

Local Leaders in Sustainability



*A Study of
Green Building Programs
in Our Nation's Communities*

The American Institute of Architects



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*A Study of
Green Building Programs
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Local Leaders in Sustainability: A Study of Green Building Programs in Our Nation's Communities is the first in a series of reports focusing on green building at the local level.

The next report in the series will be an analysis of county green building programs.

Cover photo

Heifer International Headquarters, AIA/COTE 2007 Top Ten Green Projects award recipient. Polk Stanley Rowland Curzon Porter Architects Ltd., Little Rock. Photo by Timothy Hursley.

Content

- Executive Summary** 4

- Introduction** 6
 - Methodology 7
 - Definitions 9

- Study Findings** 10
 - Typical Path to a Green Building Policy 10
 - Green Building Nationwide 12
 - Regional Distribution of Programs 13
 - Trends 16
 - Additional Survey Responses 18

- Case Studies** 23
 - Portland 23
 - San Francisco 26
 - Scottsdale 29
 - Chicago 32
 - Austin 35
 - Atlanta 39

- Cities Pushing Ahead** 41
 - D.C.-to-Boston Corridor 41
 - California 44
 - Beyond Platinum: The Living Building Challenge 47

- Conclusion** 49
 - Recommendations for Continued Greening 49
 - Final Analysis 50

- Green Building Program Quick Reference Matrix** 51

Executive Summary

American cities are going green and local leaders are charging ahead with innovative sustainability policies. Buildings currently account for close to one-half of all greenhouse gas emissions, and the design and construction of green buildings offers the opportunity to create a more sustainable future. *Local Leaders in Sustainability: A Study of Green Building Programs in Our Nation's Communities* is a resource that examines the current state of green building laws in American cities as of 2007.

The American Institute of Architects (AIA) is focusing its energy on the promotion of sustainable design in our nation's communities, and this report demonstrates the valuable work of America's local leaders in sustainability. Green building measures have moved forward more rapidly at the grass-roots level, as local officials lead the way on sustainability policy.

Green building policy is necessary, as such factors as climate change, energy costs, and healthy living are all seen as priority issues for our nation. The primary goal of this analysis is to provide a tool for communities as well as other levels of government that seek to design green building programs in the future.

Local Leaders in Sustainability examines the growth and effectiveness of green building policies in cities with populations greater than 50,000. This represents a total of 661 communities, or 107,918,963 Americans. In conducting this study the AIA spoke to planners, building, and sustainability officials in 606 cities, for a response rate of 92 percent, during the summer of 2007. Using this data, we discovered

- At least 42,374,499 million Americans live in cities with green building programs
 - An additional 36 cities indicated they are in a more advanced stage of developing green building programs, forecasting a future of increased green activity
- No less than 14 percent of all Americans live in cities with green building programs. The true number is greater, however, because the study purposefully limited the data set to cities with populations greater than 50,000. Therefore many smaller communities that have equally impressive programs are not represented in this analysis.
- The regional distribution of green building programs helps to illustrate the growth of sustainable development throughout the country.
- The western region leads the way in green building programs, with 42 cities in just six states, or a total of 46 percent of all green building programs
 - The mountain region is well represented and is second in percentage of cities that have green building programs
- Ninety-two cities have green building programs, or at least 14 percent of all cities with a population greater than 50,000

- The East is growing quickly but comes in third in the percentage of programs compared to the number of cities surveyed and second regionally in overall programs
- Although the central states have the lowest percentage of overall programs, there are several innovative, well-established policies to be found here as well

The results of the study point to no single guideline or policy that will be best for all cities. Just as certain design features are more effective depending on the regional climate, certain policies are more effective depending on the political climate. However, the data revealed common threads in successful policies.

The best practices of municipal green building programs are illustrated through a series of case studies in this report. Six cities were chosen: Portland, Ore.; San Francisco; Scottsdale, Ariz.; Chicago; Austin; and Atlanta. Although this list could certainly be expanded, these cities represent a cross-section of American green building programs.

The case study communities reflect a diversity of long-standing policy. Many have been established for several years, therefore offering an opportunity to see what has worked well and which adjustments were needed. These cities provide an overview of the best practices of green building at the local level.

There is a further grouping of cities continuing to push ahead on green building, with inventive and far-reaching programs, largely concentrated in California and the D.C.-to-Boston corridor. These cities are going beyond standard concepts of green design by incorporating green requirements into all or nearly all buildings. Many of these policies are either just now getting off the ground or are being phased in over the next few years. In the Northwest there is even a group that is currently striving toward designing buildings that are zero net energy and zero net water users, creating truly sustainable buildings.

In addition to informing municipal policy, this report strives to advance the dialogue on the many green

building rating systems that have been created. The cities in this report have experience with multiple rating systems, which will help inform communities contemplating green programs.

Communities are also grappling with increasing energy and water demands. Green buildings are a fundamental part of an overall strategy to address these problems because they create standards for sustainable design within a community. And, while the current state of green building laws is not consistent, it is an excellent representation of the American federal system of government.

It is heartening to see all the hard work that politicians, officials, architects, and citizens across the country have contributed toward greening America's cities. The breadth of green building experience displayed by these communities should be useful for all levels of government as they move forward on green building initiatives.

Green building is flourishing now and the future looks bright for sustainable design. The ultimate goal for green building is eliminate the concept of "building green" and, instead, have green design integrated into all buildings. This day is soon approaching, and the AIA is advocating for policies, such as the 2030 Challenge, to make this green future a reality.