

**National Conference of State Historic Preservation Officers**  
**Square Table Discussion**  
on  
**The Greening of Historic Properties**  
**Leadership in Energy & Environmental Design**  
February 26, 2007

**Agenda, Concepts and Strategic Directions**

**OPENING COMMENTS:**

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**SUMMARY**

In the past ten years, the sustainable design movement has begun to codify a formal approach for establishing and evaluating what makes a building “green.” There are now several methods that attempt to measure sustainable design, and the one having the biggest impact in our country is an evaluation tool known as the LEED Green Building Rating System (Leadership in Energy and Environmental Design) developed by the United States Green Building Council (USGBC). At least three states California, Washington and New Mexico have Governor Executive Orders promoting LEED Standard buildings, including older and historic buildings. For instance, California’s Governor Schwarzenegger’s Executive Order, S-20-04, dated December 14, 2004, has set the standard for LEED Silver Accreditation for all state-owned buildings.

At the last NCSHPO Board of Directors meeting in Pittsburgh on October 31, 2006 the Board decided, as part of its 2007 NCSHPO Work Plan “to broaden and build relationships with ‘industry’ and other organization and associations, with an emphasis on the USCGB and LEED Standards.” This Square Table will explore past initiatives, current practices and future considerations to develop a joint NCSHPO policy on sustainability, LEED Standards, and historic preservation.

**GUEST SPEAKERS**

1. Overview of the LEED Accreditation Program Standards, and Considerations for Historical Resources  
**USGBC Representative**
2. LEED Standards and the Federal Historic Rehabilitation Tax Credit Program: Lessons Learned  
**Sharon Pack, FAIA, National Park Service**
3. Current Coalitions and Recommendations for Integrating Historic Resources within the LEED Program  
**Barbara Campagna, AIA, National Trust for Historic Preservation**

## BACKGROUND

Older and historic buildings comprise more than half of the existing buildings in the United States and the retention and reuse of these buildings preserves the materials, embodied energy, and human capital already expended in their construction. The recycling of buildings is one of the most beneficial “green” practices, and stresses the importance and value of historic preservation in the overall promotion of sustainability. The accepted definition of sustainability from the U.N. World Commission on Environment and Development’s 1987 report, “Our Common Future” is that sustainability involves “meeting the needs of the present without compromising the ability of future generations to meet their own needs.” The intersection of sustainable design and historic preservation would seem a natural alliance.

Mike Jackson, in his essay “Building a Culture that Sustains Design,” builds a case for this natural alliance: “Both approaches are concerned with the built environment and its relationship to the natural one. Sustainable design and historic preservation need to find their common ground, identify any potential conflicts, and develop complementary programs.” (APT Bulletin, Vol. 36, No. 4, 2005, p. 2)

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The historic preservation community applauds these developments, but has had concerns that these standardized tools are lacking in how they address historic properties. Specifically, these standards overlook the impact of projects on cultural value; do not effectively consider the performance, longer service lives and embodied energy of historic materials and assemblies; and are overly focused on current or future technologies, neglecting how past experience helps to determine sustainable performance.

This realization has caused several national organizations, which create preservation policy and best practices, to join together. The National Trust for Historic Preservation is coordinating the activities of a national coalition to develop a joint strategy for making historic preservation a more viable option within green building. The organizations currently involved are the American Institute of Architects (AIA), the Association for Preservation Technology International (APT), the National Park Service (NPS) and the National Trust for Historic Preservation (NTHP). An initial priority for the group is to affect how preservation is treated in green rating systems, notably the LEED system. This coalition has reached out to USGBC to become more involved in the development and revision of LEED products and to advise on the development of guidelines for historic buildings. The leadership of these organizations is meeting with USGBC leadership in early March, 2007. Additionally, the group plans to develop a joint policy position on sustainability and historic preservation. The coalition, which was created a year ago, is now expanding its membership and has invited participation from NCSHPO and GSA.

## **OVERVIEW**

The dialogue between historic preservation and green building advocates has been promoted at a variety of conferences, symposia and workshops in the past five years helping to define both the inherent conflicts and synergy of the two design approaches. APT established a Technical Committee on Sustainable Preservation in 2004 and held a seminal symposium in Halifax in 2005 (The Sustainable Heritage Conservation Symposium) which was attended by representatives from both the historic preservation and green building communities, resulting in a statement of purpose and an action plan which were published in a special issue of the APT Bulletin in late 2005. The national coalition has been using this publication as a guideline for their policy efforts. Workshops throughout the country such as those held in Seattle, Riverside, California, the annual EcoBuild Federal Summits in Washington, DC, and an invited DOE symposium this past December, 2006, to name but a few, have furthered the dialogue.

During the National Trust for Historic Preservation Conference in Pittsburgh, PA, November 1 – 5, 2006, several tours, workshops, and meetings were held to encourage the “greening” of historic properties. A special session, the Greening of Historic Properties National Summit was also held on October 30, 2006 prior to the Conference, and a working draft White Paper titled *Pinpointing Strategies and Tactics for Integrating Green Building Technologies into Historic Structures* was distributed on November 8, 2006 (no date on the White Paper)

While the Summit was a valuable experience for attendees, “The White Paper”, as it is currently written, does not appropriately reflect the positive outcome and discussions of that session. APT, the National Trust and the National Park Service have all registered their concerns about the discrepancies in the paper and it is their hope that the White Paper will be adjusted to focus on the results described in the last four pages of that paper so that it too can help to move the dialogue forward.

## **NCSHPO WORK PLAN 2007**

At the NCSHPO Board of Directors meeting in Pittsburgh, PA on October 31, 2006 it was decided to explore the NCSHPO participation in the greening of historic buildings, and broaden our relationships with the US Green Building Council and the National Trust for Historic Preservation in their efforts towards better representing historic preservation methods in LEED products or, at the very least, to support the integration of LEED principles into historic buildings.

These principles, if found important by the NCSHPO Board, would be integrated into the Strategic Plan 2007 NCSHPO-Green Building Principles for Historic Buildings, Work Plan 2007. All of these efforts encourage the integration of historic buildings into the Green Building Movement by promoting a better representation into the LEED rating system. Throughout the country, there are anecdotal reports from designers, architects, and consultants who note that their clients are demanding that LEED standards be followed, even if certification is not obtained, for older and historic building rehabilitations.

The LEED Rating System includes a variety of products and tools. The most widely used product for historic preservation, rehabilitation and restoration projects is LEED NC (New Construction). While there is a LEED for Existing Buildings it is actually a system designed as a maintenance tool which encourages maximizing operational efficiency while minimizing environmental impacts. It provides a recognized, performance-based benchmark for building owners and caretakers to measure

operations, improvements and maintenance on a constant scale. LEED for Existing Buildings is a road map for delivering economically profitable, environmentally responsible, healthy, productive places to live and work but it is not an effective tool for construction projects.

The LEED rating system provides points for projects which, when added, become a rating system that identifies the level of sustainability a project will reach – from Certified, to Silver, Gold and ultimately Platinum. When combined with the Federal Historic Rehabilitation Tax Credit Program and using the *Secretary of the Interior's Standards for the Rehabilitation of Historic Properties (Standards)*, the LEED principles can become an added bonus towards the historic preservation movement, insure the conservation of historic properties, and make good economic sense while promoting sound environmental stewardship.

Under the USGBC guidelines, however, mandated energy efficiency standards, and state-of-the-art building, environmental, and life safety control systems can prove challenging to historic fabric. Integrating new materials and technologies, including electrical, HVAC, electronic and fiber optic cabling, new energy-efficient windows and exterior wall insulation can appear to be at odds with the *Standards* by un-informed practitioners lacking the experience to broaden the interpretation of the LEED criteria. Obviously, LEED-focused technology principles can provide significant challenges and may bring green building advocates into direct conflict with accepted historic preservation principles, largely because of a lack of education on the part of designers and owners. In addition, historic buildings and their existing low energy designed systems (e.g. prismatic glass, reflective tin ceilings, and durable materials such as marble) are not given equitable points in the scoring system as noted under the LEED Existing Building grading system.

To address these issues there needs to be input from the NCSHPO to encourage larger scale discussions and guidelines for the integration of historic preservation principles and green building guidelines. Awareness of the multiple organizations and agencies participating in these common efforts would benefit each SHPO and their office staff when dealing with LEED historic building candidates. The development of the LEED program appears to have similar global potential impacts to historic properties as earlier energy-loss conservation principles, Americans with Disabilities Act, Toxic Substances Act, various seismic and structural strengthening ordinances and similar compliance programs that are continuing to affect historic buildings and structures. The LEED program being much broader than buildings, over the last few years, has garnered wide support from public and private concerns at large.

## **2007 NCSHPO WORK PLAN DISCUSSION ISSUES**

### **Specific Steps**

#### **1. Create a new Historic Buildings Application Guides Committee to promote and strengthen better representation within the LEED Rating System**

Create a new Application Guides Committee on Historic Buildings within the LEED Committee Structure. This would create a new committee to join the existing committees: Campus, Healthcare, Laboratories, Retail, and Schools.

It seems getting a NCSHPO representative on the USGBC Board would be an important component of having direct dialogue and involvement with the LEED organization. An action may be to find out how this could be best facilitated.

## **2. Category of Involvement Needs to be Defined**

Which category or categories should NCSHPO concentrate on - Existing Buildings and/or New Construction or all of them?

LEED-NC (New Construction) was developed for application to new construction and major renovation projects. This section would affect larger projects involved with the Federal Rehabilitation Tax Credit Program.

LEED-EB (Existing Buildings) addresses the operations and maintenance phase of the building's lifecycle, including facility upgrades and performance improvements. This category appears to have the greatest impact on interior infrastructure such as HVAC, electrical, and lighting systems.

LEED-CS (Core & Shell) is designed for use by commercial real estate and speculative developers. Created in conjunction with LEED-CI (Commercial Interiors) to serve the needs of building owners who lease space to tenants, it addresses only those portions of the building that the owner controls and provides incentives to educate tenants about the benefits of green tenant fit out. This section affects historic interior finishes and character defining features.

## **3. What is the Role of a LEED Accredited Professional in a SHPO office?**

SHPO's offices oversee and comment on projects involving the Federal Rehabilitation Tax Credits, Save America's Treasures, and several State Bond Acts, Grants, and Propositions involving monies used on historic structures. Many of these projects are coming into the office with LEED components.

Having a SHPO person as a LEED Accredited Professional (LEED AP) that understands the LEED process would lend a high level of credibility to the review process. In addition, a LEED AP could communicate at the NCSHPO level to disseminate information similar to Section 106 compliance standards.

There is concern as to the regulatory authority given to SHPOs in regard to LEED review and comment and how this would be actively integrated into the SHPOs workload.

## **4. Financial Incentives for Historic Buildings under LEED**

What are incentives under the LEED certification system for building owners? How does economic benefit compare to the Preservation Tax Incentives for Historic Buildings? Financial incentives may be the most valuable tool historic preservation has to bring to the table.

### **Responsible Parties**

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### **Links**

USGBC's website on Existing Buildings: [www.usgbc.org/DisplayPage.aspx?CMSPageID=221](http://www.usgbc.org/DisplayPage.aspx?CMSPageID=221)