



The Nashville Challenge

Sustainable development – development that meets the needs of the present without compromising the ability of future generations to meet their own needs – includes social, cultural, economic, and environmental elements. In recent years the preservation movement has articulated ways in which sustainable development and historic preservation are mutually reinforcing. Historic preservation, by its very nature, is one form of sustainable development. Yet despite these connections, there are instances in which the goals, values, and policies for sustainable development and historic preservation diverge. The Challenge Statement is intended to serve as a foundation for a dialog about how these issues might be addressed by the preservation community.

The Nashville Challenge narrows the broad spectrum of sustainability topics to focus on climate change as this is currently the predominate issue in the sustainability discussion. Although the Challenge is limited in scope due to time constraints, we recognize the numerous other social, economic, and cultural issues that also need to be addressed.

The idea for the Nashville Challenge evolved from an earlier meeting of preservationists, architects, green builders, and energy experts in November 2008 to discuss the challenges and opportunities presented to the historic preservation movement by climate change and the call for more environmentally, economically, and socially sustainable development. The resulting *Pocantico Proclamation on Sustainability and Historic Preservation* includes five principles to sustain our built environment. The Nashville Challenge responds specifically to the Proclamation's call to reexamine preservation policies in light of the challenges presented by an ever-growing number of federal, state, and local policies that require or create incentives for more sustainable building practices.

The Challenge

How can the American historic preservation movement align with national efforts to address climate change and promote environmental sustainability?

In theory, historic preservation and sustainability are strongly interrelated, but in practice that synergy is not always the rule. Given the growing political and economic imperative for sustainability, the current misalignment reflects an increasingly urgent problem. If not addressed, climate change/energy legislation and policies may undermine efforts to protect historic resources, without utilizing the benefit of lessons learned from decades of historic resource conservation.

Background

Sustainability requires fulfillment of social, environmental, and economic criteria. While every facet of sustainability is of importance, current discussions focus primarily on environmental matters, and more specifically on climate change mitigation.

Scientific consensus holds that immediate and significant actions are required to reverse patterns of global warming. Unprecedented levels of greenhouse gas emissions are disrupting natural cycles, creating potentially irreversible and undesirable environmental changes. With over 40% of carbon emissions in

the United States coming from the operation of existing buildings, strategies adopted to address climate change will make major demands on our existing built environment, including historic resources. Political and economic incentives are spawning a robust green building market, and there is a growing regulatory demand for building energy retrofits, alternative energy, and new green solutions and technologies.

As these new industries and regulations change Americans' view on the worth and potential of their buildings, this new vision must include maximizing the life cycle of resources through conservation as a fundamental premise of sustainability. Historic preservation is critical to the conservation and stewardship of existing built and cultural resources. Lessons and techniques learned from historic preservation are transferable to retrofitting existing buildings for energy efficiency.

Despite the seeming synergy between historic preservation and sustainability, the preservation community's response to sustainability discussions has raised questions of how much "green technology" we can tolerate within the established guidelines, rather than demonstrating leadership in green design and sustainable technology. To help align the American historic preservation movement with national efforts to address climate change and promote sustainability, the following are examples of challenges that must be addressed:

Requirements for Energy Efficiency:

- New energy efficiency requirements, such as those included in the National Energy Code that is part of the House of Representative's American Climate and Energy Security Act, can pose a challenge for historic preservation practices, and specifically the Secretary of the Interior's Standards for Rehabilitation. New federal requirements will likely require buildings achieve 50% energy improvements by 2015.
- State and local governments are also requiring or creating incentives for energy efficiency in existing buildings through green building ordinances, changes to energy codes, and other means. In many instances, these changes directly impact historic buildings.
 - When preservationists engage on the topic of national energy codes it has often been to seek exemption. Should preservationists embrace energy codes for historic buildings? If so, do we have the means to administer historic preservation practice in a way that will accommodate the performance improvements that these codes would demand?
 - Are we giving those implementing local, state, and federal preservation policies the guidance and tools they need to make decisions about what is appropriate for historic buildings?
 - How is the preservation movement aiding owners of historic buildings in approaching energy efficiency issues?
- Many experts believe that in order for existing buildings to achieve greater than 40% improvement in energy performance, the building must incorporate renewable energy (solar, geothermal, etc.).
 - How is the preservation movement assisting owners with renewable technology, such as drilling geothermal wells, placement of solar panels etc., in view of these coming imperatives?

Promoting Traditional Approaches to Green Building

- Traditional architectural elements in many historic buildings reduce energy consumption and greenhouse gas emissions. The Department of Energy, the EPA, the federal Energy Star program, the AIA/DOE Commercial Building Initiative, the Commercial High Performance Green Buildings Initiative, the federal Zero Net Energy Buildings Initiative, the National

Building Performance Initiative, and many other public/private efforts are creating directives, regulations, and best practice guides for retrofitting existing buildings, which emphasize replacement and new materials, regardless of the age or style of the building.

- How can historic preservation educate non-traditional partners on the effectiveness of traditional building elements and styles for energy efficiency?

Potential Solutions

Alignment of the historic preservation movement with national efforts to address climate change offers numerous potential solutions, which can be classified in three broad categories:

- 1) Internal revision of preservation policies and practices
Example: Revise the Secretary of the Interior's Standards for Rehabilitation to include guidance on integrating energy efficiency strategies into historic buildings.
- 2) Collaborate with environmental and green building organizations working outside of preservation
Example: Work with green building rating system developers to update standards to accurately account for life cycle benefits of reusing existing buildings.
- 3) A combination of internal revisions and outreach to the green community.

In summary, the Nashville Challenge provides a framework for discussing the challenges facing the preservation movement in regards to sustainable development and green building. In answering these challenges, the preservation movement has the unique opportunity to reveal itself as both a vital player in the sustainability community and also a true leader in sustainable development.