

HISTORIC PRESERVATION AND COMPREHENSIVE PLANNING

Draft – December 9, 2009

TABLE OF CONTENTS

INTRODUCTION

I. VISION FOR HISTORIC PRESERVATION OF RESOURCES IN THE COMPREHENSIVE PLAN

II. BENEFITS OF HISTORIC PRESERVATION

III. HISTORIC PRESERVATION ASSERTIONS

IV. HISTORIC PRESERVATION OBJECTIVES

V. STRATEGIES AND ACTIONS

APPENDICES

- Appendix A: *“Working Vision for Belmont”*
- Appendix B: *Belmont Values Preservation: The Economics of Historic Preservation and Historic Districts*, Belmont Historic District Commission, May 2009.
- Appendix C: *Secretary of the Interior’s Standard’s for the Treatment of Historic Properties – Standards for Rehabilitation*
- Appendix D: Suggested Design Criteria
- Appendix E: National Trust for Historic Preservation: *Our Position on Sustainability*
- Appendix F: National Trust for Historic Preservation: *Pocantico Proclamation*
- Appendix G: Partial List of Endangered Historic Resources in Belmont

INTRODUCTION

The Comprehensive Plan offers an opportunity to affirm Belmont's commitment to historic preservation. By following a series of recommended strategies and actions, Belmont can fulfill its commitment to the Town's "*Working Vision for Belmont*" (see Appendix A). The *Vision* outlines goals for Quality of Life, Character of Our Town, and Sense of Community, all with references to preserving and enhancing the town's character-defining small-town features. The Historic Preservation Task Force, in the Comprehensive Plan process, has produced the following Historic Preservation Report consistent with the *Vision's* goals.

In this Report, the Task Force expands upon the *Vision* document by outlining the Benefits of historic preservation, Statements clarifying the intent of historic preservation, Objectives for historic preservation, and Strategies and Actions for historic preservation.

I. VISION FOR HISTORIC PRESERVATION OF RESOURCES IN THE COMPREHENSIVE PLAN

As stated in the town's *Working Vision for Belmont*, "Belmont is a desirable and welcoming community that retains a small-town atmosphere within a larger metropolitan area." However, without thoughtful consideration this small-town community atmosphere can easily disappear.

Belmont is a community made up of many residential neighborhoods, each with its own unique past and outward appearance. In addition to these neighborhoods there are three distinct commercial centers - Belmont Center, Cushing Square and Waverley Square (including Pleasant Street north of Waverley Square), that are surrounded by several transition zones that are comprised of a mix of residential and commercial uses.

Preserving the physical settings and streetscapes of these areas must be a priority if the town's overall character is to be maintained. This is not to say that growth and change should not take place in Belmont. The commercial centers along with the transition zones, will benefit from the thoughtful planning of future development that better defines the commercial and residential areas while expanding the stores and services available to residents. However, when change does occur it should be harmonious with its surroundings; built upon the aesthetic and historic values of the town; and sustainable in that efforts are made to encourage the reuse and improvement of existing buildings of historic or architectural value.

In addition, views of natural and man-made landmarks unique to Belmont, along with better use and access to its open spaces should be incorporated into Belmont's long-term planning to further preserve Belmont's small-town identity and atmosphere.

HISTORIC PRESERVATION IS MORE THAN PRESERVING EXISTING BUILDINGS

- **It is about preserving the character and quality of life that makes Belmont a special and desirable place to live.**
- **It is about preserving the character-defining elements responsible for shaping Belmont's outward appearance.**
- **It is about preserving and highlighting that which gives the various neighborhoods and commercial areas a sense of place as seen and articulated by an individual's perception of special relationships rather than by officially designated boundaries.**
- **It acknowledges that change can and will happen – but it ensures that change will be compatible with its surroundings, preserving the community's look and feel.**

- **It acknowledges that the economic viability of adaptive reuse and redevelopment strategies must be considered when making decisions about preservation, growth and change.**

II. BENEFITS OF HISTORIC PRESERVATION

HISTORIC PRESERVATION:

- **Creates and builds economic value in both residential and commercial areas.**

Numerous articles, books, scholarly studies and anecdotal evidence attest to the fact that historic preservation has direct and indirect positive impacts on the economy of communities and in the value of the homes and neighborhoods in which preservation is practiced. For more information on the economic benefits of preservation, see Appendix B: *Belmont Values Preservation: The Economics of Historic Preservation and Historic Districts*, Belmont Historic District Commission, May 2009.

 - Neighborhoods where maintenance and development projects follow accepted preservation standards, such as the *Secretary of the Interior's Standards for the Treatment of Historic Properties* (see Appendix C), generally have property values that increase faster than the market as a whole.
 - Historic preservation protects the investments of owners and residents. Buyers know that the aspects that make a particular area of town attractive will be protected over a period of time.
 - There is a pool of private individuals interested in living in and owning historic and preserved homes and buildings.
 - Historic building rehabilitation, which is more labor intensive and requires greater specialization and higher skills levels, creates more jobs and results in more local business than does new construction.
 - Tax credit and preservation grant opportunities add economic value to both commercial and residential properties listed individually or as part of a district on the State and National Register of Historic Places.
- **Encourages private sector development.**

Historic rehabilitation projects, such as the re-development of the Waverley Fire Station and the Central Fire Station, act as anchor in commercial areas and residential neighborhoods and often stimulate additional private investment in similar projects.
- **Reinforces the *Vision 21* Goals related to Quality of Life, Character of Our Town and Sense of Community.**

Re-using existing buildings helps to preserve Belmont's small-town community atmosphere. Throughout Belmont, the original design character of the housing

and neighborhoods has helped create the sense of a community that emphasizes goal-worthy qualities in a small town – tranquility, beauty and excellent schools. The commercial areas, in need of revitalization, have benefitted from the rehabilitation and adaptive re-use of historic buildings. And, preservation, along with conservation, benefits the town’s natural habitats.

➤ **Ensures that development respects the traditions and distinctive characteristics of a community.**

Re-using existing buildings and retaining/restoring their historic features ensures that the characteristics of a building and its surroundings are retained. When new construction must take place, historic preservation can ensure these projects are sensitive to their surroundings by establishing design criteria that will guide a developer to design projects that preserve the “look and feel” of the town (see Appendix D: Suggested Design Criteria).

➤ **Promotes sustainability.**

Preservation and re-use of existing homes is environmentally responsible - we can *reduce* the amount of demolition and construction waste deposited in landfills, *lessen* unnecessary demand for energy and other natural resources, and *conserve* embodied energy (the amount of energy originally expended to create existing structures).

- The greenest buildings are the ones that already exist.
- One third of our nation’s landfill is construction debris from demolished older buildings.
- For more information on sustainability and preservation see Appendix E: *Our Position on Sustainability*, National Trust for Historic Preservation, and Appendix F National Trust for Historic Preservation *Pocantico Proclamation*.

➤ **Fosters civic pride in the community.**

Historic buildings are a touchstone to Belmont’s past - their preservation instills a sense of pride in the community and provides individuals with a connection to the past.

➤ **Increases sense of ownership and responsibility in the neighborhoods.**

- Historic rehabilitation encourages additional neighborhood investment.
- Projects that re-use and preserve historic buildings generally encourage better design in projects at nearby properties. There is a greater sense of relatedness, more innovative use of materials, and greater public appeal within neighborhoods where established preservation practices guide repair and development projects.

III. HISTORIC PRESERVATION ASSERTIONS

- **Historic preservation is integral to *Vision 21* Goals of Quality of Life, Character of Our Town and Sense of Community.**
- **Historic preservation is about Community Planning, not simply saving old buildings.**
- **Historic preservation builds economic value in communities and neighborhoods.**
- **Re-use of existing buildings is a green, sustainable strategy – re-use is the ultimate in recycling.**
- **Belmont’s historic buildings, settings and neighborhoods need additional protection through education, zoning, community design standards, creation/expansion of local historic districts, etc.**
- **Adaptive re-use and new construction should be consistent with and reinforce the existing historic and small town character of Belmont.**
- **Creating more well-defined, safer neighborhoods can be facilitated with modest, easily implemented physical planning techniques.**
- **The town should work with developers of building re-use projects to ensure projects are economically viable by showing some flexibility to zoning regulations in return for the retention of building and site features. This may include showing flexibility to parking requirements for commercial and mixed-use projects that preserve and reuse an existing building of historic and/or architectural value.**

IV. HISTORIC PRESERVATION OBJECTIVES

- 1. Define “Historic Preservation” to reflect its role in:**
 - **Creating Economic Value**
 - **Neighborhood Revitalization**
 - **Commercial Revitalization**
 - **Community Planning**
 - **Sustainability**
- 2. Broaden historic preservation and protection of Belmont’s historic buildings, sites and neighborhoods beyond the town’s existing historic districts.**
- 3. Preserve, rehabilitate and/or adaptively re-use of Belmont’s historic public buildings and places.**
- 4. Encourage new development to be consistent with the historic small town character of Belmont.**
- 5. Encourage the redevelopment of existing residential and commercial structures as alternatives to new construction as a first priority.**
- 6. Strengthen physical definitions of existing neighborhoods.**
- 7. Encourage public road right-of-ways to be maintained through public/private partnerships.**

V. HISTORIC PRESERVATION STRATEGIES AND ACTIONS

1. Re-use and improve existing town-owned buildings.

Belmont's commitment to rehabilitate the buildings at the Town Hall Complex, and to sell the fire stations in Waverley Square and Belmont Center with preservation restrictions are projects that act as anchors in the neighborhoods where they are located, prove that older buildings can successfully be adapted for new uses, and stimulate interest in the private sector to retain and improve the existing building stock throughout the town. The Town must continue its commitment to preservation by maintaining and sensitively upgrading town-owned buildings and seek new uses for its obsolete or underutilized properties, such as the former Benton Branch Library in the Oakley Neighborhood and the Municipal Light Building in Belmont Center.

ACTION: Create Action Plans for:

- Re-use of the existing Police Station
- Re-use of the Municipal Light Building
- Re-use of the Rock Meadow Barn
- Re-use of the Benton Library
- Town Hall Complex Energy Improvements
- Completing Private Fundraising Efforts and Clean the Stone Bridge

2. Identify and protect Belmont's endangered historic resources.

Belmont's at-risk or endangered historic properties include buildings:

- On sites with the potential for larger buildings as permitted by zoning.
- On sites that may be subdivided as permitted by zoning.
- In a continual state of decline until their rehabilitation is difficult or at least very costly.
- Where historic, character-defining features have been stripped and/or covered in such a way as to make them undesirable.
- Where current development plans do not include the re-use of the building(s) if there are economically viable re-use alternatives available.

SEE APPENDIX G FOR PARTIAL LIST OF ENDANGERED HISTORIC RESOURCES IN BELMONT

ACTION:

- Adopt the following criteria for identifying the historic resources in town: Historic resources shall be identified as those resources that: are listed on the inventory of the Historic and Archaeological

Assests of the Commonwealth as maintained by the Massachusetts Historical Commission; or are listed on the National or State Register of Historic Places; or are specifically designated a “Historic Resource” by the Belmont Historic District Commission, using the criteria for evaluation established for determining eligibility for the National Register of Historic Places.

- Create full-scale inventory of historic resources including building, structures, open space, and views.
- Preserve and enhance views to landmark buildings and open spaces, e.g.: views of McLean’s and Beaver Brook from Waverley; Pequotette Field from Trapelo Road; historic civic buildings (Town Hall, etc.); historic former fire stations; and churches and schools.
- Classify levels of endangerment to create priorities for preservation and projects to be funded by the Community Preservation Act funds (see Actions under Strategy 5 “Adoption of the Community Preservation Act).
- Create public awareness of the tax benefits related to the protection of historic buildings and open space with preservation and conservation easements.

3. Encourage growth in commercial zones that complements Belmont’s small town character.

Belmont has three distinct commercial centers: Belmont Center; Cushing Square; and Waverley Square including Pleasant Street north of Waverley Square. In addition, the major transportation corridors in town which include Belmont Street/ Trapelo Road and Concord Avenue include commercial areas at Central Square, Palfrey Square, East Belmont (vicinity of Belmont Street/School Street) and Concord Avenue (vicinity of Concord Avenue and Bright Road).

ACTION:

- New development that will strengthen the commercial activity in these areas is encouraged provided that it complements the scale and design of the existing buildings in these areas and enhances the small-town atmosphere of the town.
- Provide developers a set of design criteria that will help provide a general idea of what new development should and should not look like. The architectural and aesthetic compatibility of a proposed development project should take into consideration the character of the surrounding neighborhood, taking into account appropriate scale, massing, and locations of buildings on the lot, roof slopes, street façade, exterior building materials, historic significance and similar factors (see Appendix D: Suggested Design Criteria).

4. Create public outreach programs to educate townspeople on the benefits of preservation.

ACTION:

- Promote wider participation of various committees, commissions, Town staff, and private groups with each other.
- Provide access, either online or through publication, to resources such as the Belmont Historic District Commission's Design Guidelines for Local Historic Districts to educate residents on appropriate historic preservation practices.
- Assist property owners in identifying the history of the evolution of the neighborhood their property is in, and assist in defining the characteristics of the neighborhood to ensure future changes are consistent with the neighborhood's look and feel.
- Work with the local Real Estate Community to provide developers and prospective property buyers with accurate information about possible development possibilities of properties and the benefits of Historic Preservation.
- Work with the Belmont Historical Society to promote its annual preservation awards program using past recipients as role models for preservation.
- Include historic preservation as a part of the local elementary schools' visits to the Belmont Historical Society's Claflin Room.

5. Enact protective measures to strengthen preservation of existing properties not currently protected.

ACTION:

- Adopt the Community Preservation Act:
The Community Preservation Act is statewide enabling legislation that helps communities preserve open space and historic sites, and create affordable housing and recreational facilities by creating a specific fund dedicated to: (1) acquisition and preservation of open space; (2) creation and support of affordable housing; and (3) acquisition and preservation of historic buildings and landscapes. This fund is established from a surcharge (1%- 3%) on all property tax that is matched by a dedicated state fund. Once adopted funding must be fairly distributed to the above three categories.
- Adopt Demolition Review By-Law
Buildings that are fifty years or older and that the Belmont Historic District Commission determines to be significant and preferably preserved will not be issued a demolition permit until a period of twelve months have passed which will

allow members of the Belmont Historic District Commission to work with the property owner to explore alternatives to demolition.

- Formulate criteria for selecting specific historic resources needing protection.
- Identify vulnerable areas and create measures to protect them.
- Update the 1982 Inventory of Historic Properties.
- Inventory various patterns of housing development.
- Inventory Landmark Buildings and Open Spaces.
- Update Scenic Roads designations (Somerset Street is the only designated 'scenic road').
- Create new Historic Districts (a house can be a district).
- Create a Protection of Specimen Trees By-Law.
- Partner with the Belmont Historical Society to create a Historic Plaque Program.
- Include on the Planning Board a member experienced in historic preservation. Create liaisons from the Belmont Historic District Commission to the Planning Board and to Sustainable Belmont.

6. Enact zoning reforms to include design standards for new development that are informed by preservation.

ACTION:

- Enact zoning reforms to include design standards that are neighborhood specific for new development to require new residential, commercial, and mixed-uses to complement neighborhoods.
- Promote use of natural, traditional and sustainable building materials.
- Enact Density Bonuses for Preservation. In exchange for redeveloping and preserving an historic structure(s), an additional unit(s) or square footage can be granted for such.
- Prepare Design Criteria and establish a Design Review Board for Overlay districts that address: scale and mass; proportions, shape and roof pitch; parking and loading; proximity to street; and views to protect, enhance, reclaim.

SEE APPENDIX D for Suggested Design Criteria

7. Provide measures and incentives to protect and enhance Belmont's neighborhoods.

ACTION:

- Use traffic calming measures to slow down traffic within the neighborhoods.
- Create gateways to neighborhoods.
- Promote neighborhood workshops to share information on ways to strengthen neighborhood environments.

- Develop newspaper/on-line campaigns demonstrating techniques and benefits.
- Enact zoning reform to avoid parking lots, loading, dumpsters, lighting, etc. adjacent to neighborhood housing.
- Create and provide Design Standards and Guidelines for homeowners and commercial owners/tenants to plant and care for rights-of-way.
- Develop guidelines for public/private sharing in care of street trees.
- Redefine “ownership” and responsibility for rights-of-way in neighborhoods.
- Encourage underground placement of utilities.
- Provide DPW support as incentive for private participation for the improvement of streetscapes.
- Update National Register of Historic Places Listings: Efforts to individually list properties onto the National Register of Historic Places and to create new National Register Districts in town can provide tax incentives for property owners to place preservation restrictions on their property, and for developers to adaptively re-use and rehabilitate historic structures. To accomplish this work the existing survey of historical resources will need to be updated and expanded.

8. Adopt and Promote a Position on Sustainability

ACTION:

- See Appendix E and F for suggested position on sustainability.

APPENDIX A
“Working Vision for Belmont”

APPENDIX B

**ATHE ECONOMICS OF HISTORIC PRESERVATION AND OF HISTORIC DISTRICTS
BELMONT HISTORICAL COMMISSION BELMONT HISTORIC DISTRICT
COMMISSION MAY 2009 THE ECONOMICS OF HISTORIC PRESERVATION
AND OF HISTORIC DISTRICTS**

A BIBLIOGRAPHY Plus

Numerous articles, books, scholarly studies and anecdotal evidence attest to the fact that historic preservation and the creation and maintenance of historic districts have direct and indirect positive impacts on the economy of communities and in the value of the homes in which preservation is practiced. “What does historic preservation do for a local economy? Increases the tax base, increases loan demand, enhances property values, generates sales of goods and services and—most importantly—creates jobs.” *Community, Place and the Economics of Historic Preservation*, Donovan D. Rypkema, New Jersey Preservation Awards (1966). By what methods(s) are these economic benefits measured? The five most referred to methods are: basic cost studies; economic impact studies; regression analysis (hedonic, travel cost and property value studies); contingent valuation and choice modeling; and case studies. The Brookings Institute recently analyzed the efficacy of these methods, identified each of their strengths and weaknesses and ended up proposing a “hybrid of the most promising methods.” The study, however, left no doubt that “[d]esignating a landmark as historical typically maintains if not boosts the value of the property, and as an economic development tool historic preservation has proved its worth. Nearly any way the effects are measured, be they direct or indirect, historic preservation tends to yield significant benefits to the economy.” *Economics and Historic Preservation: A Guide and Review of the Literature*, Randall Mason, Metropolitan Policy Program, the Brookings Institution. See also, *The Economics of Historic Preservation, A Community Leaders Guide* by Donovan D Rypkema on behalf of the National Trust for Historic Preservation (contains one hundred “arguments” on the economic benefits of historical

preservation each backed up by cites to studies, papers, publications, speeches, or report on the topic).

These same benefits are realized and, perhaps even to a greater extent, when preservation takes the form of the creation of a historic district. Indeed, not a single study has been found to show a reduction in the value of homes located within an historic district. To the contrary, these studies show that:

- Home prices in historic districts generally increase faster than the market as a whole;
- The extra protection provided by local historic district designation generally leads to owners benefiting with a higher rate of return on their investments;
- The added value of properties in historic districts strengthens the tax base of communities;
- Tax credit and preservation grant opportunities add economic value to commercial historic registered properties.

While the studies are too numerous to list, we have highlighted in this bibliography some of the more significant ones should you desire to read further. We have also collected various quotes considered notable.

QUOTES

1. “Property values in local historic districts appreciate significantly faster than the market as a whole in the vast majority of cases...simply put, local historic districts enhance property values” – *The Economics of National Register Listing*.
2. “Local land-marking can actually boost property values by introducing certainty into the marketplace and improving the overall economic climate, which benefits all property owners” – *The Economic Benefits of Historic Preservation*.
3. Historic Preservation.... “[F]rom an economic standpoint, historic preservation creates new local jobs, spurs private and public investment, increases property values, and enhances neighborhood and community pride.” The City of El Paso, Texas Department of Development Services.
4. Frequently Asked Questions about Local Historic Districts:
www.uga.edu/gapc/links_doc_pdf/FAQ%20about%20local%20districts.pdf.
Article notes that the economic benefits of historic preservation are:

- “Creation of local historic districts stabilizes, and often increases residential and commercial property values.
- Increases in property values in historic districts are typically greater than increases in the community at large.
- Historic building rehabilitation, which is more labor intensive and requires greater specialization and higher skills levels, creates more jobs and results in more local business than does new construction.
- Heritage tourism provides substantial economic benefits. Tourists drawn by a community’s (or region’s) historic character typically stay longer and spend more during their visit than other tourists.
- Historic rehabilitation encourages additional neighborhood investment and produces a high return for municipal dollars spent.
- Use of a city or town’s existing, historic building stock can support growth management policies by increasing the availability of centrally located housing.”

5. “...[W]e looked at the cost/benefit of the tax credit. In Fiscal Year 1995 the Department of the Interior reports that there were 529 projects representing investment of \$467,000,000. What is the cost of that program to the Federal coffers? Well with a 20 percent tax credit, the revenue loss to the treasury is a maximum of \$93,400,000. But what is the economic benefit? Income taxes paid by construction workers of almost \$51 million; income taxes from other workers of over \$39 million; business income taxes of nearly \$15 million; capital gains taxes of over \$19 million; totaling Federal economic benefits from this program of \$124, 250,000 last year significantly more than the revenue cost.

Additionally this activity created 14,000 jobs, added \$348 million to local household incomes, and will generate each year local property tax revenues of between \$7 and \$11 million dollars. Independent of the social, cultural, and aesthetic benefit historic preservation provides, the U.S. taxpayers are absolutely getting more than their money’s worth with this program. And I thought that’s what reinventing government was all about.” *Community, Place and the Economics of Historic Preservation*, Donovan D. Rypkema, New Jersey Historic Preservations Awards Ceremony, April 27, 1996, Montclair, New Jersey

6. “Historic Districts preserve memories for future generations, as well as a sense of time and place.” – Mission Hills Historic District.
7. “Environment – the greenest homes are the ones that already exist.” “One third of our landfill is construction debris from demolished older buildings.” “Our Homes: ‘Maintain tangible contact with the places where our identity as a nation was established and our character as a people was shaped’.” – *Historic Preservation & Historic Districts are Good for America* – Richard Moe (National Trust).
8. “...homes within historic districts sell at a premium over similar houses outside historic districts and values outpace nearby neighborhoods – a point touted by realty agents and preservation experts.” – *Los Angeles Times* (Sept. 30, 2007) Real Estate section article “Banking on the Value of History”.
9. National Park Service: U.S. Department of the Interior – *Benefits of a Historic District*:

“**Local districts protect the investments of owners and residents.** Buyers know that the aspects that make a particular area attractive will be protected over a period of time.”

“**Local districts encourage better design.** It has been shown through comparative studies that there is a greater sense of relatedness, more innovative use of materials, and greater public appeal within historic districts than in areas without historic designations.”

“**Local districts help the environment.** Historic district revitalization can, and should, be part of a comprehensive environmental policy.”

“**The educational benefits** of creating local districts are the same as those derived from any historic preservation effort. Districts help explain the development of a place, the source of inspiration, and technological advances.”

“**A local district can result in a positive economic impact from tourism.** A historic district that is aesthetically cohesive and well promoted can be a community’s most important attraction. The retention of historic areas as a way to attract tourist dollars makes good economic sense.”

“**Local districts provide social and psychological benefits.** A sense of empowerment and confidence develops when community decisions are made through a structured participatory process rather than behind closed doors or without public comment.”
10. “The proximity of historically designated houses on the sales price of other non-historic houses is valued using hedonic regression analysis.” “The results suggest that a house’s value is increased by 3.8 percent by having a historical house within 250?ft. and by 1.6 percent by having a historical home located between

250 and 500?ft away.”- *Estimating the Value of the Historical Designation Externality*.

11. “Preservation is no longer the sentimental saving of a beautiful old building—it is now a broad concept involving building codes, land use planning, tax law, open space planning, downtown revitalization—a vital tool for the conservation of neighborhoods and cities.” – *Ypsilanti Historic District Fact Sheet*.
12. “Property values of historic buildings and sites in communities as diverse as Fredericksburg, Richmond, and Staunton [Virginia] significantly outperform the appreciation rates of non-historic properties” (*Virginia’s Economy and Historic Preservation: The Impact of Preservation on Jobs, Business and Community, 1995*, by Donovan D. Rypkema).
13. “*Galveston* [Texas]: Information was obtained on sales transacted over a period of six months in the two residential historic districts and in the nearby [non-historic] San Jacinto/South Broadway neighborhood ‘to compute an average sales price per area. These figures were compared to the results of an early 1970’s study of average sales prices. Between 1975 and 1991, prices increased by an average 440% in the East End [historic district] and by 165% in the Silk Stocking [historic] district. By comparison, prices in the San Jacinto neighborhood increased over the same period by an average 80%’.” (*The Economic Benefits of Preserving Community Character: A Case Study from Galveston, Texas, 1991*, by Government Finance Research Center.)
14. “*Anderson* [Indiana]: Over a recent period of 15 years, ‘the values of properties in the study areas steadily appreciated after the creation of historic [residential] districts’.” (*American Planning Association, Historic Preservation and Property Values in Indiana*, June 1998 edition of the *Planning Advisory Service Memo*.)
15. “*Indianapolis* [Indiana]: ‘The property values in the local historic [residential] district increased at a rate [that]...exceeded the rate of both an adjacent, highly similar and unregulated neighborhood and the larger area of Indianapolis within which it sits.’ Two adjacent, nearly identical historic residential neighborhoods—Fletcher Place and Holy Rosary-Danish Church—are both listed in the National Register. However, ‘since 1980, Fletcher Place has been a locally designated historic district.’ Although the value of both neighborhoods appreciated between 1982 and 1995, Fletcher Place ‘appreciated at a significantly greater rate’.” (*APA*).

ARTICLES

1. *Economic Impacts of Historic Preservation in Massachusetts*, Christopher C. Skelly, on behalf of the Massachusetts Historical Commission, May, 2002.

2. *The Economic Power of Restoration: A Community Leader's Guide*, Don Rypkema, on behalf of the National Trust for Historic Preservation; 2nd Edition (March, 2005).
3. *The Economics of Historic Preservation*, Randall Mason, Brookings Institution (2005).
4. *Historic Districts are Good for Your Pocketbook*, Elizabeth Morton, State Preservation Office at the South Carolina Department of Architecture and History.
5. *Greenfield, MA Historical Commission FAQ: Is there a connection between historic preservation and economic development? How do National Register and Historic Districts affect property value?*
6. *Study Puts Dollar Value on Historic Preservation*, Article from the *Washington Post* dated March 14, 1992.
7. *Economic Benefits of Residential Historic Districts*, Los Angeles Conservancy, 1971.
8. *Statewide Studies [of 21 states] on the Economic Impacts of Historic Preservation*, Advisory Council on Historic Preservation (2009) <http://www.achp.gov/economic-statewide.html> with links to each state's research website.
9. *Planning for Historic Preservation: An Introduction to Preservation Planning*, Amy Facca, PCJ #52, Fall, 2003.
10. National Trust for Historic Preservation and its excellent collection of preservation books.
11. Articles on the Economic Value of Historic Districts, High Beam Research, <http://www.highbeam.com/search.aspx?q=articles+on+the+economic+value+of+historic+districts>

BOOKS

1. *Economic Benefits of Preserving Old Buildings*, by the National Trust for Historic Preservation (1982).
2. *Historic Preservation: An Introduction to its History, Principles, and Practice*, by Ted J. Ligibel, Ph.D., Irene R. Taylor, Norman Taylor AICP (1999).
3. *Economic Impact of Historic District Designation: Lower Downtown Denver, Colorado (Dollars and Sense of Historic Preservation)* by Siler Hammer, George Associates, and Bridget Hartman.

4. *Use It or Lose It (Dollars and Sense of Historic Preservation)* by Matthew Bauer and Bridge Hartman.
5. *Saving Places that Matter: A Citizen's Guide to the National Historic Preservation Act* by Thomas F. King.
6. *The Economics of Historic Preservation: A...* by Donovan D. Ryp...
7. *Partners in Prosperity: the Economic Benefits of Historic* by Lisanne Renner and Bridget Hartman.
8. *Keeping Time: The History and Theory of Preservation in America* by William J. Murtagh.
9. *The Economic Benefits of Preserving Community Character: A Case* by Government Finance Research Center and Bridget Hartman.
10. *Assessing the Impact of Local Historic Districts on Property* by Jo Ramsay Leimenstoll and Bridget Hartman.
11. *A Richer Heritage: Historic Preservation in the Twenty-First Century* by Robert E. (ed.) Stipe (Hardcover – June 23, 2003).
12. *Historic Preservation in the USA* by Karolin Frank, Patricia Petersen, H.M. Mowat, and J. Smith
13. *The Economics of Rehabilitation (Preservation Information)* by Donovan D. Rypkema.
14. *Preservation Yellow Pages: The Complete Information Source for Homeowners, Communities, and Professionals* by National Trust for Historic Preservation and Julie Zagars.
15. *Historic Preservation Incentives of the 1976 Tax Reform Act: An Economic Analysis (NBS Technical Note; 980)* by Stephen F. Weber.
16. *Economic Facts and Fallacies* by Thomas Sowell.

Most, if not all, of the cited articles may be obtained on line while the published books can be found on Amazon as well as at other national booksellers' sites. All are still in print and are available new or, in many cases, used condition. Please contact any HDC member should you be unable to locate any listed material.

APPENDIX C

SECRETARY OF THE INTERIOR'S STANDARDS FOR THE TREATMENT OF HISTORIC PROPERTIES

Standards for Rehabilitation

1. A property will be used as it was historically, or be given a new use that requires minimal change to its distinctive materials, features, spaces and spatial relationships.
2. The historic character of a property will be retained and preserved. The removal of distinctive materials or alteration of features, spaces, and spatial relationships that characterize a property will be avoided.
3. Each property will be recognized as a physical record of its time, place, and use. Changes that create a false sense of historical development, such as adding conjectural features or elements from other historic properties, will not be undertaken.
4. Changes to a property that have acquired significance in their own right shall be retained and preserved.
5. Distinctive materials, features, finishes, and construction techniques or examples of craftsmanship that characterize a property will be preserved.
6. Deteriorated historic features will be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature will match the old in design, color, texture, and where possible, materials. Replacement of missing features will be substantiated by documentary and physical evidence.
7. Chemical or physical treatments, if appropriate, will be undertaken using the gentlest means possible. Treatments that cause damage to historic materials will not be used.
8. Archeological resources will be protected and preserved in place. If such resources must be disturbed, mitigation measures will be undertaken.
9. New additions, exterior alterations, or related new construction will not destroy historic materials, features, and spatial relationships that characterize the property. The new work will be differentiated from the old and will be compatible with the historic materials, features, size, scale and proportion, and massing to protect the integrity of the property and its environment.
10. New additions and adjacent new construction will be undertaken in such a manner, that if removed in the future, the essential form and integrity of the historic property and its environments would be unimpaired.

APPENDIX D
Suggested Design Criteria

NOTE: THIS SECTION REQUIRES FURTHER DEVELOPMENT

GENERAL

The Design Criteria listed in this section are examples of what should be included in zoning bylaws. The Planning Board should be given broader site planning review authority than it currently has.

The entire section needs to be more thoroughly crafted and illustrated as a next step in the Comprehensive Plan process. See photographs as reference for things to encourage and discourage.

The Comprehensive Plan should include specific recommendations for launching an extensive town-wide educational campaign, describing a vision of benefits and likely design outcomes when applying design criteria.

COMMERCIAL AND MIXED-USE ZONES DESIGN CRITERIA

Design Criteria in commercial and mixed-use zones should be created to provide developers a general idea of what new development should and should not look like. The architectural and aesthetic compatibility of a proposed development project shall be considered with the character of the surrounding neighborhood, taking into account appropriate scale, massing, space for current parking demands and requirements, and location of buildings on the lot, roof slopes, street façade, exterior building materials, historic significance and similar factors.

Design Criteria should be written specifically for various zones. For example, the criteria for the Oakley Overlay District would certainly be different than for Waverley Square.

Design Criteria should also be included in the various zoning districts as part of a “site plan review” process giving the Planning Board review authority.

Design criteria for commercial zones should be written so that the design of sites and building is respectful to existing surrounding/adjacent residential neighborhood homes.

Design Criteria should include:

Scale and Massing:

Several features of a building define its scale and massing including: height; number of stories; roof design and materials; cornice height; and fenestration, all of which are addressed below. In addition, the area that a building’s footprint occupies on its lot also defines its scale and massing when compared to the existing surrounding buildings and their lots.

Building Form:

Needs language

Building Height:

The height and number of stories of a proposed new building must be compatible with the majority of the existing surrounding buildings in the residential zones. In general the maximum height on primary streets shall be no greater than 2-1/2 stories (32’), as measured to the mid-point of sloping roofs (see Waverley Sq. Dunkin Donuts building as an example). The South Pleasant Street zone, up to and including the Flett site can be 3 stories (36’) max. View corridors to landmark sites (e.g. Wellington Hill) should not be obstructed. Only in the case of a proposed new parking garage in a commercial area will a greater number of stories be permitted, provided that the number of stories does not increase the building height beyond that permitted by zoning.

Roof Design and Material:

The design of a roof, whether flat, side-gable, front-gable, Gambrel, Mansard or other, is a character defining element of a building. Roof design, including form and materials, should blend well with and be respectful of the design of the historic homes in adjacent neighborhoods.

Sidewall Material:

The sidewall material of a building is a critical visual design element and should be made of natural materials such as wood siding, wood shingle, brick, stucco, stone, etc.

Fenestration:

Needs language

Exterior Mechanical and Electrical Equipment:

Air conditioning handlers and condensers, venting and exhaust equipment, and other related utilities must be located to minimize visual impact and sound disturbance to neighboring properties and any surrounding public way. Rooftop building systems (such as mechanical and electrical equipment, antennas, satellite dishes) shall be screened from view from the street frontage by integrating them into the building design with parapets, screens or by other appropriate methods.

Exterior Lighting:

The location and brightness of exterior lighting must be consistent with the existing lighting in the neighborhood, and, whenever possible, be minimized to encourage the conservation of electricity and limit light pollution associated with urban areas.

Setbacks:

?

Landscaping:

?

Grade Changes:

?

Driveway/Parking Area Location and Material: ?????????????????????????????????

Providing room for parking, particularly on small or dimensionally constrained lots, may require flexibility by the town when considering redevelopment options for Belmont's commercial centers. These will be considered on a case by case basis with preference to those projects that re-use and preserve buildings of historic and/or architectural value.

Parking Garages: Parking garages above grade shall not front on primary streets; they should be behind retail and/or other commercial uses.

LEED: Building and site design should be adequate to achieve compliance with Leadership in Energy and Environmental Design (LEED) criteria, as promulgated by the U.S. Green Building Council. Goals of Sustainable Belmont must be met.

Type and Location of Infrastructure:

To the extent possible, new utilities shall be located underground. To the maximum extent feasible, all dumpsters, utilities, mechanical equipment, storage and service areas shall be screened from view from adjacent streets and from structures on neighboring lots with plantings and/or landscape structures. In no cases shall dumpsters be permitted to be located within the required Front Setback.

Off-Street Parking:

Surface parking areas shall be set back from street lines a minimum of ten feet (10'). Parking layouts should minimize nuisance from car headlights that beam into residential dwellings through the use of visual screening by use of plantings or fencing. Alleys are permissible to provide multi-purpose parking areas.

Surface parking shall be located in the side or rear relative to the streets, and should be screened with a combination of stone walls or fencing, and landscaping.

Lighting:

Subject to compliance with the lighting requirements, distinctive features of buildings including entries, signage, canopies, and areas of architectural detail and interest may be illuminated.

Protection of Significant Natural Site Features:

Location and design of buildings shall not cause avoidable removal or damage to any tree exceeding twelve (12) inches trunk diameter measured at a point four feet above grade.

Location and Design of On-Site Open Spaces:

The overall site design shall include common open space and facilities designed to be functional and well-integrated with the built environment. Wherever practicable, existing trees and plantings shall be maintained. Consideration will be given to creating open space that is visually and functionally accessible to the public.

Within Renovation projects, open space surrounding existing buildings shall be maintained. Any new structures and outdoor parking areas shall be screened with evergreen shrubbery which shall be a minimum five (5) feet in height at time of building occupancy, and be planted to maintain adequate sight lines for pedestrians and motor vehicles.

Landscaping:

Existing vegetation should be preserved if feasible and healthy. Plant materials should be chosen to withstand seasonal weather cycles in New England and for compatibility with existing plantings in the surrounding neighborhood, with consideration for resistance to infestations, resilience to climate exposure, water availability and drainage conditions. Native species must be used.

Buffering in Relation to Adjacent Properties:

Wherever it abuts existing development, new development should incorporate design transitions between new buildings and existing buildings, using comparable materials, roof design, fencing materials and landscaping.

RESIDENTIAL ZONES DESIGN CRITERIA

NOTE: THIS SECTION REQUIRES FURTHER DEVELOPMENT: This should be written for residential zones only – that is the single family and general residence zones – not to be confused with residential in the commercial and mixed-use areas.

Scale, Proportion and Exterior Appearance of Homes:

Home renovations should seek to restore the character of the original historic design, while accommodating the user's needs. New home construction should be consistent with that found on the majority of the existing surrounding homes.

Windows and Doors:

All homes should contain doors and windows of natural, traditional and sustainable building materials, to the extent practical.

Roofs:

Roof form and materials should be consistent with that found on the majority of the existing surrounding historic homes. Dormers should be carefully designed to appear as relatively small compared to the general roof surface – shed dormers as large as room widths are inappropriate. Roofs additions larger and/or taller than the original house are inappropriate.

Balconies/Porches

Enclosures of existing balconies and/or porches should not be permitted. The re-opening of previously enclosed balconies, especially on historic two and three-family homes, should be encouraged. New balconies and/or porches should be encouraged on both new and renovation projects, if suitable for and compatible with the existing neighborhood.

Sidewalls:

Material selection should be of natural, traditional and sustainable building materials. Materials such as wood shingles, clapboard, brick and stone are encouraged.

Facades:

In renovation development projects, the façade(s) of any building that is determined to be eligible for listing on the National Register of Historic Places will be appropriately rehabilitated, as provided in the Secretary of the Interior's Standards for Rehabilitation (36 CFR Part 67).

Two-Family Dwellings:

Two-family dwellings should be designed to appear as a single-family home to the greatest extent practical. If the two-family dwelling includes two entrances, consideration should be given to placing the entrances on two different sides of the building. The two-family dwelling

should include pitched rooflines, and features such as porches and terraces characteristic of the historic stock on homes in the neighborhood,

Placement, Alignment, Width and Grade of Streets and Sidewalks.

The pedestrian environment shall be maintained by providing for continuous sidewalks that are unencumbered by parked vehicles and are minimally broken by vehicular access and parking. Sidewalks should provide a uniform travel surface for people who use wheelchairs, carriages, walkers, bicycles or scooters.

Streets and sidewalks should not obstruct the growth of trees, especially larger, older trees.

Sidewalks, when built adjacent to retaining walls should, to the extent practical, be built to leave planting strips.

Street paving should be minimized and landscaping maximized wherever possible, particularly at intersections leading to neighborhoods.

Existing paving of existing planting strips on rights-of-way should be removed and new planting installed. Public private partnerships between the Town and property owners should be encouraged.

Location of Building and Garage Entrances:

Building design and location of garages and driveways should minimize the impact of automobile parking and driveways on the pedestrian environment, adjacent properties and existing streets and intersections by consolidating access to a limited number of curb cuts.

Garages are not allowed on street facing, primary façades in neighborhoods where historically it is not the pattern.

Below grade garages requiring ramped driveways with retaining walls are inappropriate.

Entries:

Entry areas should provide protection from adverse weather through the use of porches or canopies.

Outbuildings (Garages, Sheds, etc.):

Outbuildings, including garages and sheds must be compatible with the existing surrounding buildings in the neighborhood and of a smaller scale and massing of the primary building on the property. In no case will subterranean garages be permitted in residential neighborhoods.

Protection of Significant Natural Site Features:

Location and design of buildings shall not cause avoidable removal or damage to any tree exceeding twelve (12) inches trunk diameter measured at a point four feet above grade.

Location and Design of On-Site Open Spaces:

The overall site design shall include common open space and facilities designed to be functional and well-integrated with the built environment. Wherever practicable, existing trees and plantings shall be maintained. Consideration will be given to creating open space that is visually and functionally accessible to the public.

Within Renovation projects, open space surrounding existing buildings shall be maintained. Any new structures and outdoor parking areas shall be screened with evergreen shrubbery which shall be a minimum five (5) feet in height at time of building occupancy, and be planted to maintain adequate sight lines for pedestrians and motor vehicles.

Landscaping:

Existing vegetation should be preserved if feasible and healthy. Plant materials should be chosen to withstand seasonal weather cycles in New England and for compatibility with existing plantings in the surrounding neighborhood, with consideration for resistance to infestations, resilience to climate exposure, water availability and drainage conditions. Native species must be used.

Buffering in Relation to Adjacent Properties:

Wherever it abuts existing development, new development should incorporate design transitions between new buildings and existing buildings, using comparable materials, roof design, fencing materials and landscaping.

Mechanical and Electrical Equipment: Mechanical equipment is inappropriate for placement on the roofs of homes. Electrical equipment (satellite dishes, antennae, cable/telephone/electric wires, etc.) should all be placed as discretely as possible away from the public view. Underground wiring is highly encouraged. Solar panels and other energy efficient equipment should be integrated with the home design, to the extent practical, and discretely placed away from the public view.

APPENDIX E

National Trust for Historic Preservation notes re: Preservation and Sustainability From website:
<http://www.preservationnation.org/issues/sustainability/> 10-29-09

Our Position on Sustainability

Historic preservation can – and should – be an important component of any effort to promote sustainable development. The conservation and improvement of our existing built resources, including re-use of historic and older buildings, greening the existing building stock, and reinvestment in older and historic communities, is crucial to combating climate change.

Preservation’s Essential Role in Addressing Climate Change

The construction, operation and demolition of buildings accounts for 48% the United States’ greenhouse gas emissions. But reusing and retrofitting our existing buildings can reduce these emissions dramatically. In fact, our existing buildings are one of our greatest renewable resources.

Through our Sustainability Initiative, the National Trust for Historic Preservation is focusing the nation's attention on the importance of reusing existing buildings and reinvesting in older and historic communities as critical elements in combating climate change. Americans already embrace as common sense the need to recycle aluminum cans, glass and newspapers. We advocate applying that same common sense to our built environment.

We don't discount the value of new, green construction – in fact many green technologies can and should be applied to existing buildings to improve performance. But new construction – no matter how green – still uses energy and other natural resources and generates construction waste that clogs landfills.

Through its research, the National Trust’s Sustainability Initiative is demonstrating that conservation and improvement of our existing built resources are environmentally logical and economically viable elements in combating climate change.

Sustainable Stewardship of our Buildings and Communities

Guiding Principles:

- ⌚ Reuse existing buildings: Use what you have. The continued use of our existing buildings reduces the amount of demolition and construction waste deposited in landfills, lessens unnecessary demand for energy and other natural resources and conserves embodied energy (the amount of energy originally expended to create extant structures).

1 National Trust for Historic Preservation notes re: Preservation and Sustainability From website:
<http://www.preservationnation.org/issues/sustainability/> 10-29-09

- ⌚ Reinvest in our older and historic communities: Older and historic communities tend to be centrally located, dense, walkable, and are often mass-transit accessible – qualities celebrated and promoted by Smart Growth advocates. Reinvestment in existing communities also preserves the energy embedded in infrastructure, such as roads, water and sewer lines.
- ⌚ Retrofit our existing building stock: Many historic and older buildings are remarkably energy efficient because of their site sensitivity, quality of construction, and use of passive heating and cooling, while other buildings require improvements to reduce their environmental footprint. Historic buildings can go green without compromising historic character.

Our Commitment

Focus on Local, State and Federal Policy: The National Trust for Historic Preservation will work with several cities to develop model policies that encourage preservation as sustainable development. This work will include refining building, energy and zoning codes, as well as developing model language for comprehensive plans and climate change action plans. We will also work to expand the availability of historic tax credits at the state and federal level, encourage other financial incentives for building reuse and community revitalization and support energy policy that improves energy efficiency in older buildings.

Empower Preservation Practitioners: The National Trust will provide our network of practitioners with the tools they need to incorporate green building practices into their preservation work. This will include development and dissemination of best practices and other guidance for greening older and historic buildings.

Sustainability by the Numbers

The Costs of Construction & Demolition

- ⌚ The average home size in the United States has increased 105% between 1950 and 1999.
- ⌚ The United States is responsible for 22% of the world's greenhouse gas emissions, though we have only 5% of the world's population. According to the Pew Center on Climate Change, the operation of buildings accounts for 43% of carbon emissions in the United States. The environmental impact of buildings is even more significant when we take into consideration the greenhouse gas emissions associated with manufacturing building materials and products.
- ⌚ In terms of waste, construction of an average 2,000-square-foot home generates 3,000 pounds of wood, 2,000 pounds of drywall and 600

2 National Trust for Historic Preservation notes re: Preservation and Sustainability From website:
<http://www.preservationnation.org/issues/sustainability/> 10-29-09

- pounds of cardboard. Moreover, the construction of an average single-family home generates four pounds of waste per square foot. On average, only about 20%-30% of that waste is recycled or reused.
- ⌚ It takes a lot of energy to construct a building – for example, building a 50,000 square foot commercial building requires the same amount of energy needed to drive a car 20,000 miles a year for 730 years.
 - ⌚ We are much too inclined to think of our buildings as disposable rather than a renewable resource. A 2004 report from the Brookings Institution projects that by 2030, we will have demolished and replaced 82 billion square feet of our current building stock. Since it is estimated that there are about 300 billion square feet of space in the United States today, that means we anticipate demolishing nearly 1/3 of our building stock in the next 20-25 years.
 - ⌚ It will take as much energy to demolish and reconstruct 82 billion square feet of space (as predicted by the Brookings study) as it would to power the entire state of California – the 10th largest economy in the world with a population of about 36 million people – for 10 years.
 - ⌚ If we were to rehab even 10% of this 82 billion square feet, we would save enough energy to power the state of New York for well over a year.
 - ⌚ Construction debris accounts for 25% of the waste in the municipal waste stream each year. Demolishing 82 billion square feet of space will create enough debris to fill 2,500 NFL stadiums.

Energy Efficiency of Historic & Older Buildings

It is often assumed that older and historic buildings are "energy hogs" and that it is more environmentally friendly to demolish these buildings and construct new energy efficient buildings. However, recent work indicates otherwise.

- ⌚ The average embodied energy in existing buildings is five to 15 gallons of gasoline per square foot. The average embodied energy in a 250,000 square-foot office building is 3.75 million gallons of gasoline.
- ⌚ Recent calculations indicate that it takes 35-50 years for an energy efficient new building to save the amount of energy lost in demolishing an existing building.
- ⌚ Far from being "energy hogs," some historic buildings are as energy efficient – or more so – than buildings constructed in later decades. Data from the U.S. Energy Information Agency finds that buildings constructed before 1920 are actually more energy-efficient than those built at any time afterwards – except for those built after 2000.
- ⌚ In 1999, the General Services Administration examined its building inventory and found that utility costs for historic buildings were 27% less than for more modern buildings.

- ⌚ Not all historic and older buildings are as sustainable as they should be – indeed, many are not. But an increasing number of case studies demonstrate that historic buildings can go green. The National Trust's Lincoln Cottage Visitors Education Center in Washington, D.C., is just one such example.

3 National Trust for Historic Preservation notes re: Preservation and Sustainability From website:
<http://www.preservationnation.org/issues/sustainability/> 10-29-09

The National Trust for Historic Preservation launched its Preservation Green Lab on March 25, 2009, in Seattle, WA. The work of the new field office will focus on preserving older and historic buildings sustainably, as well as supporting the broader goal of fighting climate change. Click [here](#) to view photos from the official launch event.

Why do we need a Preservation Green Lab?

There's a lot of buzz these days about global warming and the worsening climate crisis, but did you know that it's not just gas-guzzling cars that are to blame? An astounding 43% of our nation's carbon emissions originate from the operation of the buildings that we live and work in. Even worse? Factoring in the environmental impact of the construction (and perhaps future demolition) of those buildings bumps that percentage even higher.

In recent years, state and local governments across the country have adopted much-needed climate action plans outlining strategies for countering the growing threat of global warming. These plans typically identify goals for preserving open space, increasing the use of mass transit, enhancing recycling activities and promoting the greening of new construction projects. However, despite the grim statistics noted above, few of these action plans offer strategies for greening our country's existing building stock, and even fewer – if any – identify the important role that building reuse plays in curbing carbon emissions.

What will the Preservation Green Lab do?

Sometimes the best way to teach is to lead by example.

In its day-to-day work, the Preservation Green Lab will coordinate demonstration projects and provide technical assistance and model policies – all in an effort to encourage municipalities and states around the country to fully consider historic preservation and the existing building stock in formulating their climate change action plans. As a key component of the National Trust for Historic Preservation's [Sustainability Program](#), the Preservation Green Lab will focus on these three goals:

Good Policy, Green Results: The greenest building is often the one that is already built, which is precisely why the Preservation Green Lab will work in various cities and states to develop and implement policies that support green retrofits and adaptive reuse, as well as reinvestment in existing communities.

4 National Trust for Historic Preservation notes re: Preservation and Sustainability From website:
<http://www.preservationnation.org/issues/sustainability/> 10-29-09

Greening by Example: To demonstrate that older and historic buildings can, in fact, be retrofitted to achieve high levels of energy efficiency, the Preservation Green Lab will launch a number of green retrofit projects in pilot cities across the country.

The Go-To for Going Green: The Preservation Green Lab will lead the conversation on best practices and model policies for greening our country's prized older and historic buildings, functioning as the go-to resource for those navigating the intersection of historic preservation and sustainability.

Support for the Preservation Green Lab was made possible by the City of Seattle, the Kresge Foundation, the Bullitt Foundation, the Charles Evans Hughes Foundation, the Goodfellow Fund, 4Culture, and Mr. and Mrs. Kevin Daniels.

Where will the Preservation Green Lab work?

Headquartered in Seattle, the Preservation Green Lab will partner with selected cities and states in its efforts to become a national clearinghouse for best practices and model policies. Seattle, San Francisco and Dubuque have agreed to be the Preservation Green Lab's first pilot cities, and additional cities are already being considered for future projects and partnerships.

Want to know more about the people behind the Preservation Green Lab? Check out our new Q&A interview series, and come back often as we add more profiles.

Speak out! How could your city or state be more green?

Historic preservation and sustainability go hand-in-hand. That's the conversation we need to have time and time again with the people who are making important decisions in our cities and states. Join in by leaving a comment below with your thoughts and ideas about how things could be greener – and at the same time more historic – in your neck of the woods.

5 National Trust for Historic Preservation notes re: Preservation and Sustainability From website: <http://www.preservationnation.org/issues/sustainability/> 10-29-09

Green Home Tips

The greenest house is the house already built. But that doesn't mean you shouldn't make your old house even more eco-friendly. Mouse over the numbers to see 10 tips to green your home while maintaining its historic integrity.

Illustration by MCKIBILLO (from Preservation Magazine January/February 2008 issue).

Submitted by nateknowswindows at: July 18, 2009 Please visit www.antiquewindowrestoration.com for information on restoring your original wood windows. We are here to help you understand what your options are with your windows and your home. Email nate@antiquewindowrestoration.com if you have ANY questions about your windows. **Submitted by Landscape Architect Student** at: May 20, 2009 This is more of a general question... I'm working on a summer research project that is looking at: preservation and restoration of historic architecture and ways to upgrade them so they are more "sustainable" without taking away from their antiquity. Any good books or sites that I could be directed to? **Submitted by HPCP** at: April 22, 2009 <http://www.oldhouseweb.com/suppliers/Windows/> You need to know what materials your house is made out of to decide what insulation will be best fit for it. This Brief discusses is: <http://www.nps.gov/history/hps/tps/briefs/brief03.htm> **Submitted by Buphie** at: March 25, 2009 I have a 1930 brick tudor in Seattle. Most of the downstairs windows were replaced with ugly aluminum in the 70s or 80s, and we have original leaded glass upstairs. The upstairs windows don't close properly, but I just haven't been able to bring myself to replace them. I'm looking for resources or advice for fixing leaded glass windows and frames, for storm

6 National Trust for Historic Preservation notes re: Preservation and Sustainability From website: <http://www.preservationnation.org/issues/sustainability/> 10-29-09

windows, and for replacement windows for downstairs that match the house. Are there contractors who will install salvage windows, and maybe even help find them? Does anyone make replacement windows that look like leaded glass (not the cheesy black-plastic-inside-double-pane ones)? Any pointers? Also looking for pointers on attic insulation. Thanks! **Submitted by sarah** at: February 26,

2009 our home inspector told us that he had to tell us to replace the windows in our 1840 stone house, but we would be crazy if we did. **Submitted by Casey** at: February 2, 2009 Historic home owner Help **Submitted by John Leeke** at: January 28, 2009 The latest strategy for saving energy dollars and historic windows at the absolute lowest cost is to add interior air panels, turn down the thermostat one degree, then use the annual savings to repair and maintain your fine old windows.

Instructions and discussion to make interior air panels here:

<http://historichomeworks.com/forum/viewforum.php?f=6> Step-by-step methods to maintain and repair wood windows here: <http://www.historichomeworks.com/hhw/reports/reports.htm#Windows>
John by hammer and hand great works do stand www.HistoricHomeWorks.com

Sustainability Resources

The National Trust for Historic Preservation is compiling and commissioning research to help explain the environmental benefits of preservation. Through this research, the National Trust will quantify the significant adverse impacts that occur when well-built, functional historic buildings are unnecessarily razed or abandoned in favor of new construction.

- ⌚ **[Statement]** "The Impacts of Climate Change on the Chesapeake Bay," Prepared for the U.S. House of Representatives Committee on Natural Resources, July 2009
- ⌚ **[Report]** "Heritage Tax Credits: Maryland's Own Stimulus to Renovate Buildings for Productive Use and Create Jobs," The Abell Report, March 2009
- ⌚ **[Report]** "How Changes to LEED Will Benefit Existing and Historic Buildings," Forum News, December 2008
- ⌚ **[White Paper]** "Green Building Practices and the Secretary of the Interior's Standards for Historic Preservation," November 2008
- ⌚ **[Report]** "Building Reuse: Finding a Place on American Climate Policy Agendas," September 2008
- ⌚ **[Testimony]** "Improving Energy Efficiency, Increasing the Use of Renewable Sources of Energy, and Reducing the Carbon Footprint of the Capitol Complex," Senate Rules Committee, June 2008
- ⌚ **[White Paper]** "Making the Case: Historic Preservation as Sustainable Development," October 2007
- ⌚ **[Bibliography]** General Preservation and Sustainability Resources

7 National Trust for Historic Preservation notes re: Preservation and Sustainability From website:
<http://www.preservationnation.org/issues/sustainability/> 10-29-09

Submitted by Ca Heritage Boare Member at: April 28, 2009 Hello again. We have won a short respite. Our main concerns was that the mandatory existing building upgrade ordinance (goal: 80% of homes by 2015), would pass before adequate accomodations for historic and potentially historic homes could be implemented. The local window replacement contractors are lined up and ready to go. We have a little time to apply the good work of places such a Boulder to our mild climate here.

We would welcome ANY insights into the advantages/disadvantages of prescriptive vs incentive-based ordinances. Is hard data on embodied energy or life cycle cost of new/old materials available yet? We would love to hear how the Feebate system in Portland is working out. Do you find that well-intentioned individuals come in mis-informed regarding window replacement or damaging insulation or other "upgrades"? Would welcome comments from Planning and Building Department staff in particular. Does anyone have policies that protect POTENTIALLY eligible buildings? We have a large body of structures that will be potentially eligible for listing in the next decade, but will remain unprotected from historically damaging energy upgrades. Thank you for any insights. Mark DeBacker

Submitted by Ca Heritage Bd Member at: February 17, 2009 Help! I am an architect with a strong preservation background, newly appointed to the Cultural Heritage Board of a small city (200,000) in California that has just decided it wants to be the Greenest place on the planet.

Using groundwork set by the previous City Council, the new (and very Green) Council is acting rapidly with staff support to be the first city in California with MANDATORY green requirements for ALL new construction. To this they will be adding mandatory upgrades to ALL EXISTING BUILDINGS within the next 60 days. Historic buildings and Districts are not excluded (unlike all other jurisdictions). The current plan is to apply HERS, Build-it-Green and LEED to evaluate and score the various building classes. These are not currently configured, as you know for older structures. They are determined to act quickly on this to save the planet (weeks not months). I need all available assistance to get them to understand the principles of Embodied Energy and example ordinances that provided reasonable modifications to HERS, BIG and LEED as they apply to historic properties,.. QUICKLY! I have reviewed the new LEED 2009, and while it significantly improves the situation for commerical buildings, it must be acknowledged as just a start. This is happening so fast.

BIG and HERS are almost completely oriented at new construction and would guide citizens to significant damage to their historic properties, if unrevised. Using some of the available referrences, we have a few Council members who seem to understand that windows should not be replaced as a first priority. The greatest, most immediate need is for well thought-through modifications to HERS,

BIG and LEED that we can offer as amendments. There is no time to develop them in a comprehensive way here. Several members were disappointed they could not pass it on thier first meeting in January, and after some additional input this month, will tolerate only about 30 to 60 days more delay to put something together for our mild climate. Grateful for any help you can offer, Mark

DeBacker, CSI, CHB

8 National Trust for Historic Preservation notes re: Preservation and Sustainability From website:
<http://www.preservationnation.org/issues/sustainability/> 10-29-09

Sustainability Speeches

Featured Speech - Historic Preservation & Green Building: Finding Common Ground

By Richard Moe / November 20, 2008

Stream [Historic Preservation & Green Building: Finding Common Ground](#) online on the USGBC Web site. Version 7.3 or higher of Apple Quicktime is required.

Thank you, Don, and good morning, everyone. I'm delighted to be here.

Since some of you may not be completely familiar with the work of the National Trust for Historic Preservation, I'd like to begin with a few words about who we are and what we do. The National Trust was created in 1949 to be the leader of America's preservation movement. We are a privately-funded nonprofit organization. We have about 270,000 members, and a staff of about 300 at our headquarters in Washington, our 6 regional offices, and our coast-to-coast collection of 29 historic sites.

The National Trust's overall mission can be summed up in a single sentence: to encourage people to appreciate the importance of the historic buildings, neighborhoods and landscapes that tell America's story, and to give them the tools they need to keep our heritage intact and playing a meaningful role in our lives. To put it even more succinctly, the National Trust helps people protect, enhance and enjoy the places that matter to them.

You'll note that the terms "sustainability" and "green building" don't appear in that brief description but that doesn't mean the concepts are new and unfamiliar to us. Back in 1980, long before the word "sustainability" came into widespread use, the National Trust

⁹ National Trust for Historic Preservation notes re: Preservation and Sustainability From website: <http://www.preservationnation.org/issues/sustainability/> 10-29-09

issued a Preservation Week poster that depicted an old building in the shape of a gas can a reminder that reusing an existing building, instead of demolishing it and replacing it with a new one, is a good way to conserve energy.

The fact is, preservationists are not gate-crashers at the green-building party. There is a strong relationship between sound old buildings and new green ones, so there is or ought to be a strong relationship between preservationists and green-building advocates. We share a determination to find effective ways to address the defining issue of our time: climate change. We have a lot in common, and there is much we can learn from one another.

This morning, I'd like to tell you about the perspective that preservationists bring to the table in discussions of green building and sustainable development. I'd also like to share with you the ways in which the preservation community is re-examining its own practices and embracing change, especially in the area of improving energy efficiency in older and historic buildings.

Let's begin with some facts.

We all know that the United States, which has only 5% of the world's population, is responsible for 22% of the world's greenhouse gas emissions. We also know that discussions on this topic usually focus on the need to reduce auto emissions. It's true that transportation cars, trucks, trains, airplanes accounts for 32% of America's carbon emissions. But here's a fact that's getting more and more attention, thanks in part to the hard work of USGBC and others in the field: According to The Pew Center on Climate Change, 43% of America's carbon emissions comes from the operation of buildings and this doesn't include the carbon that is generated by extracting, manufacturing and transporting building materials.

If nearly half of the carbon we send into the atmosphere comes from our buildings, it's clear that any solution to climate change must include being wiser about how we design and use our buildings.

I'm talking about stewardship and that's what preservation is all about. At the risk of sounding smug, I believe that preservationists know how to take good care of buildings. It's our job, and we've been doing it in this country for more than 150 years. The tradition of stewardship that we've always embraced, the knowledge that we've gained from decades of experience these can be of enormous help in efforts to transform our built environment to one that is more sustainable.

Preservationists are sometimes accused of being sentimentally fixated on the past but in fact, preservation is strongly future-oriented. Our goal is to ensure that our historic built environment our legacy from the past survives so that future generations can experience it, learn from it and be inspired by it. This kind of focus on the future is at the very core of sustainable development.

10 National Trust for Historic Preservation notes re: Preservation and Sustainability From website:
<http://www.preservationnation.org/issues/sustainability/> 10-29-09

Preservationists are also sometimes accused of wanting to freeze buildings in time but in fact, our goal is to keep old buildings viable so that they can play meaningful roles in community life. Anthropologist Ashley Montague has said that the secret to staying young is to die young but the trick is to do it as late as possible. All over the United States, preservationists are showing that old buildings put to new uses can stay young to a ripe old age. They're demonstrating that buildings are renewable not disposable resources. If that's not sustainability, I don't know what else to call it.

Two weeks ago, the nexus between historic preservation and sustainable development was the focus of a conference involving preservationists, architects, green builders and energy experts. Meeting at the historic Rockefeller estate at Pocantico Hills, New York, this group developed what we're calling the Pocantico Proclamation on Sustainability and Preservation.

This proclamation, the text of which is still being word-smithed and vetted among the preservation community, outlines six preservation-based guiding principles to sustain our built environment. We believe these principles can inform and strengthen efforts to reduce the environmental impacts especially carbon emissions that are associated with buildings. In the time remaining to me, I'll focus on these six principles.

Principle #1: Promote a Culture of Reuse

We know that the way we use our buildings causes big problems but incredibly, we keep trying to solve the problem by constructing more and more new buildings while largely ignoring the ones we already have. That makes no sense. In addition to building green, we have to make wiser use of what we've already built.

One of the basic truths we acknowledge about climate change is that it is fundamentally the result of overconsumption of natural resources namely carbon-intense resources such as oil and coal. We often think of this in terms of the oil needed to power our cars, and the coal that powers many of our buildings but constructing buildings is also an energy- and carbon-intense activity.

The retention and reuse of older buildings is an effective tool for the responsible, sustainable stewardship of our environmental resources including those that have already been expended. I'm talking about "embodied energy."

Buildings are vast repositories of energy. It takes energy to manufacture or extract building materials, more energy to transport them to a construction site, still more energy to assemble them into a building. All of that energy is embodied in the finished structure and if the structure is demolished and landfilled, the energy locked up in it is totally wasted. What's more, the process of demolition itself uses more energy and, of course, the construction of a new building in place of the demolished one uses more yet.

Let me offer an example: a well-known building not too far from where we're sitting. Boston City Hall has about 500,000 square feet of space. The amount of energy

¹¹ National Trust for Historic Preservation notes re: Preservation and Sustainability From website: <http://www.preservationnation.org/issues/sustainability/> 10-29-09

embodied in that building is about 800 billion BTUs. That's the equivalent of about 6.5 million gallons of oil and if the building were to be demolished, all of that embodied energy would be wasted. What's more, demolishing City Hall would create about 40,000 tons of debris. That's enough to fill more than 250 railroad boxcars a train nearly 2 ½ miles long, headed for a landfill that's probably almost full already. Finally, constructing a new 500,000-square-foot building on the City Hall site would release about as much carbon into the atmosphere as driving a car 30 million miles or 1,200 times around the world.

One final point: Don't assume that the energy expended in manufacturing a building is offset by the efficient operation of new green buildings. In fact, a recent study from the United Kingdom found that it takes 35 to 50 years for an energy-efficient new home to recover the carbon expended in constructing it.

It all comes down to this: We can't build our way out of the climate-change crisis. We have to conserve our way out. No matter how much green technology is employed in its design and construction, any new building represents a new impact on the environment. The greenest building is one that already exists.

Principle #2: Reinvest at a Community Scale

In its early years, preservation in America was primarily concerned with saving individual buildings, especially the grand architectural landmarks that some people call "the homes of dead rich white guys." We've come a long way since then. Today we recognize that buildings are important but context matters too.

For example, the most energy-efficient building doesn't help our cause much if it sits in a remote location accessible only by car. USGBC has recognized the importance of context in LEED 2009 by increasing the number of points available for buildings in "smart" locations that is, those that are transit-accessible. This commendable action acknowledges that the way our communities are laid out is just as important as the quality of our buildings and plays an equally important role in our efforts to address global warming.

Instead of building more and more highways and strip malls and subdivisions, we ought to be reinvesting in the communities we already have. LEED Neighborhood Development has an entire section "Green Infrastructure and Buildings" that focuses on this. LEED ND, which just came out for public comment earlier this week, includes very important language that encourages preservation and reuse of older buildings instead of demolition.

I believe you can't have smart growth without preservation. In fact, preservation is smart growth. Here's why:

- ⌚ Smart growth emphasizes density of development, mixed uses, and a pedestrian orientation. These are major characteristics of older neighborhoods. Saving them is smart growth.

12 National Trust for Historic Preservation notes re: Preservation and Sustainability From website:
<http://www.preservationnation.org/issues/sustainability/> 10-29-09

- ⌚ Communities have a major investment in the infrastructure of older neighborhoods the streets, schools, water and sewer lines, and so on. Making good use of this investment, instead of leaving it underused and duplicating it elsewhere, is smart growth.
- ⌚ Reuse of older buildings allows for growth without consumption of land. Revitalizing Main Street means less demand for a new strip mall. Converting a warehouse into 40 dwelling units reduces the demand for new houses on 10 acres of farmland. That's smart growth at its best.

This is an area in which preservationists have lots of experience. We've been fighting sprawl and encouraging smart growth for years and our message has been heard. More and more cities are using preservation as an effective tool for improving the quality of life in older neighborhoods and allowing older buildings to shelter people instead of pigeons. Creating viable alternatives to sprawl by turning urban backwaters into lively, attractive places to live and work that's what sustainable development is all about.

Principle #3: Value the Lessons of Heritage Buildings and Communities

It's often alleged that historic buildings are energy hogs but in fact, some older buildings are as energy-efficient as many recently-built ones. When the General Services Administration examined its nationwide buildings inventory in 1999, it found that utility costs for historic buildings were 27% less than for more modern buildings. In fact, data from the U.S. Energy Information Agency suggests that buildings constructed before 1920 are actually more energy-efficient than those put up between 1920 and 2000.

It's not hard to figure out why. Many older buildings have thick, solid walls, resulting in greater thermal mass and reducing the amount of energy needed for heating and cooling. Buildings designed before the widespread use of electricity feature transoms, high ceilings, and big, operable windows for natural light and ventilation, as well as shaded porches, overhanging eaves and other features to reduce solar gain. Architects and builders used careful siting and landscaping as tools for maximizing sun exposure during the winter months and minimizing it during warmer months.

Most older buildings were constructed so that their individual components such as windows, for example can be easily repaired or replaced when necessary. Even more important, unlike their more recent counterparts that celebrate the concept of planned obsolescence, older buildings were generally built to last. Because of their durability and "repairability," they have almost unlimited "renewability."

There's also much to be learned from traditional communities that were constructed before the automobile took over our lives. These places offer a vision for how our cities and towns should function in a post-auto-dependent world. No wonder smart-growth advocates and New Urbanists embrace the principles these communities embody.

In short, we can learn a lot from our heritage buildings and communities, which were constructed with respect for traditional practices that allow man-made places to exist in

13 National Trust for Historic Preservation notes re: Preservation and Sustainability From website:
<http://www.preservationnation.org/issues/sustainability/> 10-29-09

harmony with the natural environment. In recent decades, with the advent of new materials and technologies, we've lost touch with the building lessons of the past and that worries me. I'm concerned, for example, that many new buildings employ tech-heavy systems for heating and cooling, when lower-tech, passive systems might work fine. I'm concerned, too, that many new materials and systems may prove to be much less durable than their earlier counterparts.

Don't get me wrong. I'm enormously heartened by the spirit of innovation and enthusiasm that is so evident at this conference, and I know that what we can learn from history however useful won't be enough to solve all of today's problems. But I'm convinced that innovation in the green-building arena must be grounded in the hard-learned design lessons of the past.

Principle #4: Make Use of the Economic Advantages of Reuse, Reinvestment and Retrofits

The current economic downturn has everyone scrambling to identify ways to stimulate local economies and create jobs. The situation reminds me of what a British statesman told his colleagues during the darkest days of World War II: "Gentlemen, we are out of money; therefore, we shall have to think."

This is another area in which preservationists can make a meaningful contribution. Over the years, we've discovered some important things related to the economics of reusing buildings and reinvesting in existing communities.

Here's the basic message: Dollar for dollar, rehabilitation creates more jobs than new construction. Several studies and an economic input-output model developed by Carnegie Mellon University demonstrate that preservation activities create more jobs than new construction. For example, one study found that \$1 million invested in the rehabilitation of an existing building creates 9-13 more jobs than the same \$1 million invested in new construction. Why? Quite simply, rehabilitation activities are more labor-intensive than new construction that is, they require more man-hours and fewer materials. This has other

implications for our conversation about sustainable development as well. An economy that is more labor-intensive and less materials-intensive is a greener economy.

Here's another point to consider: Much of the work involved in building rehab requires skilled craftsmanship which means that historic rehab, combined with job training programs, can build a corps of workers with bankable skills that will serve them well for a lifetime.

It's highly likely that the creation of more "green" jobs will be a cornerstone of economic-stimulus packages that come down the line in the next few months. Most of these "green" jobs will probably focus on developing things such as solar panels, wind turbines and other highly technical solutions but we shouldn't overlook the wisdom of a statement in Van Jones's new book, *The Green Collar Economy*. He suggests that "the main piece of technology in the green economy is a caulk gun."

14 National Trust for Historic Preservation notes re: Preservation and Sustainability From website: <http://www.preservationnation.org/issues/sustainability/> 10-29-09

In almost every way imaginable, the rehab and retrofit of existing buildings is essential not only in fighting climate change but also in addressing the economic crisis and bringing good, skilled jobs back to American communities. We need to make sure that Congress and our new President connect these dots. Any meaningful economic stimulus package must include provisions to reinvest in our failing infrastructure and retrofit our buildings.

Principle #5: Re-imagine Historic Preservation Policies and Practices as They Relate to Sustainability

Obviously, this portion of my message is directed primarily at preservation practitioners. I mention it to you as evidence that we understand the gravity of the threat of climate change and we take seriously our responsibility to do whatever we can to reduce the impact of buildings on the environment. In its early years, preservation focused on keeping buildings from being torn down. Now we understand that just saving them isn't enough we also have to do our best to improve their energy efficiency and ensure that their impact on the environment isn't harmful.

Happily, there is a growing number of projects that show how historic buildings can go green. There's a great example in Portland, Oregon, where an armory built in 1892 was turned into a state-of-the-art performance space and in the process became the first historic building to receive LEED Platinum certification and federal historic-rehab tax credits. I'm especially proud of another example in Washington, D.C.: Last spring, the National Trust opened President Lincoln's Cottage to the public and just a few yards away from the Cottage, the Visitors Education Center is housed in a renovated historic building that will be LEED Gold-certified.

Examples such as these and there are many others show that we're making progress, but this is an area in which preservationists can't pretend to have all the answers. We know that we have much to learn from you the green building community about how to be smarter about preserving and reusing historic buildings. We will learn and we'll put what we learn into action.

That brings me to my final point:

Principle #6: Take Immediate and Decisive Action

It's not enough to talk about how historic preservation can inform green building, or how green building practices can be integrated with preservation practices. We must roll up our sleeves and put these principles into practice. Education and outreach will be key to our success but action, especially in the public policy arena, is critically important.

I'd like to commend the work of the USGBC, which has done a great job of focusing attention, especially in the building community, on the issue of green building. LEED standards are being adopted by more and more state and local governments and many of

15 National Trust for Historic Preservation notes re: Preservation and Sustainability From website:
<http://www.preservationnation.org/issues/sustainability/> 10-29-09

us expect that these standards will eventually be incorporated into municipal and state codes throughout the country.

Over the years, preservationists have expressed some concerns about LEED specifically, that it is biased towards new construction and doesn't offer enough credit for reuse, and that there is too much focus on individual buildings and not enough on the context or location of buildings. To address this concern, the National Trust formed a Sustainable Preservation Coalition which includes the American Institute of Architects, the Association for Preservation Technology, the Environmental Protection Agency, the National Park Service, the General Services Administration, and the National Conference of State Historic Preservation Officers. This group has been working with the USGBC to ensure that the benefits of reusing existing buildings are better recognized in future versions of LEED and some great progress has been made. Initially, green building standards grew out of some loose ideas about what would make for a more sustainable built environment; with LEED 2009, USGBC is shifting to a rating system that is based on the science of building and the quantifiable impact of buildings on the environment.

As many of you know, LEED 2009 will incorporate a system in which credits are weighted according to Life Cycle Assessment indicators that are based on environmental impacts and take into consideration the durability of materials. The new rating system is also more context-sensitive than the previous version, awarding many more points for constructing or reusing buildings in environmentally-responsible locations. Finally and this is very important the new rating system will incorporate what USGBC calls an "Alternative Compliance Path" that we anticipate will award more points for the reuse of existing buildings than was the case with previous versions of LEED.

Once LEED 2009 is finalized, the National Trust and USGBC will begin working on the next version of LEED which will incorporate even more changes. For one thing, in addition to the durability metric that will already be in place, we'll apply a new overlay of cultural, social and preservation metrics that will provide direct recognition of the importance of things such as

preserving sites of historic and cultural significance, reinvesting in existing neighborhoods, and providing affordable housing.

These are great steps forward, but there's more work to be done. The science that informs the USGBC's standards and, indeed, all ratings systems is still evolving. We must ensure that this science is accurate, especially when it comes to understanding the embodied energy and embodied carbon in buildings, and the life cycles of buildings and materials.

On the federal level, we are at a critical juncture for new policies related to climate change and the built environment. President-elect Obama has made it clear that he wants to address the threat of global warming and will make reducing carbon emissions a priority in his new administration. I'm very encouraged by this.

Many of you are familiar with the Lieberman-Warner Cap & Trade bill that Congress failed to pass last summer. In addition to mandating a cap on carbon emissions in the United States, this bill included many other provisions related to carbon mitigation and

16 National Trust for Historic Preservation notes re: Preservation and Sustainability From website:
<http://www.preservationnation.org/issues/sustainability/> 10-29-09

the environment but it would have done little to incentivize retrofits to reduce carbon emissions by buildings. That's a serious oversight that must be corrected in any climate-change legislation that comes up during the next session of Congress.

USGBC, the American Institute of Architects, the National Resources Defense Council and others have begun to develop proposals to address this issue. We need a bill that recognizes that reducing carbon emissions means being smarter about how we construct, use and re-use our buildings. All of us green builders, preservationists, architects, smart-growth advocates and others all of us must work together to support measures that will make this happen.

I believe there is a powerful synergy between green building and historic preservation. But I also know there have been tensions between our two fields. Some of you may see preservation as a roadblock to going green and there's no denying that occasionally there are very real conflicts between preservation and sustainable development goals. Here are some examples:

- ⌚ We know that part of the solution to global warming is the development of renewable energy such as wind but sometimes the development of windmill farms threatens viewsheds and sites of cultural significance.
- ⌚ In many cases, solar technologies can be accommodated in historic rehab projects but there are other instances in which aesthetics or concerns about historic fabric make their use undesirable.
- ⌚ Higher density is a key element of sustainable development but efforts to increase density, especially in urban locations accessible to mass transit, sometimes put historic buildings and neighborhoods at risk.

Situations such as these pit "good guys against good guys" but we can't let them cripple our efforts. Be assured that preservationists are committed to re-examining our practices, committed to thinking critically and creatively about how they can be improved to reflect the realities of the climate-change crisis.

As an indication of our commitment, we will soon open the National Trust Preservation Green Lab on the West Coast. The Green Lab will undertake demonstration projects to retrofit historic buildings to achieve high levels of energy efficiency and reduce other environmental impacts. The Clinton Climate Initiative, which recently announced an Energy Efficiency Building Retrofit Program, is a partner in this effort, having committed to provide technical assistance, materials at cost, and favorable financing through participating lenders.

The Preservation Green Lab will also work with state and local governments to make sure that municipal plans, building and zoning codes and "climate action plans" incorporate principles that support reuse, reinvestment, and green retrofits. Here's a specific example: In Seattle, many landmarked buildings are exempt from high-performance energy requirements that are imposed on new construction or major

17 National Trust for Historic Preservation notes re: Preservation and Sustainability From website:
<http://www.preservationnation.org/issues/sustainability/> 10-29-09

rehabilitation projects. To address this issue, the Green Lab will work in partnership with the City of Seattle to develop code language that encourages energy efficiency in historic buildings while providing the flexibility needed to deal with historic fabric and other complexities associated with older buildings. This is just one way in which we intend to make our Green Lab a true laboratory for generating creative policy and technical solutions to help integrate preservation and green building practices.

The preservation and green building communities share a common goal: securing a viable, sustainable, meaningful future for our children and the generations that will follow them. We stand on common ground but to ensure that we don't lose our footing, two things are needed:

First, a recognition of the importance of balance between the need to preserve our heritage and the need to address global warming and the degradation of our environment;

And second, a commitment to honest, open and ongoing dialogue to identify points of difference and find ways to overcome them.

In the face of an unprecedented global challenge, we have an opportunity to forge an unprecedented partnership. Working together, we can make a real difference.

###

The National Trust for Historic Preservation is a non-profit membership organization bringing people together to protect, enhance and enjoy the places that matter to them. By saving the places where great moments from history – and the important moments of everyday life – took place, the National Trust for Historic Preservation helps revitalize neighborhoods and communities, spark economic development and promote environmental sustainability. With headquarters in Washington, DC, nine regional and field offices, 29 historic sites, and partner organizations in all 50 states, the National Trust for Historic Preservation provides leadership, education, advocacy and resources to a national network of people, organizations and local communities committed to saving places, connecting us

to our history and collectively shaping the future of America's stories. For more information visit www.PreservationNation.org.

APPENDIX F
POCANTICO PROCLAMATION
On Sustainability and Historic Preservation
NATIONAL TRUST FOR HISTORIC PRESERVATION

Premise

The historic preservation community has a deep tradition of stewardship for our built environment, emerging as leaders in sustainable practices. Consistent with this tradition, historic preservation practitioners resolve to face head-on the global human-caused ecological crises that threaten our built and natural resources. Historic preservation must play a central role in efforts to make the built environment more sustainable. To this end, we urge all policy makers to recognize the following:

1. *The Climate Change Imperative* – Human activity has increased and accelerated global warming putting the environment at risk. It is imperative that we immediately and significantly reduced greenhouse gas emissions to begin reversing extreme climate change patterns within a generation.
2. *The Economic Imperative* – Our current economy is based upon unsustainable consumption and an overreliance on finite resources. A new green economy must rest upon a conservation-based foundation to manage natural and cultural resources in a sustainable and economically beneficial manner.
3. *The Equity Imperative* – In recent years, economic inequalities between rich and poor have grown in the United States and abroad. The disproportionate levels of resource consumption and global pollution are unsustainable. Our consumption patterns must be altered to foster social equity, cultural diversity, and survival of all species.

The Pocantico Principles on Sustainability and Historic Preservation

Therefore, in order to address the three above imperatives, we advocate the following:

1. **FOSTER** a Culture of Reuse

Maximizing the life cycle of all resources through conservation is a fundamental condition of sustainability. The most sustainable building, community or landscape is often the one that already exists. Lessons learned from historic preservation are transferable to the entire existing built and landscaped environment.

Pocantico Proclamation
on Sustainability and Historic Preservation

2. **REINVEST** at a Community Scale

It is not sufficient to address sustainability on a piecemeal basis through individual building projects. We must consider the larger context of the built environment: our communities. Reinvestment in existing, more sustainable

neighborhoods – especially our older and historic ones – saves resources and promotes socially, culturally, and economically rich communities.

3. **VALUE** Heritage

The design of older buildings, landscapes, and communities should inform future building practices. While new green building technology offers promise for reducing the environmental harms caused by new construction, traditional building practices provide a wealth of sustainable design solutions that are premised on sensitivity to local conditions, careful siting and planning, and longterm durability, all of which provide essential models for the future.

4. **CAPITALIZE** on the Potential of the Green Economy

Preservation economics provide a powerful model for shifting away from a consumption-based and energy-inefficient economy. Reinvestment in our existing built environment must become an indispensable part of America's new green economy. Per dollar spent rehabilitation activities create more new jobs than new construction.

5. **REALIGN** Historic Preservation Policies with Sustainability

Today's challenges require that historic preservation move beyond maintaining or recovering a frozen view of the past. Historic preservation must contribute to the transformation of communities and the establishment of a sustainable, equitable, and verdant world by re-evaluating historic preservation practices and policies, and making changes where appropriate.

Next Steps

Consequently, we, the historic preservation community, recognize the environmental, economic, and social challenges that face us and call for policies that will result in revising our present course. We stand ready to offer an example for sustainability, while further challenging preservationists to more fully accommodate sustainable practices. We call for our leaders and fellow citizens to join us in taking immediate action.

The Pocantico Proclamation on Sustainability and Historic Preservation was written by participants in the Pocantico Symposium: 'Sustainability and Historic Preservation -- Making Policy, November 5-7, 2008' based on materials developed at this symposium and the discussions that took place there. It reflects the views of the authors and not necessarily those of the Rockefeller Brothers Fund.

APPENDIX G

Partial List of Endangered Resources in Belmont

Public Buildings:

In the past several years, Belmont has made admirable progress in preserving its historic buildings. The Town Complex including the Homer Building, the School Administration Building and the Town Hall has been rehabilitated to create one of the most beautiful historic municipal centers in the region. The Waverley Fire Station and the Central Fire Station were provided with preservation restrictions enabling them to be adaptively reused as successful private developments; they are now crown jewels in Waverley Square and Belmont Center, respectively. But work remains to be done to complete the Town's commitment to preservation.

- **Police Station** – 1930, Georgian Revival, H. Thaxter Underwood, architect. According to Town studies, Police operations will likely be moved from this building to another location. Designed to resemble a colonial residence, it fits well with both the municipal town complex and the adjacent residential neighborhood. *Recent studies have included suggestions for development which would include the building's demolition.*
- **Municipal Light Building** – Georgian Revival, 1925 (substation, Francis Galaher, architect), 1934 (offices, George Robinson, architect). Underutilized and unmaintained, building. It's well-proportioned, graceful façade is a major frontispiece to the historic Town complex. *The lack of depth on the site, backed by the railroad tracks, presents challenges. Along with the adjacent Police Station, recent studies have included suggestions for development which would include the building's demolition.*
- **Underwood Pool and Bath House** – 1912, Loring Underwood, landscape architect; H. Thaxter Underwood, architect. Originally built as a pond fed by an underground spring, the site is significant as the nation's first public outdoor pool. *Recent studies indicate that the current concrete pool is facing imminent failure and the Bath House is in need of repairs. Action needs to be taken by either the Town or a "Friends" group to restore this historic complex.*

Residential Properties:

Throughout Belmont there are numerous examples of important 17th and 18th century homes that are unprotected. Typically these homes are on sites that could be subdivided or have larger homes built if the existing historic structures were demolished.

17th and 18th Century Residences – There are at least ten 17th and 18th century homes in Belmont. Only one of these structures is in the Historic District and, therefore, protected. Often these homes are lived in by residents who care deeply for the historic value of their

homes. Nevertheless, the properties are unprotected if there is a change of ownership or intent of the owners. Examples of unprotected early homes include:

- **59 Common Street** – Thomas Clark House, c.1760 – An outstanding 18th century Georgian farmhouse, built and lived in by Thomas Clark, an American Revolution Minuteman who served in Lexington and Bunker Hill. He became the first person to cast a vote in the new Town of Belmont. Clark Hill is named after him. *The site, under current zoning, could be subdivided if the house were to be demolished.*
- **52 Washington Street** – John Chenery House, c.1654
- **388 Pleasant Street** – Abraham Hill House, c.1693
- **981 Concord Avenue** – Josh Shattuck House, c.1744
- **154 Mill Street** – Capt. Eaton House, c.1750
- **325 Common Street** – Christopher Grant House, c.1760
- **160-162 Washington Street** – Jonathan Stone House, c.1775-1800

19th Century Residences – Throughout Belmont there are examples of 19th century homes that are unprotected. Some are in enclaves and others are in scattered locations. Examples that would benefit from some form of protection include:

- **Belmont Park** – An 1896 enclave of well-detailed Queen Anne and Shingle Style homes at Myrtle, Goden, Oak and School Streets.
- **386 Common Street** – The Whitney Mansion, c.1856 – Gothic Revival home, currently used as a non-conforming boarding house. It is in continuously rundown condition, greatly compromised by the application of inappropriate exterior cladding material. *The lot appears to be subdividable into a condition similar to the recent townhouses built on neighboring Warwick Road if the historic house were to be demolished.*
- **Frost Family Homes** – 308, 340, 354 Lake Street and 170, 291 Brighton Street, c.1805-1889 – several homes from one of the early landholders in Belmont.

Early 20th Century Residences

Most of the homes in Belmont were developed in subdivisions created in the first three decades of the 20th century. These are homes in a variety of historic revival styles that create the character defining features in their neighborhoods. *Many of these homes are in danger as they fall into one or more of the conditions cited above. The loss recently of a home on Van Ness Road resulted in the not only the demolition of the historic home but also the removal of a very old specimen tree – all to make way for a larger home.*

Modern Homes

There are several modern homes in Belmont that are representative of the Modern Movement in architecture, embodying criteria for listing on the National Register of Historic Places. Examples include: the 1936 Miller House on Juniper Road; the 1950 Whiting House on Tyler Road; the 1956 McCreary House at 54 Kenmore Road; and the

1956 Meyer House at 240 Somerset Road. Others include the group of small homes designed by Carl Koch and built in 1940-41. *As an example of the threat to these homes, the 1934 International Style home at 12 Park Avenue, designed by the distinguished architect Eleanor Raymond, was demolished by Belmont Hill School in 2007. This was one of the first modern houses in New England and represented a milestone in modern American architecture; now it is a vacant lot.*

Privately Owned Commercial Buildings:

Historic buildings in our commercial areas are particularly at risk until there is zoning reform that reflects a commitment to preservation. Although demolished forty years ago, the memory of the Tudor Block and Olive's Block remains fresh. Some of the commercial buildings at risk include:

- **The former SS Pierce Building** (489-493 Common Street; 102-104 Trapelo Road), c.1913, Colonial Revival, wood shingle and brick, gambrel gabled form – *As part of the Cushing Square Overlay Zoning District, this building at the important corner of Common Street and Trapelo Road is in imminent risk as it has not yet been included in proposed development plans.*
- **432-444 Common Street** 1931 Georgian Revival, single-story set of storefronts with steep-pitched slate roof and cupola - *set back from the street to align with the houses in the adjacent residential neighborhood, this is one the most handsome commercial buildings in Belmont. Its threat may be its small but appropriate size.*
- **The Winters Block** (72-86 Trapelo Road), c.1925-1929, Tudor Revival, stucco/half timber exterior – Also set back from the street, its second story contributes to the scale of the area. While perhaps seeming to be an unlikely candidate for demolition, its relationship to adjoining underutilized commercial properties makes it a potential prospect for inclusion or exclusion in a larger development plan.