

Local Leaders in Sustainability



Green Counties



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Local Leaders in Sustainability: *Green Counties*
is the third report in a series that focuses on green
building at the local level. Earlier reports in the series
include:

Local Leaders in Sustainability: *A Study of Green
Building Programs in Our Nation's Communities*

Local Leaders in Sustainability: *Green Incentives*

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Cover Photo

Ben Franklin Elementary School, AIA/COTE 2006

Top Ten Green Project award recipient.

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Executive Summary

American counties are walking the walk on sustainability by creating impressive green building programs across the country. Local governments are charging ahead toward a greener future with focus and determination. *Local Leaders in Sustainability: Green Counties* is an analysis of the current state of green building development in the 200 most populous counties as of 2008.

The AIA worked with the National Association of Counties (NACo) to complete this project. [NACo's Green Government Initiative](#), of which the AIA is a founding member, provides comprehensive resources for local governments on all things green. NACo serves as a catalyst between local governments and the private sector to facilitate green government best practices, products, and policies that result in financial and environmental savings.

Local Leaders in Sustainability: Green Counties examines the top 200 American counties by population, representing a total population of 168,864,538 Americans, or a little more than half of the country. In conducting this study, the AIA spoke to planners, building officials, and sustainability managers in 147 counties and determined that a further 29 counties did not have a county government structure, such as a county commission or board of supervisors. The AIA and NACo discovered that among the top 200 county areas:

- 39 counties have a green building program, or at least 19.5 percent of all sample counties
- At least 42,949,498 people, or 25.6 percent of the sample population, live in counties with green building programs

- A further nine counties indicated that they are in a more advanced stage of developing green building programs, forecasting a future of increased green activity

Breaking down programs regionally helps demonstrate the degree to which green building programs have grown proportionately around the country:

- The Eastern Region has the most green building programs at 19, covering approximately 19 million people
- The Central Region has 7 programs, with approximately 9 million people living in those counties with green building programs
- The Mountain Region was a smaller portion of the sample, with only 3 programs; over 2 million people live in these counties
- The Western Region rounded out the survey with 10 green building programs and almost 13 million affected citizens

The programs that were chosen for the case studies provide an excellent cross-section of American green

building programs. The counties reflect the diversity of sustainability policy, and because many of these programs have also been established for a number of years, these communities have had the opportunity to see what works well and make adjustments as needed.

Alameda County, CA; Hennepin County, MN; King County, WA; and Montgomery County, MD have been chosen because they provide solid best practice examples of programs in different parts of the country that can be viewed as models. These counties are also representative of the original innovators at the county level. Partially as a result of policies such as these, buildings across the country have undergone a revolution in terms of the emphasis that is placed on resource efficiency and life-cycle performance. Another grouping of county governments across Florida is now overcoming legal barriers to create a culture of sustainable development that represents the next wave of green building policy.

The primary research in this report focuses on green building programs in the top 200 counties by population. However, there have also been impressive green building and sustainability initiatives undertaken by smaller counties in recent years. In order to provide the reader with an understanding of what these communities have accomplished in regards to green building, NACo reached out to smaller counties. [NACo's Online Green Government Database](#), a resource developed to catalogue the impressive sustainability programs and policies developed by counties, was also utilized for this report.

The states are often viewed as the laboratories of democracy, with innovative policy informing national policy. If this is true, then local governments must be the scientists. Local leaders understand the importance of their actions. Almost every county or city currently undertaking the process of creating their own green building policy spends months, and in some cases years, scouring the country for examples of other ordinances and resolutions to inform their own efforts and improve upon the success of others. *Local Leaders in Sustainability* is meant to assist these communities as they develop and enhance their green building programs.

Architects will continue to have a profound impact on the built environment in which we live, work, and play. The AIA is committed to advancing the practice of architecture by continuing to promote sustainable, low-impact building features. Green building policy is an important part of this process, and it is heartening to see all of the effort being put forth by local leaders. The experiences of these counties make it increasingly clear that investment in high-performance building programs is an efficient and popular use of taxpayer dollars.

This report documents the spread of green building programs, explores best practices, and provides tools for policymakers. The AIA and its component network have further resources, expertise, and tools to assist local, state, and federal governments as they write new legislation or amend existing green building codes in the pursuit of more sustainable policies.

Introduction

The American Institute of Architects (AIA) is working in conjunction with the National Association of Counties (NACo) to increase the level of green building in American counties. Local political leaders across the country have pushed ahead on sustainability and green building initiatives in recent years, passing a number of laws and initiatives to green their communities. *Local Leaders in Sustainability: Green Counties* examines the current state of green building laws in American counties as of 2008.

This report follows previous *Local Leaders in Sustainability* studies on cities with populations over 50,000 and a separate report on green building incentives. Our research uncovered an unexpected number of green building policies in the nation's largest counties. Although many of the trends in county policies mirror those of city policies, it is important to highlight counties independently because they face a different set of challenges in developing and implementing such programs.

Often, counties face challenges that are even unique compared to other counties. Counties serve a broad range of functions from state to state and can be strong, weak, or even non-governing bodies. Their influence over the municipal governments that exist within and between counties, and their level of communication with other counties in the region, also varies widely.

Buildings account for the largest source of energy consumption in America. As such, they offer the greatest opportunity to effect positive change in our environment. An estimated 43 percent of all greenhouse emissions come from buildings compared to 32 percent for transportation and 25 percent for

industry.¹ Numerous studies have concluded that a drastic reduction in building emissions is one of the most cost-effective, positive ways to improve overall energy efficiency in our country.

Green buildings are currently revolutionizing the design and construction industry. Sustainable design has the potential to transform the built environment from its energy intensive past towards an energy-efficient, green future. Ultimately, policies that promote this kind of development are good for communities and the architects that design the built environment.

Buildings are lasting features of the physical environment and should be designed to meet human needs. The technology now exists to make green buildings that are modern and attractive as well as financially viable. The confluence of factors, from high energy costs to global warming to a strong business case for green buildings, has created an environment in which political leaders have an opportunity to lead America towards an energy-efficient, sustainable future.

¹ Pew Center on Global Climate Change. *Towards a Climate Friendly Built Environment*. June 2005.

And this is what political leaders are doing all across America, as local elected officials have picked up the mantle of leadership on this issue. Elected officials have been working with planning departments and other dedicated civil servants to craft green building and sustainability legislation in response to the groundswell of support from citizens who are pushing for laws that begin to tackle climate change. In the absence of federal action on this issue, county boards, supervisors, and other local government officials are taking the lead for a greener future.

While no county program is perfect, the leadership exhibited by local officials over recent years has been impressive. The local level is where change is currently taking place on a wide array of issues, from green buildings to other sustainability initiatives. All levels of government should examine these policies in order to better understand the current and future state of green building in America.

AIA SUSTAINABILITY INITIATIVES

The AIA is focusing its efforts as an organization on promoting sustainable design by advocating for positive change at the local, state, and federal level. The Institute is currently undertaking multiple green building and sustainability initiatives, examples of which include the following:

- *The 2030 Goals* adopted by the AIA advance the goal of carbon neutral buildings by 2030. This goal will be reached by immediately cutting carbon output of buildings by 50 percent, then subsequently raising this number by 10 percent from 2010 onwards every five years, reaching carbon neutrality in 2030.
- *SustAIAnability 2030 Toolkit* provides a resource for local governments on how they can make their communities green. This CD Toolkit was originally distributed in conjunction with the US Conference of Mayors in 2006 and has now been updated and revised to include additional information on a range of subjects relevant to greening communities. The Toolkit answers the question of how to get to car-

bon neutral buildings. While there are already some good pathways that demonstrate how, there is also significant unmapped territory. The SustAIAnability2030 Toolkit is a virtual connection to resources and examples that demonstrate the greening of our built environment.

- *50to50* provides 50 technical recommendations on what architects can do to reduce energy use in buildings by 50 percent.
- *Sustainable Design Assessment Teams (SDAT)* is a community assistance program that focuses on the principles of sustainability. SDATs bring teams of volunteer professionals (such as architects, urban designers, planners, hydrologists, economists, attorneys, and others) to work with community decision-makers and stakeholders to help them develop a vision and framework for a sustainable future.
- *Sustainability Discussion Group (SDiG)* is an AIA Board-level sustainability discussion group.
- *AIA Committee on the Environment (COTE)*, as part of its effort to celebrate current best practices, runs its flagship program, the Top Ten Green Projects awards, on an annual basis. Started in 1997 by Gail Lindsey, this is now recognized as one of the most holistic design awards programs in the U.S. and many of these projects are featured in this report. COTE also runs programs to “green” the AIA honors and awards program, the AIA convention, and other aspects of AIA operations. The COTE network consists of 60 local and state chapters and their members.

NACO'S GREEN GOVERNMENT INITIATIVE

NACO's Green Government Initiative and the resulting Advisory Board were launched in 2007. The Initiative provides comprehensive resources for local governments on all things green, including energy, air quality, transportation, water quality, land use, buildings, purchasing, and recycling. NACO serves as a catalyst between local governments and the private sector to

facilitate green government best practices, products, and policies that result in financial and environmental savings.

Through the Initiative, NACo:

- Increases education and outreach on all things green
- Helps educate counties and help them educate the public
- Promotes environmentally preferable purchasing
- Facilitates an open dialogue with the private sector
- Reverses misinformed opinions that green techniques are too costly or of lesser quality.

Specifically on buildings, NACo's initiative seeks to help position counties as good stewards of the environment because they assume a significant role in spurring the movement toward green building, energy efficiency, and renewable energy. More counties are beginning to think beyond just the energy needs of a building and are approaching building design in a more holistic and integrated way through green building. Exploring such options in the construction of new buildings and the renovation of existing buildings can help counties save taxpayer dollars, help the environment, and lead by example. Counties can also assist in the research and development of renewable energy to help the country move towards energy independence.

The AIA is also continuously working with NACo, as a founding member of the Green Government Advisory Board, to spread the sustainability message. NACo adopted a resolution supporting the 2030 Challenge in the summer of 2007. And the AIA and NACo worked together to develop this project.

The AIA has spoken with NACo members to complete this study—the county officials and the valuable staff in communities across the country. The purpose of the green building study and this report is to be a resource for local officials, architects, and others who

want to understand the current landscape of green building laws throughout the country. This includes what is out there, the best practices, and where communities are going next. Green building is the future of design and construction, and architects are helping to make this possible by creating exceptionally designed, energy efficient, water conserving green buildings.

METHODOLOGY

Local Leaders in Sustainability: Green Counties is an examination of green building laws in the United States. The study identifies counties with green building programs, provides an overview of current laws and ordinances, and shares pertinent information on these programs in order to give the reader a clear idea of the current state of green building in our nation's communities.

The AIA and NACo believed that the availability of comprehensive information on county green building programs would be invaluable, not only for our own sustainability advocacy efforts, but for the numerous communities across the country who are currently thinking about or in the planning stages of their own green building programs.

In order to execute this study feasibly, the AIA identified the survey group as the top 200 American counties by population.² This represents a total population of 168,864,538 Americans, or a little more than half of the country. The research team then formulated a survey instrument that measures the current number of green building programs and ascertains the current level of green building in counties that have instituted green building laws.

Out of the sample of 200, the AIA spoke to representatives from 147 communities. Additionally, it was determined that 29 counties lacked county-level government structures such as a county commission or board of supervisors. Some of these counties are home-rule jurisdictions, entirely incorporated by

² U.S. Census 2006 population estimates

municipalities. Others are city/county balances, the majority of which have already been studied in the previous *Local Leaders in Sustainability* report on cities; it would therefore be inappropriate to count them in both studies.

For the purposes of this report, these 29 counties were counted as those responding to the survey that lacked a green building policy. Consideration was given to not counting the counties or their population in the figures, effectively leaving a sample of 171 counties. However, since there is no unique county government there are clearly no unique county green building policies, so these were counted as counties with no green building policy.

This assumption leaves no doubt that our findings are conservative, eliminating any possibility of inflating the results (with the exception of response rates). The remaining 24 counties either could not be reached or an appropriate respondent could not be identified.

The AIA research team contacted all of the communities with a five question survey in order to get information on:

- Whether the county has a green building program
- How long the green building program has existed
- Whether it applies to government, commercial, or residential buildings
- Whether it employs a rating system
- Whether the program provides incentives to build green.

The amalgamation of this information created a clearer picture of the current state of green building throughout the country. Regional strengths and weaknesses became apparent: the number of years that green building programs have existed, the extent of the program, whether it applies to public buildings or all buildings, whether incentives are offered by communities, and many other data points informed the analysis.

One of the ultimate purposes in collecting this information was to create quantifiable best practices that other communities can use as they begin or strengthen their own green building programs. The quantifiable best practices are further represented through the case study component of this study.

We recognize that there are clear leaders in county green building that can positively inform the overall study. These leaders help establish achievable benchmarks for other communities that have either just recently started their own green building program, are just now starting down the path towards creating a green building program, or that may have heard about green building programs happening in other parts of the country and would like to find out more information.

The programs that were chosen for the case studies provide an excellent cross-section of American green building programs. Local communities have the authority to enact their own laws and, while they have taken many ideas from others, on the whole they have been quite inventive at creating unique aspects in many of their green building programs. The following counties reflect this diversity, and because many of these programs have also been established for a number of years, these communities have had the opportunity to see what works well and make adjustments as needed. These counties are also regionally diverse, providing examples of programs in different parts of the country. Although this list of case studies is by no means exhaustive, these communities provide a good overview of the best practices of green building on the local level:

Alameda County, CA
 Hennepin County, MN
 King County, WA
 Montgomery County, MD

DEFINITIONS

The following definitions are used throughout the report and have therefore been defined below to further the reader's understanding:

Green building program

A green building program is a law or regulation that mandates or incentivizes the construction of green buildings within a community. It can focus on public, residential, and/or commercial buildings.

Sustainability

The concept of meeting present needs without compromising the ability of future generations to meet their own needs.

Sustainable design

Design that seeks to avoid depletion of energy, water, and raw material resources; prevents environmental degradation caused by facility and infrastructure development over a structure's life cycle; and creates environments that are livable, comfortable, and safe and that promote productivity.

Green

A subset of sustainability, the focus of which is life-cycle environmental impacts of materials: "Reduce, Recycle, Reuse."

Life cycle analysis

Examines total environmental impact and business cost/benefit assessment through each stage of a product's existence, from raw materials acquisition through manufacturing, packaging, shipping, installation, IAQ, and performance, as well as end-of-use resource recovery.

LEED ®

The Leadership in Energy and Environmental Design (LEED) rating system, created by the US Green Building Council (USGBC) is a third-party certification program for the design, construction, and operation of high performance green buildings.

Study Findings



THE UNIQUE ROLE OF COUNTIES

Counties in America occupy a unique jurisdictional space between city and state governments. Their authority varies greatly from state to state and, in general, counties tend to have more authority over local governance the further in distance they are away from New England. At times, this variation seems so great that it can be difficult to make broad statements concerning county policy, especially as it relates to building and construction. However, the one thing that is true of all counties across the country is that they can have an important role in using policy to promote green building design.

In most cases, county and city governments follow similar paths to creating a green building program. A county or city council begins by forming a “green team” or other *ad hoc* committee to explore green building policy options and prepare recommendations. The committee meets periodically, and the process of gathering information, gauging support, and reporting findings typically takes about a year. Recommendations almost always begin with an internal policy aimed at sustainable public facilities management and then progress from there to future incremental increases in the policy.

Additionally, the policy options available to cities and counties are the same. At the most basic level, counties and cities have control over their municipally owned facilities. Using government facilities to lead by example is easily the most popular method of promoting green buildings at the local level. Like cities, counties also have the power to provide incentives to the private sector in the form of tax breaks, direct subsidies, discounted purchasing programs for efficient appliances, and low-interest revolving loan funds. Some, but not all, counties can also make changes to their building codes. But while about two-thirds of city policies have expanded their programs beyond municipal buildings, only about one-third of all county programs among the top 200 counties have gone beyond this initial step. While the options are the same, the logistics of policy-formation and the effect these policies have in counties are completely different from municipal governments.

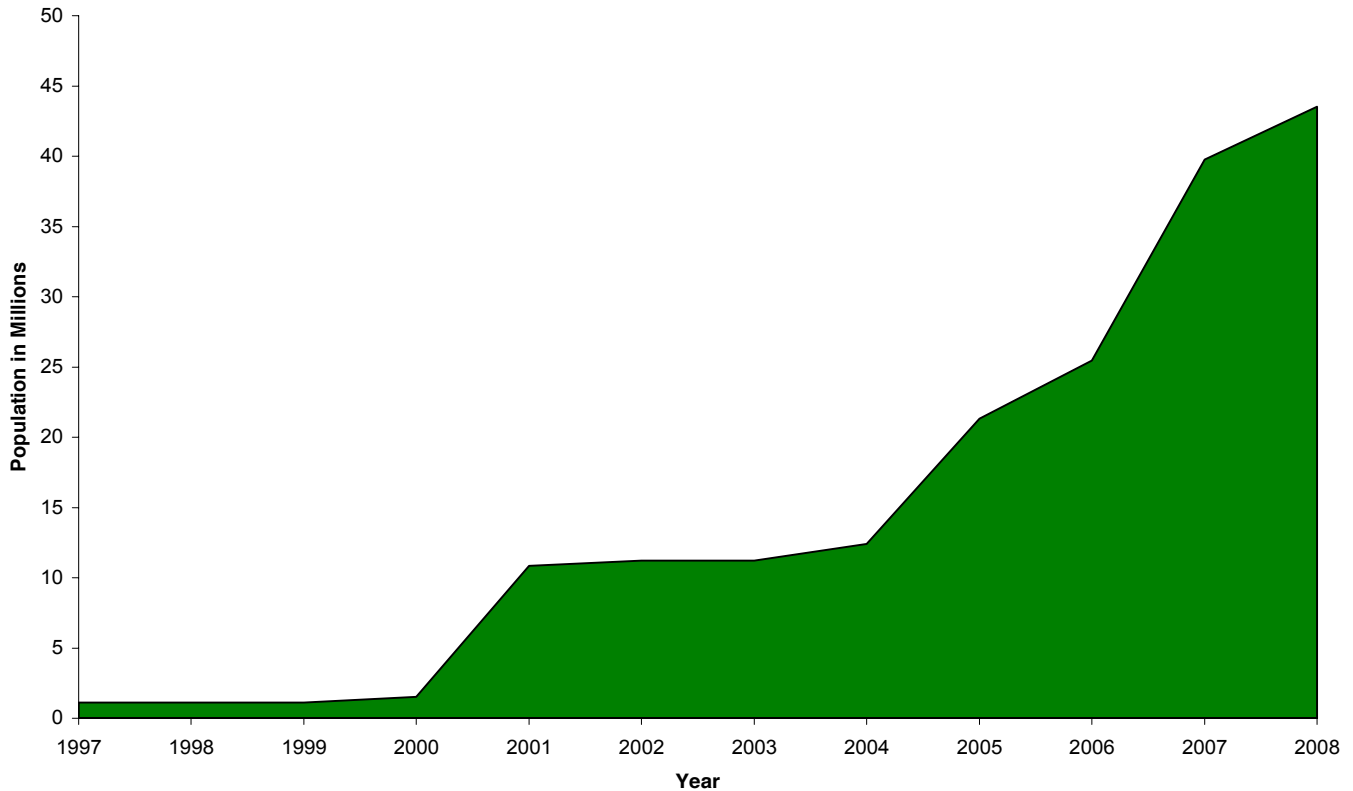
Even proactive county officials often struggle to identify policies that will have the most impact. Many counties do adopt building codes but they apply only to unincorporated land rather than urban or even suburban centers. As a result, much of the construction is residential. Several counties indicated that they have moved to adopt more sustainable residential development patterns, but these efforts often stop short of addressing actual building practices.

Counties can also encounter barriers in the form of state regulations. Mecklenburg County, NC, was placed in a difficult position when it attempted to initiate a policy offering expedited permitting to sustainable construction projects but state law prohibited discrimination of any kind in issuing building permits. The county lobbied the state, and the law was eventually changed, but their success is certainly uncommon. Other counties in states such as Florida and Oregon are required to follow the state-wide building code and are unable to make amendments. These barriers are unique to counties and they are important, but counties also have an important policy advantage that often goes unnoticed.

Counties can serve as a supporter and amplifier to city regulations. First, counties have control over their own facilities. Local governments often underestimate the significance of a commitment to building green. Johnson County, KS, recently created quite a buzz in the community by completing just one county facility that was certified by the United States Green Building Council (USGBC) as a Leadership in Energy and Environmental Design (LEED®) Gold rated building. Already, it has been named one of the Kansas City metro area’s Top 10 favorite buildings and employees are clamoring to work at the new location.³ Not only does such a measure send a message that green design is an efficient use of funds, it gives the local development and construction community experience with important sustainable building features. Once reluctance to adopt new practices is broken, building owners and developers often see that many of the costs are overestimated and the benefits are real.

³ “Built to Thrill: Which KC Building is your Favorite?” *Kansas City Star*. 5 April 2008. <http://www.kansascity.com/starmagazine/story/554378.html>

US Population Living in Sampled Green Counties



Second, counties can take actions to support their incorporated municipal governments by adopting policies that are regionally consistent. One of the most common concerns coming from developers nationwide is that metropolitan areas will end up with a patchwork of policies to navigate. County government (and regional councils of governments) should play a role in getting neighboring cities and area developers to come together to identify common policy goals. Gaining the support of the design and development community can make weaker policy much more effective than an ambitious policy with no local buy-in.

Finally, if there are municipal green building policies, county policy should work to amplify their effects. If a city is incentivising green building development with fast-track permitting or a bonus in floor/area ratio, a county can match the policy for unincorporated areas. Aside from extending the scope of policy, counties can provide complementary policies. A revolving loan fund can offer low-interest loans for projects that can use utility savings as repayment. This is extremely effective for features such as HVAC systems or green

roofs that require greater investment up-front but carry significant benefits in the life-cycle of a building. Such a fund can even be allocated on a competitive basis, encouraging developers to push innovation further and rewarding bold commitments to efficiency in design.

Every county is capable of promoting green building features. As the economics of efficient design continues to bolster political will, it is important to learn from the experience of other jurisdictions. The best county policies are those that are simple, uniform, and conscious of the need to support municipal or state policies.

SURVEY RESULTS⁴

By now, many in the design and construction industry are aware that green building policy has become an important trend in local politics. However, it has been

⁴ It is important to note that many county programs apply only to unincorporated land while the population data used in these calculations represent the total population of the county.

unclear how widespread these policies have become and there has been little effort to comprehensively study these policies at the local level.

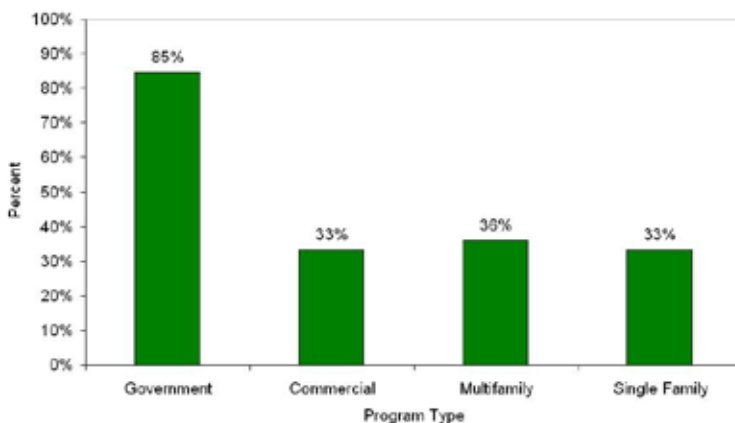
Our survey of the 200 most populous counties in the nation indicates that the number of green building policies is underreported and new policy creation is accelerating. Of these 200 counties, 29 lacked a unique and authoritative county-level government, serving only as geographic districts. As explained in the methodology, these counties were counted as respondents with no green building program. All calculations are derived based on this assumption.

The AIA has spoken with officials in 147 of the remaining counties for an overall response rate of 88 percent. In all, 39 counties we spoke with had a green building program in place at the time of the interview. This is admittedly a greater number than expected and represents 19.5 percent of all counties surveyed. The results are made even more extraordinary considering the fact that these counties represent 42,949,498 people out of a possible 168,864,538. This means that a minimum of 25.6 percent of people living in America's 200 most populous counties are residing in counties with a green building program. Depending on the type of program and how counties and cities share responsibilities in these county jurisdictions, residents will be more or less affected by the counties' green policies.

County Responses

Policymaking is an incremental process. In many jurisdictions, the current green building policies are viewed

Does your program apply to government, commercial, multifamily, or single family buildings? (check all that apply) 39 responses



as first steps, with the majority only affecting capital building projects or private projects receiving significant funds from county grants. Very few counties originally set out to utilize their green building policy to directly impact private development. However, as time has passed, several have expanded their programs by adopting additional ordinances.

A representative from each of the 39 counties with existing green building programs answered the question: "Does your program apply to government, commercial, multi-family, or single family structures?" We found that 33 of the 39, or 85 percent, of the identified programs address county-funded construction. In fact, 24, or 61 percent, of these policies apply exclusively to government buildings. But several counties have chosen to take their policies further. The study found that 13, or 33 percent of counties with programs, have laws affecting commercial buildings, 14, or 36 percent, have laws affecting multi-family housing developments (generally defined as a residential structure with four or more units), and 13, or 33 percent, have laws affecting single-family residential construction. The policies affecting private construction are rarely mandatory. Recently, counties have begun to trend in this direction but it is still much more common for a county to offer incentives for developers to earn green building recognition.

In addition to asking what kind of program each county has chosen to enact, we also collected data on the type of building rating system the county has chosen to use. By far the most common is the USGBC's LEED point system. Twenty-nine counties indicated that the LEED standards are a part of their program. Other respondents utilize rating systems that are primarily regional. In addition to LEED, three of the counties in Florida make use of the Florida Green Building Council's system, both counties in Minnesota utilize the Minnesota Sustainable Building Guidelines, and a few other counties use systems similar to these guidelines but have developed their own in-house checklists.

Finally, the survey collected data regarding incentive options that counties offer to private developers to promote the use of green certification. These inducements

can range from tax abatements to priority permitting to allowing bonus density or floor-area ratio for a project that meets certain desirable specifications. Twelve of the 39 counties indicated that their green building program affords some incentive for private developers.

TRENDS

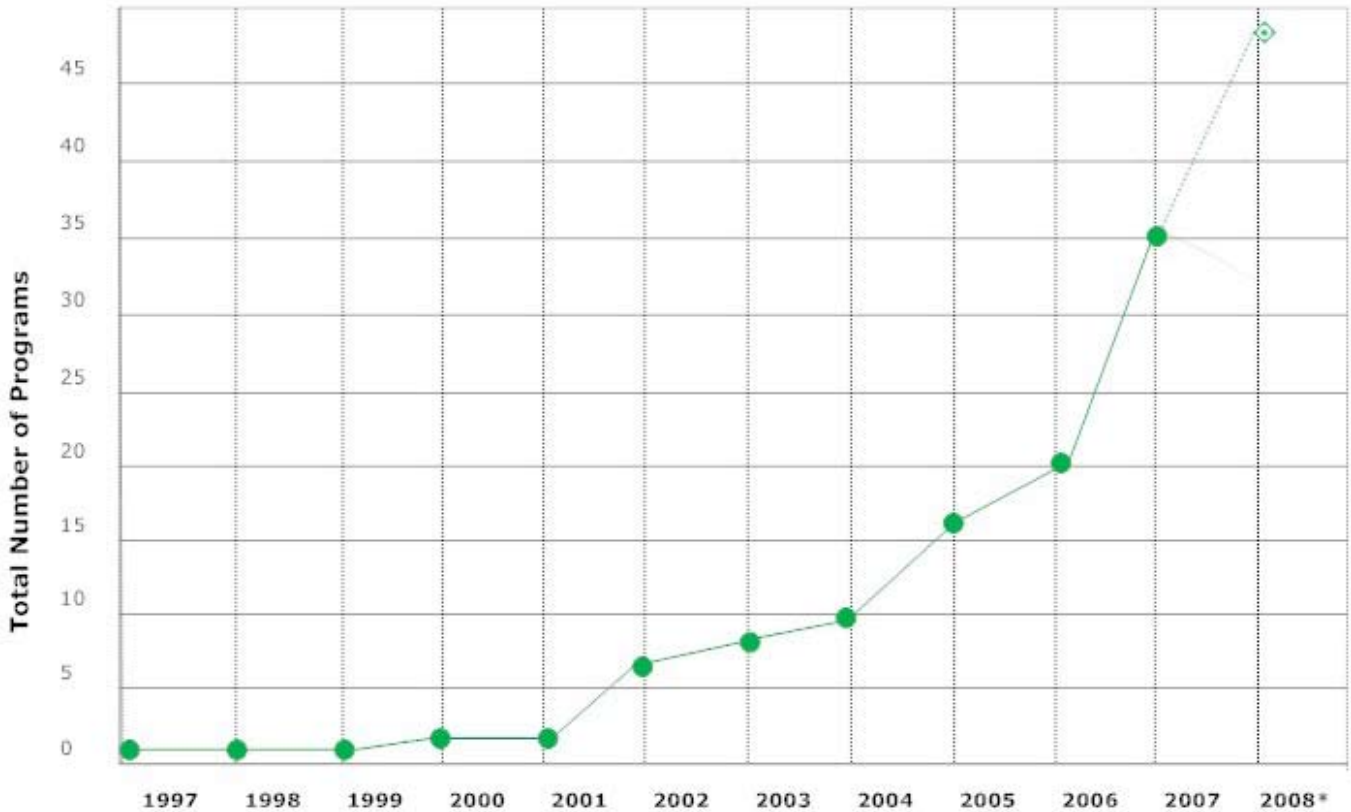
One of the most dramatic findings of this survey has been the nearly exponential rate that green building policies have multiplied over the past several years. The 39 counties that have made green building a matter of public policy provide an interesting snapshot of what clearly seems to be a trend that shows no signs of reaching a plateau.

One reason for this is that the perception of green buildings as luxuries for residents and businesses that are particularly environmentally conscious is dwin-

ding. Experience with high-performance buildings has increasingly demonstrated that the design features necessary to create an efficient building and earn a green rating are cost-effective and that the living and working environments they foster have broad appeal.

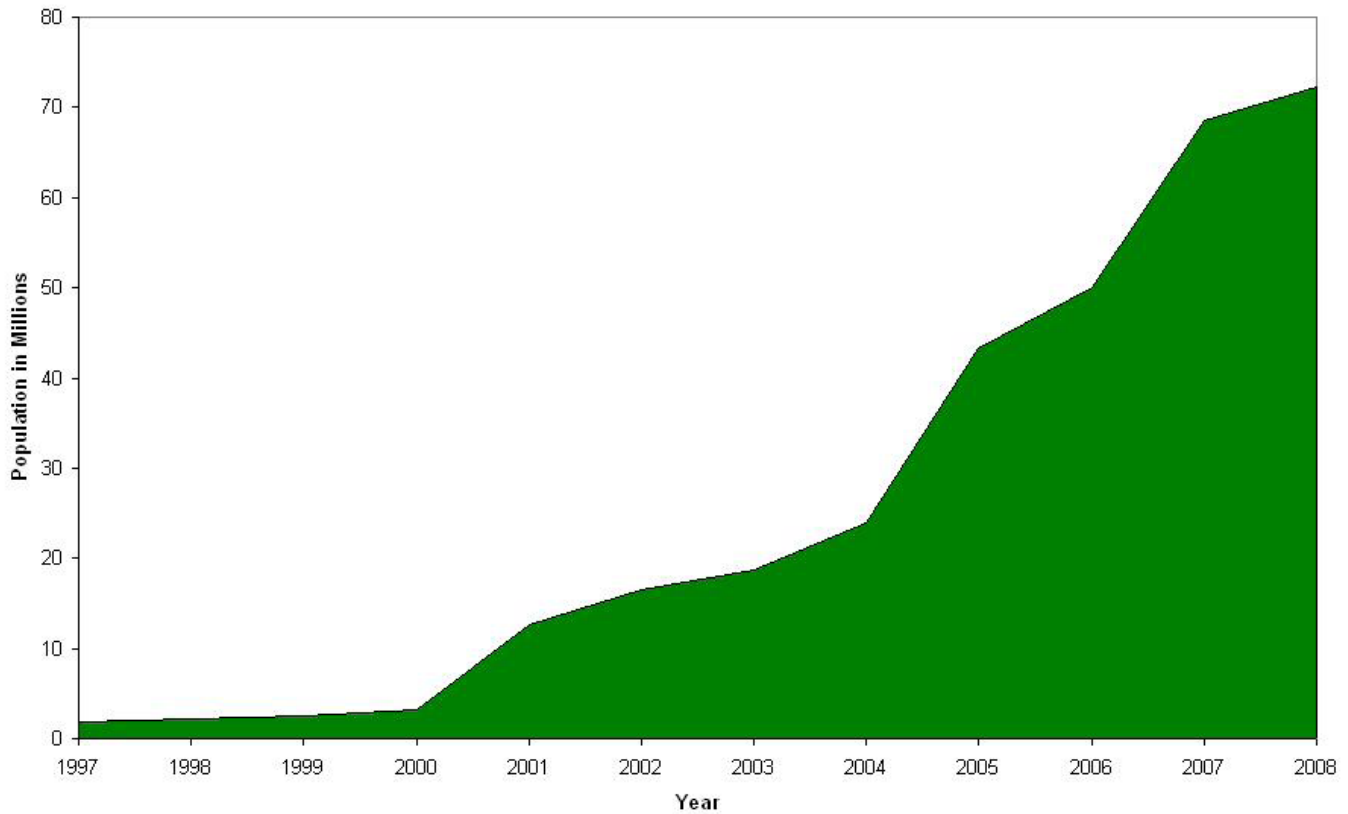
This experience has clearly influenced policymakers. For county jurisdictions that had programs, our survey asked the question: “When was your green building policy first adopted?” While interest in these programs is widespread, the responses to this question indicate that it is still a very new phenomenon. Prior to 2004, there were only eight green building programs in the nation’s top 200 counties, and they were primarily confined to the Western region. Many counties in other parts of the country seem to have been reluctant to address the building sector in this fashion. They either lacked authority to control much of the development in municipalities or failed to immediately realize the

Green Building Policies in Sample Counties



* 2008 figure is an estimate based on policies already adopted and counties that have drafted legislation that is expected to pass by the end of the year

Total US Population in Sampled Green Cities and/or Counties



benefit that this could have on their own utility budget. Since that time, other jurisdictions have found that these policies can benefit both the county and the community—just as businesses have found that green buildings can benefit their bottom line and their workforce.

Although it is difficult to establish benchmarks and determine whether a county is close to passing a green building policy, another eight indicated that they have drafted such a proposal. It is rare that a county government goes through the process of setting up a “green team” or exploring and drafting green building policy without the presumption that such a program will be approved. This has been used to project the number of programs that will exist by the end of the year. Additionally, at the time the survey concluded in May, at least four more counties had established green building policies since the beginning of 2008. All of these data, combined with the many anecdotal accounts from around the country, suggest that policy measures will be an increasingly common tool to push green practices even further into the mainstream.

Beyond noticing an increasing rate of policy growth in this field, the trend that stands out most relates to the size of the counties adopting programs. Of the 39 programs identified in this study, 29 of them are in the top 100. It does not appear that the larger counties passed programs first—in fact the average age of the smaller counties’ programs is greater—but it is clear that larger counties have had more of an interest in developing green building legislation. This is almost certainly a product of a greater volume of construction activity in these large counties. Many policies get their start by addressing county facilities and small counties simply do not have as many capital projects to be concerned with.

Local Leaders: Trends from City and County Data

The county data that provided the basis for this report are certainly valuable in their own right. Although the survey covered the most populous 200 out of a possible 3,066 counties nationwide, there is significant variation in the size, structure, and other characteristics of the sample, and it represents a vast and diverse population.

Region	Population under a green program (counties)	Population surveyed (counties)	Total sample population (counties)
Eastern	18,996,337 (19)	77,060,947 (104)	83,062,105 (116)
Central	8,690,221 (7)	30,581,891 (32)	33,574,696 (38)
Mountain	2,284,098 (3)	9,754,467 (11)	9,754,467 (11)
Pacific	12,978,842 (10)	38,949,909 (27)	42,473,270 (35)
Total	42,949,498 (39)	155,770,330 (173)	168,864,538 (200)

This data becomes particularly interesting when compared with the data already collected in the original report on cities with populations over 50,000. To provide a brief summary, that study identified 92 green building programs in cities representing a total of over 42 million Americans as of October, 2007. Many of the trends from that report parallel those noted here. After the LEED standard gained popularity and several cities began pilot programs to demonstrate the potential effect policy could have on the green building movement, there was a surge in cities adopting green programs. Of the 131 programs identified in cities and counties, 73, or 77 percent, were adopted in 2004 or later. As we have noted, many of these policies only

pertain to county construction projects but many also affect the private building industry. In all, 34 cities and 12 counties provide some form of incentive for private developers to earn green building certification.

Many of the cities identified in the original *Green Cities* report are located in the counties studied in this sample. This reinforces the need for cities and counties to work together to form complementary programs. Many cities have more control over building codes and fast-track permit options. Alternatively, many counties have authority to provide tax incentives or create green business programs that cover an entire metropolitan area.

Green Building Programs in the Top 200 Counties



But several of the cities identified in the original report are in counties that are not included in this study. By pooling all of the relevant data from the *Local Leaders in Sustainability* project it is possible to get a more complete view of how green building policy is spreading at the local level. The chart above shows the total population that has been identified as living in a jurisdiction with a green building program over the course of the *Local Leaders in Sustainability* project. By identifying all of the cities that are not located in the 200 most populous counties we can combine the population data to find that there are 71,680,631 people living in cities and/or counties with green policies. Given the methodology of this report and the limited samples, this is undoubtedly a conservative estimate. Since many of these policies are still so new, the ramifications of this dramatic shift in green building awareness, and the incentives associated with high-performance design, have yet to be fully realized.

REGIONAL DISTRIBUTION OF PROGRAMS

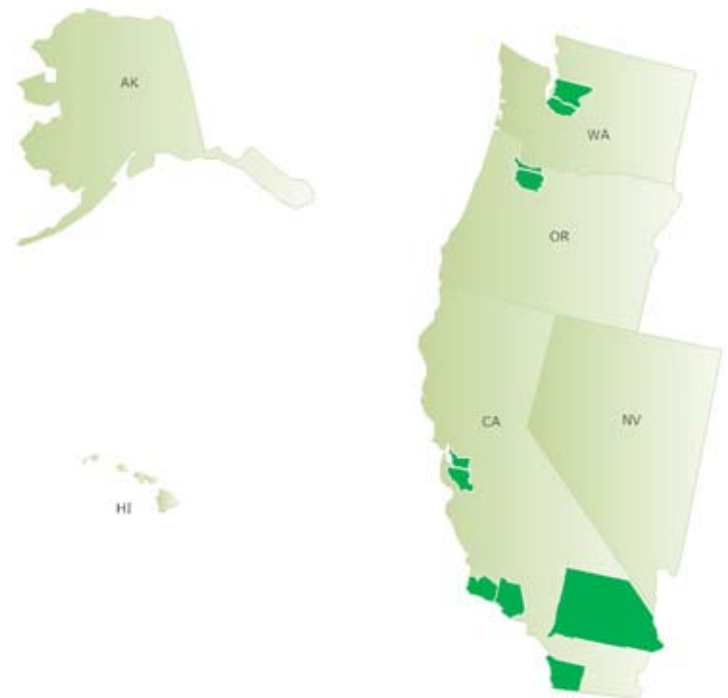
Breaking programs down regionally helps demonstrate the degree to which green building programs have been growing around the country. The wide geographic distribution of the programs and the consistency of the findings indicate that this is truly a national trend. While the Pacific region is, predictably, at the forefront of green building policy, all four regions contain counties that have exhibited a long-standing dedication to high-performance building practices.

Pacific (Western) Region

The Pacific region has earned a reputation as a leader on most policies relating to energy efficiency, and the green building issue follows this positive trend. Of the 10 county green building policies in this report formed prior to 2005, five of them come from Western states.

The six states in this region are California, Oregon, Washington, Nevada, Alaska, and Hawaii. These states contain 35 of the sample counties, representing 42,473,270 people. Of these counties, 10 have passed legislation to initiate a green building program. According to the census data, 12,978,842 people, or 30

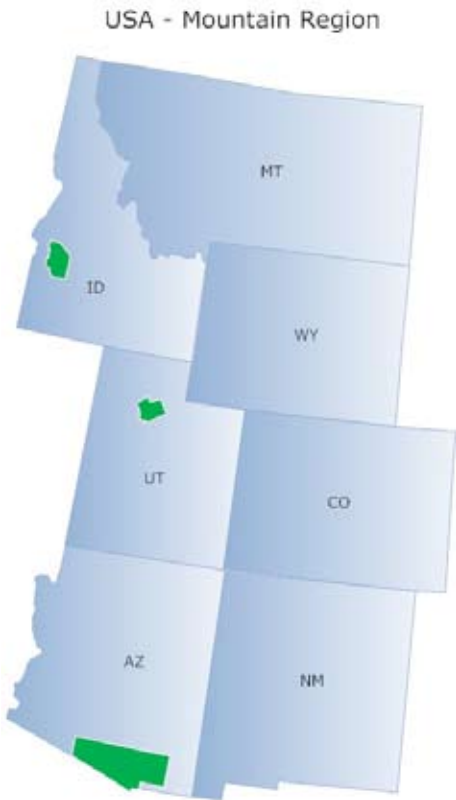
USA - Western Region



percent of the total population of the sampled Western counties live in these 10 counties, making it the region with the greatest proportion of the population living in green counties. Furthermore, if Los Angeles County finalizes its program this year as they anticipate, then the total population of Western citizens in green counties will nearly double. Other counties throughout the region also indicated strong political interest in such policies.

California leads the Pacific states with six county programs among the sample group located in Alameda, San Bernardino, San Diego, Santa Barbara, Santa Clara, and Ventura Counties. Alameda and Santa Barbara have programs dating back nearly a decade and both counties have tremendously experienced staff and well-informed community leaders guiding their programs.

The remaining programs are found in; Clackamas County, OR; Multnomah County, OR; King County, WA; and Pierce County, WA. King County is often the center of attention in the upper Northwest, but Clackamas County also provides an excellent example of how to lead by example. Since 2001, the majority of their county buildings are located on a central campus,



which has been developed to meet green standards. Additionally, the county maintains a green advisory committee that meets quarterly to set goals for each department. All of this is supported by quantifiable data on resource efficiency.

Mountain Region

The mountain region consists of Arizona, Colorado, Idaho, Montana, New Mexico, Utah, and Wyoming. It is easily the least densely populated of the four regions and, consequently, there are very few counties that have a large enough population to make the top 200. Fortunately, we were able to get a 100 percent response rate and contacted all 11 counties within the sample. These mountain region counties have a combined population of 9,754,467. At a glance, it would be easy to overlook this region but proportionally it is very much in line with the national results. Three of the 11 counties have passed measures relating to green buildings. This affects a total population of 2,284,098, just over 23 percent of the mountain region's sample population.

The existing programs are located in Ada County, ID; Pima County, AZ; and Salt Lake County, UT,

and all of them apply to new construction and major renovation of county facilities. Additionally, the city/county balance government in Denver maintains a fairly robust GreenPrint program, but, as previously explained, this was not included in this report.

Central Region

The central region is a near-perfect snapshot of national green building trends. Western states, with several programs and extensive coverage of urban areas, pull the averages up. Eastern states, as discussed below, have several counties with policies but far more without. The central region proves to be right in the middle. The sample includes 38 counties, representing a total of 33,574,696 citizens. Within this subset, seven counties, or 18 percent, have instituted green building policies compared to a national average of 20 percent. Furthermore, these seven counties represent 8,690,221 people, or nearly 25.8 percent of the citizens residing in the sample counties of the central region. This is almost identical to the national average of 25.6 percent.

More importantly, these programs run the gamut from Cook County, IL, with its population of over 5 million,



Case Studies





ALAMEDA COUNTY, CA

California and its counties and cities are clear leaders on sustainability and green buildings, with a long history of innovation. Alameda County is located in the San Francisco Bay area and has often served as a guide for other governments to replicate or reference. The multifaceted program stands out as one of the best, having independently developed a comprehensive green building rating system that has evolved into the Build It Green – GreenPoint rating system that is used in the county and beyond.

Like many successful green building policies, the push for Alameda County to develop these standards came from both public officials and private developers. The Alameda County Waste Management Authority (WMA) is charged with the task of managing and reducing the flow of waste into the local landfill. Sometime around 2000, the WMA began considering options to reduce construction waste, especially from homebuilders, which was a significant contributor to a crisis in landfill capacity. In response, Stop Waste, a joint office of the WMA and the Alameda County Source Reduction and Recycling Board operating as one public agency formed the Build It Green program to address the issue. At about the same time, a local developer approached the county with the idea to find

a means to independently certify developments, or developers, as green builders. Seizing the opportunity, Build It Green began to develop a training program as well as a home rating system.

This green building award program began as early as 2001 and, in 2003, the county passed its first green building ordinance mandating that it follow its own recommendations and build county facilities to LEED standards. Beyond that, the program strives to be inclusive as the WMA functions as an agency comprising Alameda County, the 14 cities located within the county, and two special sanitary districts. Since then, Build It Green

has split away from the county and now functions as a regional nonprofit promoting sustainable design.

Green Building Requirements & Incentives

The Alameda County green building program targets all types of buildings—from municipal, to commercial, and residential. However, the only mandatory section of the policy is that all municipal buildings achieve a minimum LEED Silver rating. The commercial and residential section of the program are both voluntary but offer several incentives to encourage green building within the county.

The three primary incentives offered include the county's Mini Grants Program, technical assistance and green building grants, and a revolving loan fund. The Mini Grants Program provides between \$1,000 and \$5,000 for specific, limited purposes related to green building. This grant is open to any applicant, ranging from schools to nonprofits to individuals.

Technical assistance and green building grants are available for public and public-benefit projects. The purpose of this program is to incentivize the incorporation of green building measures into these specific projects through assistance and grants. And, since 2001, the county has provided design assistance services on over 70 projects. In order to qualify, these

projects must be publicly owned, publicly funded, or be a public-benefit project. Examples of projects include city halls, fire stations, affordable housing, and many other such buildings within Alameda County.

The county has also developed a revolving loan fund that is available to small and medium-sized companies within the county for projects that directly divert waste from county landfills. Loans of \$10,000 to \$250,000 are available with up to 60 month terms. The fund grants loans to start-up businesses as well as existing businesses.

Build It Green—GreenPoint Rated Homes

The current GreenPoint Rated Homes program was developed as a result of evolving residential green building rating systems that have served California since 2000. The primary impetus for this program

was the Green Building Guidelines first developed by Alameda County. Since 2005, Build It Green has operated as a non-profit membership organization and managed the program, serving the entire state rather than only the county. The robust Green Point rating system has been updated and reflects the needs of buildings in the California climate.

Aside from independently certifying homes and developments, one of the most important functions Build It Green performs is as a facilitator of information. During its growth over the last eight years, it has evolved into a resource for developers, government agencies, and citizens. The organization has numerous associate councils to represent key stakeholders and address concerns of the green building community while still adhering to their goal of promoting more sustainable development. The Public Agency Council represents



over 100 public agencies from cities, counties, and the state. Additional councils represent suppliers, builders, architects, realtors, lenders, and other concerned parties. This is mutually beneficial as it creates a network for exchange among these stakeholders and provides additional legitimacy to the positions of Build It Green.

Architect Involvement

Architects have been heavily involved in the greening of the county, with firms like Siegel & Strain Architects designing sustainably as a matter of course in their practice, exhibited by projects such as Camp Arroyo, featured here. 2008 AIA COTE Chair, Henry Siegel, FAIA, explains how the county has involved architects in the process. “In our case, the county has asked us to take the lead and explain the pros and cons as well as the associated costs of our decisions.”

Siegel also commented that his firm’s projects have been affected positively by the county policy. “Since we have been doing green design a long time, it has given us the opportunity to expand into types of projects we did not have in our portfolio. It also gives us leverage to hold the county to this commitment when we run into cost challenges.”

Furthermore, Siegel sees the future of sustainable design in Alameda County expanding and becoming more commonplace. “Looking at projects from a sustainability perspective is quickly becoming, if it is not already, the standard approach to designing buildings in our community. Because of our strength in ecologically sensitive design, we like to think of ourselves as a partner in our community’s effort to create buildings that are cherished.”

Other Sustainability Initiatives

Like many of the counties profiled in this report, Alameda County does more to enhance its sustainability than just improving the efficiency of its buildings. The county has partnered with the International Council for Local Environmental Initiatives (ICLEI) and other counties in pursuing CO2 reduction strategies. In conjunction with ICLEI, the county will develop a carbon emissions inventory and reduction strategy. Green buildings will continue to be a portion of this effort,



but so will sustainable product purchasing, increased vehicle fleet fuel efficiency, and renewable sources of energy. As a member of the Sierra Club’s Cool Counties Initiative, the long term goal of these efforts is to achieve 80 percent reduction in CO2 emissions by 2050.

In addition to reducing the amount of waste that is produced by construction and demolition, the WMA promotes other waste reduction strategies throughout the county. The county participates in the Bay Area Green Business program and assists businesses in waste reduction and energy conservation strategies that are most appropriate. Furthermore, Alameda County estimates that schools alone account for 4 percent of the waste that is deposited in county landfills each year. StopWaste partners with teachers and school districts in the area to improve recycling and composting to avoid the creation of waste in the first place. Finally, county residents are able to purchase discounted compost bins that can be used by residents of homes or apartments. These are much smaller steps toward overall county sustainability, but with such positive public support in the region, it is best to leave no stone unturned and continue to improve efficiency in as many ways as possible.

Resources

2005 New Homes Standards: http://www.stopwaste.org/docs/newhomes_2005.pdf

Alameda County GSA Sustainability Program Overview: <http://www.acgov.org/gsa/sustainability.htm>

StopWaste: www.stopwaste.org

Build It Green: www.builditgreen.org

HENNEPIN COUNTY, MN

Many counties are rightly considered innovative policy leaders and proponents of the broader green building movement. Hennepin County, MN, stands out as one of the very few county governments that have been involved in a campaign to improve efficiency and design before “green building” even made it into the common lexicon. The county was a partner in creating the Minnesota Sustainable Building Guidelines that were originally released in 1997. In its quest to become more sustainable, the county has experimented with a number of alternative energy production options to get more direct experience with technologies such as geothermal, fuel cells, and solar photovoltaic panels.

Formation

The county first started devising a plan to integrate sustainable design guidelines in the mid-1990s. Hennepin began the process when the County Facilities Department partnered with the Minnesota Office of Environmental Assistance (OEA), the University of Minnesota’s School of Architecture, and a number of local architecture firms to develop guidelines to ensure that the county’s facilities budget was spent on sustainable projects.⁵ The result of this effort was the Minnesota Sustainable Design Guidelines, first published in 1997. Given the costs associated with heating buildings in the harsh Minnesota climate, the standards focused heavily on energy efficiency, and Hennepin quickly adopted the standards for their own internal projects.

Beginning with such an inclusive coalition of parties certainly appears to have had its advantages since the county first adopted the guidelines in its construction. Since the county has little control over construction beyond its own facilities, it has continued to work with governments at the state and local level to push the region toward more widespread use of high-performance building techniques. With the help of Hennepin, the OEA has promoted the standards state wide and Minnesota adopted its own mandate that state-funded projects be sustainable in 2001. That same year, Minneapolis, the largest city in Hennepin County, became

the first city in the nation to implement a floor-area ratio (FAR) bonus as an incentive to utilize the Design Guidelines.

The Current Program

Like many counties, Hennepin does not have the legal authority or budgetary flexibility to create a far-reaching policy on its own. Instead, the county has followed a path of experimentation with its own municipal building design. Although LEED is gaining popularity in the private sector, the Minnesota Sustainable Design Guidelines have been updated since 1997 and the county continues to utilize the standards in its facilities projects. The Design Guidelines are very similar to the more familiar LEED system and award points for



site, energy, water, environment, materials, and waste. However, independent observers tend to view the standards as more rigorous than LEED due to an emphasis on actual performance and the fact that many elements of the standard are required. This is especially true of requirements for energy efficiency. The Guidelines actually contain a scoring system to determine how the building performs once it is occupied instead of focusing exclusively on design features. This emphasis on building performance is unique, and it provides much needed information that can be used to further improve the design of future projects.

5 Industrial Economics, Inc. “Analysis of Green Building Programs.” 30 September, 2005. pp. 22. http://www.keystone.org/spp/documents/12_8IEc%20Final%20Report.pdf

Aside from these self-imposed requirements, the county operates an annual Lead by Example Incentive Fund. Established in 2005, the fund offers \$100,000 annually, and it is awarded to county departments for use on innovative projects in the areas of waste reduction, recycling, and environmentally preferable purchasing. Awards are typically between \$5,000 and \$25,000 and special consideration is given to projects that other departments may be able to replicate.

Not all of these projects are successful. Although it was not awarded a grant from the Incentive Fund, one attempt to install natural gas-powered fuel

cells as a more sustainable energy source for the Eden Prairie Library proved to be ill-conceived as mechanical problems with the unit have caused the unit to be shut down for the time being. But setbacks such as this do not deter county officials. Currently, plans for an 80 megawatt solar array atop one county building would make it the second largest photo-voltaic array in the state. According to county architect Greg Karr, a wind turbine has been proposed for a nearby facility and the county has also begun to look into pilot projects for geothermal and hydro-thermal energy. The county seems to operate under the assumption that the benefits of these attempts at



renewable energy have outpaced the costs and that more projects like these will only improve the success rate.

Finally, as noted above, the county has been active in promoting high-performance buildings to other governments in the area. The state law, originally passed in 2001, is one of the oldest state green building programs in the nation. Cities inside Hennepin such as Minneapolis, Bloomington, and Eden Prairie have followed the county's lead by adopting programs to complement and expand upon the county building requirement. By bringing many levels of government together with local architects, the local government established a culture of low-impact development that has expanded to this day.

Other Initiatives

One interesting feature of Hennepin County's efforts to improve sustainability is an organic composting program. The region has gained the participation of several local governments, businesses, and over 35 local schools. In all, about 50-60 tons of trash is diverted from local landfills to organic composting each month. The compost is then used as a material in transportation project designs and for the prevention of soil erosion.

Hennepin County is yet another founding member of the Sierra Club's Cool Counties initiative. Expanding on the Cool Cities campaign, this program commits counties to 80 percent reductions in CO2 emissions by 2050. In order to meet these goals, the county will clearly have to keep up its fearless efforts to expand renewable energy production by any means necessary. Currently, approximately three-quarters of all county electricity is generated by coal fired plants, with much of the rest supplied by a nuclear facility.

Resources

Minnesota Sustainable Building Guidelines: <http://www.msbg.umn.edu/index.html>

Hennepin County Green Government Site: <http://www.co.hennepin.mn.us/portal/site/HCInternet/menuitem.77d27cbcd42457649bfa04a6c8c06498/?vgnextoid=c66ebe2f09b7c010VgnVCM1000000f094689RCRD>

KING COUNTY, WA

King County, WA, is a leading example of a county that has successfully integrated green building and sustainability into the operation and functioning of the county government. The state of Washington and the city of Seattle have complemented King County's efforts, as they have also been very active on sustainability issues, leading to effective green building programs at the county, city, and state levels.

Formation

The King County Green Building Initiative was established by an executive order issued by County Executive Ron Sims in 2001. The order served to encourage and incorporate the use of green building practices into all new county construction, remodeling, and renovation.

The county created a green team to coordinate the green building program between the various departments that would be involved. This team was housed within the Department of Natural Resources and Parks and was tasked to assist with project management, architecture, landscape architecture, design, engineering, resource conservation, budget analysis, and other expertise as necessary.

Following the success of the executive order, the county created its Green Building Ordinance in 2005. The language of the ordinance is virtually identical to the executive order and sought primarily to reaffirm the green building program. However, within the final clause of the ordinance, an opening was inserted to incentivize green building in the private sector, as it states: "the executive shall make recommendations regarding possible implementation of King County LEED incentive program, similar to Seattle, to promote LEED participation in the private sector."

GreenTools Program

King County's GreenTools Program assists those involved in green building – ranging from builders to homeowners to local governments – as they develop their project. A GreenTools team can offer technical expertise, training, assistance with securing grants, and information on local sustainable materials and resources for the green building project.



Public

The public section of the county's green building program requires that all buildings use the LEED checklist in pre- and post-design phases. Buildings should then incorporate as many green features as possible based on a life-cycle cost analysis, and seek the highest LEED rating achievable. A green building team works with the designers/builders during a new construction project, and assists the team with meeting the LEED checklist. On renovations and remodels, the LEED Reference Manual is used as a guide to include green building measures when feasible.

Commercial

King County's commercial green building policy is a robust offering provided to the commercial design and construction industry to build green. The Department of Natural Resources and Parks funds a competitive LEED grant program that provides varying amounts of funds based on the level of LEED Certification achieved, offering \$15,000 for Silver, \$20,000 for

Gold, and \$25,000 for Platinum buildings. There are also numerous resources for design/construction teams to implement their projects successfully. These resources include tools to evaluate green building projects, green building case studies, and an interactive tool that allows one to see how LEED applies to projects within the county.

Residential

The county uses the Built Green™ standard for residential green building. This standard was developed by the Master Builders Association in conjunction with King and Snohomish Counties. Residential buildings are rated on a 5-star system, which is organized into several "action categories" and details various green building features that may be included in the structure. A competitive grant program also exists within the residential program that provides grants for 4- and 5-star rated homes. These grants range from \$2,500 for a single family 4-star rated home to \$10,000 for a single family

development of four or more units at the 5-star level. The grant program also applies to community development, defined as 10 or more units, with 4-star rated developments being awarded \$10,000 and 5-star \$15,000. The Built Green checklist is widely employed throughout the county and more than 3,000 homes were certified in 2006 alone. This number almost entirely consists of homes rated 3-star or less. Looking ahead, the county is hoping to maintain these numbers but improve the level of certification new homes achieve.



Unincorporated Areas

Unincorporated areas of King County are another important area of focus for the community. Permitting incentives are the primary focus, with numerous incentives offered to promote green building and low impact development projects. These incentives are buttressed by knowledgeable staff in the Department of Development and Environmental Services (DDES), who provide designers/builders with proven green building strategies and technical consulting services in order to encourage green building within the county. DDES staff also provide a customized review schedule, priority processing, and 10 hours of free project management for residential projects that achieve the highest Built Green rating.

Architect Involvement

The county has done an impressive job of reaching out to the architectural community for ideas, best practices, and feedback as it has developed and grown its sustainability programs. One of the

King County/Seattle area architectural leaders, The Miller/Hull Partnership designed the Discovery Center at South Lake Union, featured here, and has integrated green design into its firm culture and architectural practice.

Former AIA Vice President Norman Strong, FAIA, Partner at the Miller/Hull Partnership, spoke on how, “King County and the City of Seattle have done a wonderful job of pulling (sometimes pushing) both publicly funded and privately developed projects toward a sustainable future that will directly reduce our carbon footprint.” The policies of both King County and the city of Seattle have been instrumental as they provide a clear direction in which the community would like to move.

Strong added, “For our publicly funded projects, sustainable design outcomes have been a contractual requirement for a number of years. Now, with the combined County/City emphasis on reducing carbon emissions we are seeing new requirements being considered for inclusion in both the entitlement process and ultimately for building permits.”

Strong sees the community as actively engaging architects in the process, but believes architects are willing to do even more to help green their communities. “There has been an active engagement of the design profession in the development of policies, but architects could and should be called upon as a resource to the discussion because of our ability to directly impact climate change through responsible, sustainable designs.”

Finally, Norman Strong is bullish on the future of sustainable design in his community. He predicts: “Very soon sustainable design solutions will be a given if you are to do any project within the King County and/or City of Seattle jurisdictions. Plus regional approaches to transportation and essential resources such as water (yes, even in rainy Seattle!) must be considered in the development of our communities in addition to the focus on the carbon footprint of a single building. Architects must play a role in the process, and must be seen as a resource for creative solutions for a sustainable future.”

Additional Sustainability Initiatives

King County is a leader in green building because of its long-standing commitment to general principles of sustainability. Outside of green building, the community also focuses on many other important initiatives. The county offers assistance for construction and demolition material recycling. Building waste takes up a large portion of landfill space and, regardless of green building features in the structure, the county treats material recycling as an important issue in its own right.

Furthermore, in 2006, County Executive Ron Sims issued an executive order that will require 50 percent of non-transit energy used by King County's government operations to come from renewable sources by 2012. The combination of this high target and such a short timeframe makes it one of the most ambitious renewable energy policies in the nation at any level of government. Meeting the objective requires efficiency in usage as well as improved renewable energy capacity. In response to the order, an Energy Task Force was created and a detailed energy plan has been drawn up. Over the next few years, this plan calls for such initiatives as seeking to improve energy efficiency by 10 percent per square foot and to maximize waste-to-energy capacity at the county's Cedar Hills Landfill. King County will continue to push ahead as an ambitious green leader.

Resources

King County Energy Plan: <http://www.metrokc.gov/exec/news/2007/pdf/EnergyPlan.pdf>

King County Climate Change Plan: <http://www.metrokc.gov/exec/news/2007/pdf/ClimatePlan.pdf>

King County Green Tools: <http://www.metrokc.gov/dnrp/swd/greenbuilding/>

Public buildings: http://www.metrokc.gov/dnrp/swd/about/green-building-team/documents/Ordinance_15118.pdf

Commercial buildings: <http://www.metrokc.gov/dnrp/swd/greenbuilding/commercial/index.asp>

MONTGOMERY COUNTY, MD

Montgomery County, MD, a suburban community bordering Washington, DC, is a progressive leader on green building and sustainability. The county green building legislation is much younger than other counties profiled in this report, but it has made use of experience gained by other jurisdictions and is setting an aggressive pace. The State of Maryland has been very supportive of green building and sustainability policy over the years, creating a welcoming environment for such programs to flourish. Montgomery County has been a principal catalyst for such policies in the state and greater Washington region.

County officials actively work with neighboring governments in Washington, DC; Arlington County, VA; and Fairfax County, VA, to help establish the entire DC region as a vanguard of sustainable design. The county further cemented this leadership role when it formalized green building efforts in an ordinance passed in 2006, immediately targeting public projects and setting a timetable for requirements that would affect private non-residential and multifamily construction within the community. Montgomery County will certainly be a county to watch as recent legislation takes effect and local policymakers go to new and innovative lengths to promote green buildings in their communities.

Green Building Requirements

As noted above, the first county legislation concerning green buildings was enacted in November 2006. The county had experimented with various green design features before, but the legislation would prove to be a firm and ambitious commitment on the part of county leaders. The law required county buildings over 10,000 sq. ft. to meet LEED Silver standards. This is defined to include any building that receives over 30 percent of its construction funding from the county. These regulations took effect for all buildings first receiving funds in fiscal year 2008.

Additionally, the county took the bold step of addressing privately constructed non-residential and multifamily buildings with this initial legislation. Beginning in September 2008, or one year after county buildings



must meet their requirements, this legislation requires all covered buildings over 10,000 sq. ft. to earn 20 points on the appropriate LEED checklist (or an equivalent rating system). One of the most important factors in earning the cooperation of the private sector and keeping costs low is to allow grace periods such as this in order to keep compliance predictable and allow local builders to gain experience with the new system.

Although it was passed in 2006, this legislation has yet to affect private development. Many of the green buildings that have been constructed within the county have been in response to a Maryland tax incentive (which is no longer available) or in anticipation of the county mandate.

Finally, this original 2006 legislation set out guidelines for the establishment of a Clean Energy and Environmental Rewards Program. Placed under the authority of the county Department of Environmental Protection, the program is designed to provide incentives for both green building and renewable energy. It is available to owners of applicable buildings in the private sector that achieve at least 24 LEED points as well as

any other consumer who wishes to consume cleaner energy. The Clean Energy Program currently rewards participating consumers with \$.01 to \$.015 per kWh for signing up with a clean energy supplier or purchasing renewable energy credits.

Recent Additions

In addition to setting requirements for minimum green building standards, the 2006 legislation also set goals for the establishment of a county environmental sustainability policy that would cover sustainable purchasing, fleet management, and allow for future changes to the green building policy. A year later, in December 2007, the County Council voted unanimously to approve a property tax credit to provide another incentive to earn points beyond the minimum requirements. Depending on the level of certification, building owners could earn tax credits of 10–70 percent.

This effort did not satisfy Montgomery County officials for long. Residential buildings had essentially been left out of the first two efforts to improve sustainable construction in the county. On Earth Day of 2008, the County Council sought to remedy this omission.



Less than two years after passing the original green building legislation, the County Council voted unanimously to approve a series of seven bills addressing the environment and climate change. The flagship bill was a measure that will require all new homes in the county to meet federal ENERGY STAR® standards after January 2010. Estimates indicate that the measure will reduce energy consumption in the affected homes by 15-30 percent at a cost premium of just \$2,000-\$20,000 depending on the level of efficiency achieved. In a county where the average home sells for about \$800,000 and new homes are appraised even higher, the total cost premium is just 1–2 percent above normal market value.

Complementing this landmark legislation are measures requiring utility costs to be disclosed when selling a house, additional tax credits for solar and geothermal power generation, and a requirement that the county explore options for the creation of a carbon fee or “cap and trade” program. In a financially strapped county, these initiatives are not budget neutral. Some councilmembers did question the wisdom of allocating funds to these proposals but eventually they were



passed unanimously. Councilman George Leventhal put it bluntly: “The costs of climate change are going to be far, far more costly.”

These recently adopted policies, as well as all mandates of the original 2006 legislation, have yet to be enforced. Don Tucker, AIA, of Eco-Housing Corporation, believes the effect of their implementation remains to be seen but the time for such legislative effort is long overdue. “It’s good progress,” he remarks, “but we also made progress during the Carter administration.” The cities, counties, and states have

worked well to create policies that they believe are appropriate, but there must be a long-term commitment to implementation.

Other Initiatives

The county has placed a particular emphasis on green schools in their sustainability initiatives. As children oftentimes have the most to gain from healthy schools during their developmental years, green school programs offer incredible return on expenditures of public funds. In fact, the county school system has been proactive in incorporating green building features into school buildings since 2003. It is partially due to the success of these informal efforts that the county created the more expansive green building program it has in place today. The Great Seneca Creek Elementary School became the first LEED certified school in Maryland when it opened in 2007 with a Gold rating on the newly released LEED for Schools checklist.

Furthermore, Montgomery County has taken advantage of the significant public support to implement numerous sustainability initiatives that reach beyond green building alone. Until net-zero energy buildings are commonplace, the energy still consumed by buildings in the region is almost exclusively provided by coal fired power plants. Montgomery County has been working hard to increase the production of energy from renewable sources. In 2004, the Department of Public Works and Transportation (DPWT) led a regional effort on the part of several jurisdictions to purchase five percent of their energy (over 38.4 million kWh) from a wind energy supplier. In 2007, many of these partners increased that rate to 10 percent.

What Can Other Counties Learn?

Having quickly established one of the most aggressive green building policies among counties nationwide, Montgomery County has set an excellent example for other counties to follow. It is no coincidence that the county was able to draft and unanimously pass multiple pieces of legislation creating and expanding their green building program in just two years. The county reached out to governments throughout the region to coordinate policy, seek advice, and gain a broad base of support. Eric Coffman, the Senior Energy Planner for the county, notes that the 2007 legislation to create

the property tax credit was modeled after a similar proposal in Baltimore County. Becoming aware of the policy environment in surrounding governments allows policymakers to borrow elements and improve upon them.

Montgomery County has the advantage of operating in a metropolitan region where a council of governments already exists to coordinate policy. But, in practice, this only means the lines of communication are open. Someone still must take the initiative to create policy.

When asked how he would advise other counties, Mr. Coffman refrains from specific policy recommendations. He says: “Any county government considering green building legislation [should] carefully examine the models of other jurisdictions and open a dialogue with neighboring jurisdictions and municipalities early in the process to seek as much consensus as possible and ideally operate under similar requirements or incentives. The best action is a model that a group of counties or municipalities can agree on is best for their environment, community, and economy as a group, and this is best achieved through collaboration on a regional scale.”

Resources

County Green Building Act of 2006: http://www.montgomerycountymd.gov/content/council/pdf/agenda/col/2006/061128/20061128_07.pdf

County Residential Building Standards Act of 2008: <http://www.montgomerycountymd.gov/content/council/mem/Berliner/PDF/30-07buildings.pdf>

Montgomery County Celebrates Earth Day with Seven New Bills: http://www.montgomerycountymd.gov/Apps/Council/PressRelease/PR_details.asp?PrID=4488

Montgomery County Green Schools: <http://www.schools2green.org>

Florida Counties Pushing Ahead

King, Alameda, Montgomery, and Hennepin Counties are all representative of the original innovators of green building policy at the county level. They saw high performance buildings as an opportunity to improve their allocation of funds and establish sound, long-term practices and were willing to explore new means to embark upon that path. Partially as a result of these policies, buildings across the country have undergone a revolution in terms of the emphasis that is placed on resource efficiency and life-cycle performance. Counties that are just now considering these types of reforms can look to these communities for the necessary experience and information to design and implement even more effective green building programs. In this tradition, county governments across Florida are now overcoming legal barriers to create a culture of sustainable development by following the example of another local leader, Sarasota County.

Local governments in Florida operate under unique circumstances when it comes to building regulation. Due to the ever-present threat of hurricanes, the state adopts a central building code that cannot be altered by either cities or counties. This impacts the feasibility of green building in a number of ways.

First, the code affects low-impact design techniques in unintended ways. It seems inconceivable for the “Sunshine State,” but since the law states that nothing can breach the structure of a building’s roof, it is against code to install most conventional solar arrays. Secondly, although several jurisdictions have shown an interest in green building over the years, the centralized nature of building code decisions had engendered a sense of powerlessness in local officials. Many believed there was no authority to establish policy. When asking building or planning

officials throughout Florida about their green building policy it was not uncommon for the conversation to immediately turn to the existence of the state-wide building code.

However, in 2002, something seemed to click for the state. That year saw the establishment of the state’s first green building policy in Sarasota County as well as the formation of the Florida Green Building Coalition (FGBC). Policymakers realized it was possible to incentivize green building standards or construct government buildings that could serve as local demonstration projects, proving high-performance design was not incompatible with the Florida codes. With the policy options now exposed, it was not long before other jurisdictions took notice and made similar motions. To date, 5 of the 17 counties surveyed in Florida have green building policies.



These counties collectively represent 5.8 million people, or 35 percent of all Florida residents. Several other counties operate under less formalized energy efficiency guidelines. Many jurisdictions seem interested in going the extra mile to make up for lost time, adding innovative wrinkles to conventional policies and moving boldly ahead with multiple initiatives all at once.

ORANGE & PINELLAS COUNTIES

Orange and Pinellas counties may not boast the most rigorous policies for building design, but these policies are only one part of a broad effort to improve all-around sustainability. Fairly similar in scope, both programs began with legislation passed in 2005. Pinellas County requires its municipal projects to achieve

LEED standards and Orange County utilizes FGBC standards in evaluating construction projects.

Pinellas County had the honor of being the first county in Florida to be recognized as a “Green County” by the FGBC for its devotion to sustainability throughout its government operations. The state requires that comprehensive plans at the local level be reviewed every seven years to maintain their relevance. Right now, the county is in the process of overhauling their plan, and sustainability will be a central theme of the final version. In addition to working closely with the University of Florida to craft its development strategy, the county also hired a sustainability manager to assist in this process and to implement the comprehensive policies on the topic after the master plan is approved.

Orange County has also devoted itself to addressing climate change in a comprehensive way. The county recently passed a Climate Change Action Plan that lays out eight policy areas that should be further addressed. Green buildings are already a part of the county’s efforts, and the report details the many ways the policy can be expanded. The ideals espoused by the action plan are already becoming a reality with the new “Orange to Green” development program approved in March. The new initiative will offer priority plan review as well as “Green Carpet Service,” providing developers a single point of contact to support them throughout the review process.

Resources

Orange to Green Program: <http://www.orangecountyfl.net/cms/dept/growth/building/greenbldg.htm>

Pinellas County Sustainability: <http://www.pinellas-county.org/sustainability/default.htm>

SARASOTA COUNTY

Sarasota County is one of the few Florida counties that has followed a more conventional policy path by incrementally developing its green building program over several years. In 2002, the county adopted a resolution directing the County Administrator to develop “policies, guidelines, and strategic actions for building

county facilities [and]... environmentally friendly procurement practices.” After some months, this led to the passage of an environmental procurement code and an internal preference for more efficient design features in county buildings, but the green building program still had no formal standing in the government.

The county continued to expand incrementally, eventually passing a green building resolution in 2005 that required all county buildings to earn LEED Silver or a similar grade under the FGBC or other nationally recognized standard. This resolution also stipulated that the green building program is voluntary for all non-county projects but that there would be incentives provided for participation and final certification. These incentives include fast-track permitting as well as building fee reductions.

The following year, the county chose to reassert its support for green building incentives by passing another resolution further specifying how the fast-track program should function. The policy of offering fee refunds had to be revoked due to sharp cuts in the funds the county has been allocated by the state. Accordingly, there is no mention of the permit fee reduction in this resolution.

Also in 2006, Sarasota became the first county in America to adopt the 2030 goals, seeking to make the community carbon neutral by 2030. County Commissioner Shannon Staub, a member of NACo’s Green Government Initiative, has been a standout leader on sustainability issues in the state.

In 2007, the county decided to take their program further by creating the Community Housing Fund. The fund was created to “promote the development of quality affordable housing to accommodate the housing needs, financial capabilities, and... financial self-sufficiency of current and future residents.” Low-income residents must use a disproportionate amount of their income to afford basic necessities such as utility costs. To some extent, this is unavoidable, but more run-down structures tend to be the least efficient, and it benefits both the resident and the community to improve the quality of these housing units. The program’s budget comes from the sale of escheated lots, public and private

donations, and a few other sources, and is primarily used to improve the efficiency of low-income housing in the county. The Fund is designed to advance the goals of the Housing Chapter of the Comprehensive Plan and is not exclusively used for green building upgrades, but many of the evaluation criteria for receiving funds relate to infill and water or energy efficiency.

Finally, the county is heavily involved in educating citizens and other jurisdictions. Sarasota hosts an annual conference on a particular aspect of sustainable communities. Last year, the conference focused on housing standards and low-income housing. This year, the theme will center on emissions reduction. These workshops enhance the visibility of green building policy as a viable option for Florida, and Sarasota is widely viewed as a leader in the state, regularly cited in conversations with other city and county officials. The county was even consulted by the Florida State Legislature in negotiating the details of the state energy bill. The bill will establish a familiar regulation, requiring all state owned construction and major renovation projects to meet LEED, FGBC, Green Globes, or other nationally recognized standards. This commitment to information sharing is undoubtedly responsible for the precipitous rise in the number of Florida communities with green building policies in the past two or three years.

Resources

Sarasota County Sustainability: <http://www.scgov.net/Sustainability/County.asp>

Sarasota Green Housing Fund: <http://www.scgov.net/Sustainability/documents/Housing2007016.pdf>

MIAMI-DADE

Miami-Dade County is a much more urban environment than Sarasota, and it recently has become very active in pursuing several long-term sustainability projects. Much of the county's progress can be attributed to the close relationship the county has fostered with the city of Miami to drum up public support on the issue. Consistency and predictability among jurisdictions are the most important concerns of the

development community for any building policy, and this communication is essential for the success of either program since over one million of the Miami metro area's citizens reside in unincorporated portions of the county.

Legislation also needs a good policy entrepreneur to champion the issue and prioritize it on the political agenda. In Miami-Dade, District Commissioner Katy Sorenson has been credited with being a successful advocate for several initiatives that change the way developers approach building in the region. The first round of legislation on this topic occurred in 2005, when the county passed a series of three bills sponsored by Sorenson. In addition to requiring new county facilities be constructed to meet green standards, one policy extended a Targeted Jobs incentive program to businesses that operated in certified green buildings.

The program is available to businesses seeking to relocate to the county. This legislation expands the pool of businesses that are eligible for the incentive and provided additional credit to companies in the solar power industry. A second piece of legislation created fast-track permitting procedures for commercial and





residential buildings that are LEED or FGBC certified, and the final policy instructed the county manager to incorporate principles of green building into the construction and maintenance of county facilities.

More recently, Commissioner Sorenson sponsored a fourth bill that promises to expand the scope of the county's sustainability practices. In 2007, the County Council voted to approve the creation of an Office of Sustainability, led by a sustainability manager who will report directly to the county manager. Offices like this are still fairly uncommon, especially in counties, but devoting a full-time manager to implement and monitor issues relating to sustainability is an excellent way to bridge gaps between departments. This can help avoid 'siloeing,' where failure to coordinate between agencies leads to a situation in which the left hand does not know what the right is doing. Already, the county has instituted green building legislation concerning commercial, residential, and public construction. Incentives include permit fast-tracking and direct subsidies. And the county is also focusing on long-term water conservation and renewable energy goals. These policies could not be effective without the dedicated staff to implement and expand upon these programs.

Resources

Miami-Dade 2005 Resolution: <http://www.co.miami-dade.fl.us/govaction/matter.asp?matter=052213&file=rue&yearFolder=Y2005>

Miami-Dade District 8 Sustainability: <http://www.miamidade.gov/district08/smart-growth-plan.asp>

HILLSBOROUGH

Rounding out the five Florida counties is Hillsborough County. Encompassing the majority of the Tampa metropolitan area, Hillsborough has had a budding interest in high-performance design and energy efficiency for several years but has only recently taken the necessary legislative action to commit to these practices. The county's progress related to green building will be interesting to follow over the next few years due to the policy's youth and the particular emphasis on promoting green roofs.

The county passed its first ordinance relating to green building in 2007, establishing regulations for expedited building review for residential buildings and

expedited site-plan review for commercial and industrial projects. Before this policy had even taken effect, other initiatives had been proposed to make the overall sustainability program even more robust.

In addition to the permit incentives that were originally passed, the county provides an incentive for green roofs by counting the green roof towards the green space requirement for development. In order to promote green roofs further and ensure that interested developers have all of the necessary information the county recently sponsored a green roof symposium in conjunction with the Canadian organization Green Roofs for Healthy Cities. This is representative of a long-standing commitment to educate the community about efficient building design. As far back as 1999, the county was involved in courses teaching homeowners about building and remodeling green.

As with all of the counties featured in this report, Hillsborough also practices what it preaches. The county is currently in the process of passing official legislation that will require county construction projects to meet LEED or FGBC guidelines. It may seem strange that the county was able to pass all of this other legislation before getting its own house in order, but it was simply not a priority because the county has had a long-standing internal policy relating to energy efficiency. Since 2000, Hillsborough has employed a full-time energy manager with a broad mandate to improve the efficiency of all county facilities. It is estimated that between 2000 and 2006, the improvements made have saved the county over \$1.6 million annually in energy costs.

One of the most impressive projects is in a series of county offices located in downtown Tampa. The county decided to centralize climate control for five buildings, comprising over 1.5 million sq. ft. of building space, by installing a chilled water circulation plant. After the plant was installed in 2001, it was eventually hooked up to the other offices to form a multi-building loop of efficiently cooled buildings, including two schools that pay to be included in the network. This efficient cooling system alone is estimated to save the county \$1.1 million annually versus conventional air conditioning.

Resources

Hillsborough County Sustainability Summary: <http://www.hillsboroughcounty.org/resources/publications/hcgreeninitiatives.pdf>

More Counties Go Green

The primary research in this report focuses on green building programs in the top 200 counties by population. However, there have also been impressive green building and sustainability initiatives undertaken by smaller counties in recent years. While these counties have not been as quick to codify green building laws, some have developed comprehensive laws and others have instituted important initiatives, such as greening new county-owned buildings.

In order to provide the reader with an understanding of what these communities have accomplished in regards to green building, NACo has reached out to smaller counties that are members of its Green Government Advisory Board, of which the AIA is also a member, to further inform the overall report. We also made use of NACo's Green Government database, a resource developed to catalogue the sustainability programs and policies developed by counties.

Within the study, it became clear that the preponderance of green building is taking place in the larger counties, with 29 out of 39 counties with green building programs actually coming from within the top 100 counties. Therefore, it became apparent that while we could clearly identify trends in larger counties, it is not possible to project these trends onto smaller communities. The AIA and NACo believe that this section will serve as an additional guide for smaller counties across the country that have questions about how to pursue green building programs.

The following counties are not included in the overall sample but were chosen for this section: Arlington County, VA; Blue Earth County, MN; and Mohave County, AZ. These three counties represent different

regions of the country and various types of communities, ranging from urban to rural, but they all offer best practices that can teach other counties across the country.

ARLINGTON COUNTY, VA

Arlington County has been a well-known leader on green building with one of the oldest such programs in the country, stretching back to 1999. This urban county, with a population of approximately 200,000 people is located adjacent to our nation's capital. At just 26 sq. miles, the county has managed to create a focused mix of high-density commercial and residential development in its Metrorail corridor, while still offering low-density residential neighborhoods in a large part of the county.

Arlington currently has more private office space than downtown Los Angeles, Boston, Denver, or Dallas. And complementing this development has been a focused, long-range planning commitment instituted by the county that has maintained environmental and land-use leadership. Arlington has consistently been viewed as a model for other communities across the country on a wide range of land-use and sustainability issues.

In an interview with Joan Kelsch, Arlington’s Environmental Planner, we sought to ascertain the relevant development of the program and areas that could be useful for other such smaller counties currently developing or expanding their own green building programs.

What challenges did you face in implementing your green building program that you think are specific to smaller counties?

Our program has two parts—greening public facilities and greening private development. We had strong support from our elected officials for greening both public and private projects.

For public facilities, it was challenging to change the focus of our facility planners and to get contracts written so that they appropriately incorporate green components. They are continually faced with deadlines and cost limitations. When we started using LEED as our guide for greening public facilities, architects,

contractors, and County staff had steep learning curves. We still have some issues with specific knowledge about LEED and oversight of projects to ensure that all the green components are included.

For the greening of private development, we made sure we met with the development community ahead of time to explain LEED and the “green” expectations. We phased the program in slowly, asking for basic commitment at first, then asking for more documentation about two years later and then expecting that projects would achieve at least 26 LEED credits and provide us with LEED-quality documentation. We offer a bonus density program for green building—this was very successful and sent the message that we are serious about greening the building stock. About 12 projects are participating in the bonus density program.

How did you handle the new program from a staffing perspective, i.e. did you hire new staff or reorganize current staffing priorities?



My job was redefined to focus on green buildings. I coordinate the county's green building programs with the help of many staff including public facility planners, maintenance staff, community planning staff, zoning and building officials, etc. Our own facilities planners and maintenance staff are continuously learning more over time. We hired one person to focus on our Green Home Choice program (part time). We have also hired two new staff to do outreach to the private development community on green buildings and energy efficiency as part of our climate initiative.

Did you set up a task force or green team to help develop the program, and, if so, did you create a role for this team/taskforce after the law passed?

Originally, we did have a staff team that looked at private development and implementation. I continue to tap their expertise when I have questions about our specific site plan review process. A different group of staff met for several months to work out a policy for our public facilities. We continue to consult with one another on green building issues.

How did you fund the program, i.e. out of general fund revenue, grant money, etc.?

Our green building program does not have a separate budget. One position was redefined to coordinate the overall green building programs. As noted above we did hire an additional part-time staff (out of general funds) for our green home program. The climate program is funded by a designated tax on utility bills, so the two people who do outreach on green building and energy efficiency are funded from that program.

We set up a Green Building Fund—private developers who do not seek LEED certification pay 3 cents/sq foot into the Fund. This money is used for outreach and education to the community (developers included) on green building issues. We have sponsored workshops and presentations, offered LEED training to County staff including building inspectors, etc.

Did you work with the state and/or cities within your county on the program?

Arlington is a small county and has no cities within its boundaries. We did not work with the State.

How did you/did you get the development community involved in the green building program?

We talked with the development community from the beginning. I meet with the project team for each development project several times to talk about specific green components on their projects. We maintain a good working relationship with individual builders as well as the local trade associations, real estate attorneys, etc..

What advice would you provide to other small counties developing their own green building programs?

Use other programs as models (no need to reinvent the wheel). Train staff in LEED and green building concepts and processes (including integrated design). Talk about the benefits of green building. Make the most of existing green buildings in your community or nearby—offer tours and lessons learned. Work to convince elected leaders of the benefits and the process. Start with a program you can manage and build in reviews and updates every couple years. Be sure to push the envelope a little—ask for energy efficiency for sure, realize that the green building industry is moving forward quickly and what was new a couple years ago is standard practice now. If you can offer an incentive for private development, that is good. Just be sure you incorporate a sunset provision—as green becomes the norm, you don't want to be offering developers something they would be doing anyway.

MOHAVE COUNTY, AZ

Mohave County is a fast-growing, rural Arizona county with a population of approximately 200,000. The county covers 13,470 sq. miles and is one of the original four Arizona counties created in the First Arizona Territorial Legislature. The county has a county manager form of government, and is governed by a three-member Board of Supervisors elected on a partisan basis with a chairman selected annually by the supervisors.



Mohave completed a LEED certified county administration building last year. This project began in 2005. The Board of Supervisors are pleased with the end result and saw the project as one that could save their community money as well as protect the environment.

The county has shown long-term sustainability planning instincts, as the county administration building RFP was originally issued in 2003. At that time, Mohave Administrators asked for bidders to include the cost for pursuing LEED certification for the building. The Opus West Construction Corporation designed and built the building, and it is the only LEED Certified building in the county, and it is a rarity for certified green buildings to be found in rural Arizona, so Mohave is truly ahead of the pack.

The community has also been working with NACo to catalogue its buildings in conjunction with ENERGY STAR® in order to establish which buildings could receive such a designation. This process has led to five buildings, one being the county administration building, which have now received ENERGY STAR® designation.

BLUE EARTH COUNTY, MN

Blue Earth is located 75 miles southwest of Minneapolis-St. Paul. The county was established in 1853 and constitutes 764 square miles with a population of approximately 58,000. The county includes 23 townships and 11 cities. Jessica Beyer is the Public Information Specialist from Blue Earth County, MN, and she has answered the following questions to give an understanding of what Blue Earth has been focused on in regards to sustainability.

What challenges did you face in implementing your green building program that you think are specific to smaller counties?

Blue Earth County's most significant challenge as a smaller county implementing a green building program has been finding green products that we are confident will withstand the test of time in a public facility. Many green products are fairly new to the market and don't have proven reliability. The Blue Earth County Justice Center will be the first green building in South Central Minnesota. While there are some green buildings

in the twin cities and bordering states, the concept of building green (especially in a project of this size) is new to our area. Given our climate and geographic location there have been some challenges with finding LEED certification areas that are feasible to include in our facility. Minnesota winters are very different from California winters. For instance, the payback during the operating life of the building didn't warrant installing a green roof.

Another piece of this challenge is communicating to residents the benefits of building green and the cost savings that stem from green building practices. It is important for every government agency to be accountable to residents and clearly illustrate what tax dollars are funding. The Blue Earth County Justice Center is still under construction—so at this point we can only forecast what the cost savings will be over the operating life cycle of the building that warrant the extra expense of going green.

How did you handle the new program from a staffing perspective, i.e. did you hire new staff or reorganize current staffing priorities?

Blue Earth County did not hire additional staff members to specialize in green building areas of constructing the facility. Instead, we chose to work with EcoDeep, a consulting firm that specializes in LEED certification. At the time we began the project, we didn't have any local architecture firms that specialized in green building or had a clear understanding of the process.

Did you set up a task force or green team to help develop the program, and if so, did you create a role for this team/taskforce after the law passed?

We do not have any laws that require green building construction. For this project we had a Justice Center Steering Committee that also discussed LEED certification and green building features. The EcoDeep consultant guided us in this process.

How did you fund the program, i.e. out of general fund revenue, grant money, etc.?

We funded the project by investing and saving dollars for several years (over a decade) to construct a new jail. When the scope of the project grew to a Justice Center including courts, community corrections, county attorney, sheriff's office and jail, we bonded for a small portion of the overall cost.

Did you work with the state and/or cities within your county on the program?

Blue Earth County worked on the project from an individual standpoint. However, state and city officials have supported the project and have been kept well informed. The county held a ground breaking ceremony that included individuals from the state, city and other agencies. As the construction progresses and the building opens—we will include state, city and others with open houses, etc.

How did you/did you get the development community involved in the green building program?

Throughout all stages of the project, we have held open houses, gained media coverage regarding the facility being a green building, visited local organizations to share the message and developed special events where the building was recognized for being part of a green building program. At one of the events, we had local utility companies and displays present that shared information with residents about energy conservation and green building practices.

What advice would you provide to other small counties developing their own green building programs?

Counties relative to Blue Earth County's size can benefit from hiring an outside consultant to handle LEED certification and green building programs that have expertise in that field. At the time we started planning for a green facility—local architectural firms didn't have staff to assist us. Most likely this is the same case for many small counties throughout the country. Having a consultant helped us get our arms around the process and guide us to make informed decisions.

We would also recommend communicating your project to the public as much as possible. It is important

to share the message of not only what your agency is doing to construct green buildings—but how residents and other businesses can be “greener”.

All three of these counties are varied in the type of communities that lie within them, ranging from urban to suburban to rural. These counties are also at different stages of development in terms of how long the sustainability policies and what types have been in existence, whether they be codified laws or project specific. However, all three of these counties demonstrate a clear commitment to sustainability and green building. Dedicated officials, politicians, and citizens in these communities have successfully championed environmental policies over the years, and as a result these counties provide good examples of what other smaller counties can do to help implement such policies in their counties.

Resources

NACo’s Green Government Initiative: <http://www.naco.org/greencounty>

NACo’s Green Government Database: http://www.naco.org/GreenTemplate.cfm?Section=Green_Government_Database&Template=/cfiles/ggi/green_counties/ggi_search.cfm

Arlington County Green Building Program: <http://www.arlingtonva.us/Departments/EnvironmentalServices/epo/EnvironmentalServicesEpoGreenBuildings.aspx?lnsLinkID=1075>

Conclusion

Architects will continue to have a profound impact on the built environment in which we live, work, and play. The AIA is committed to advancing the practice of architecture by continuing to promote sustainable, low-impact building features. Green building policy is an important part of this process and it is heartening to see all of the effort being put forth by local leaders. The experiences of these counties make it increasingly clear that investment in high-performance building programs is an efficient and popular use of taxpayer dollars. This report documents the spread of green building programs, explores best practices, and provides a tool for policymakers. The AIA and its component network have further resources, expertise, and tools to assist local, state, and federal governments as they write new legislation or amend existing green building codes.

RECOMMENDATIONS FOR CONTINUED GREENING

The following recommendations can help local communities as they begin or enhance their green building programs.

Be inclusive: Building a broad coalition among stakeholders is one of the most important keys to a successful green building program. Architects, builders, and others in the design and construction industry should be included and efforts should be made to educate them on the merits of any proposed policy. Training sessions and workshops can be offered by a LEED accredited professional, officials from neighboring jurisdictions, or AIA component staff to garner support. As with any policy, the devil is often in the details and even people who are generally supportive of green building policy may have concerns with certain aspects of a program.

Use architects as a resource: Architects want to help communities develop green building programs and are available as a resource. Contact your local or state AIA component, COTE chapter, or AIA National; we will provide you with information and contacts for architects that can assist you in turning your community green.

Hire a director of sustainability: A full-time staff member dedicated to improving the sustainability of a community is a very worthwhile investment. Often, the savings that can be achieved in county facilities' energy efficiency alone can more than pay for the salary of this position. Furthermore, a sustainability manager can recommend new policies, assist with long-term plans, and coordinate efforts between departments, avoiding 'siloing' and failures in communication. King County, WA, and Hillsborough County, FL, are two excellent examples of a governing structure that promotes sustainability.



Train and accredit county employees: County employees should be trained in whatever rating system the community plans to use. The most obvious reason for this is to save time and money on third-party certification, but this training has additional benefits. By providing expertise at the point of contact between the government and private developers a county can explore voluntary features that may improve sustainability and better align a project with a county master plan.

Work with regional governments: Counties often do not have the lion's share of authority relating to building practices. Leading by example and creating incentives are important, but there are many other factors to consider. One of the most consistent concerns voiced by the development community is that there will be a regional patchwork of programs and each project will have to independently research how regulations apply to different parts of the community. Counties have the ability to focus region-wide governments down a similar, complementary green building path.

FINAL ANALYSIS

County leaders view green building as an investment in a healthier, environmentally friendly future. They also see green design as an opportunity to create green collar jobs in their communities, reduce energy and water costs, and create all-around superior buildings. As the cost of green building continues to move toward parity with traditional building practices, the old excuse of high cost begins to fall by the wayside.

And, as discussed in this report, many counties across the country are investing in a clean energy future by developing green building and sustainability programs, and we should be rightfully proud of these accomplishments. However, there is still a market failure in overall green building development and additional involvement, initiatives, and funding are needed by all levels of government, because there is only so much that can be done by local governments.

Energy efficiency is a public good, and energy independence is a national security concern. Therefore this augurs for the federal government to get much more involved in funding local green building and energy efficiency initiatives. There are already a number of federal programs that could be bolstered, such as the Energy Efficiency and Conservation Block Grant, and others that could and should be created. While there is a great deal of current investment and interest surrounding anything green, there is still a gross underinvestment in overall energy efficiency programs and so government needs to continue its movement toward greater investment in this sector through incentives and other complementary measures.

Green buildings are healthy, energy-efficient buildings that increase natural light, incorporate high performance systems, and improve air flow for occupants. Green living roofs and many other features may be added to integrate the building directly into the environment.

King County, WA County Executive Ron Sims nicely sums up the importance, the necessity, and the economic good sense of sustainable design. “From ballfields to bus shelters, building a structure using

green design and sustainable materials typically cost less than two percent above traditional construction. Over time, the reduced operating, maintenance and other costs of sustainably built projects exceed those initial extra design and construction costs by a factor of 10 to 1. So the incentive for local governments to follow green, sustainable building practices is not just the sense that it’s the right thing to do for our environment, but it’s sound financial stewardship as well.”

Communities should continue to move forward with green building programs, and the 39 counties that have already passed green building programs are a testament to the importance of green design. The four case studies and the discussion on Florida counties currently pushing ahead provide concrete examples of diverse successful green building programs. Although there are multiple ways to create a green building program, the ultimate goal is to create the best possible program for your community and its unique needs.

From the east coast to the west, counties face many different political, financial, and climate concerns. Every county leader, however, clearly has in common the best interest of the citizens living in their communities and the future of our country. Americans are ready to take on this global issue and have the knowledge, resources, and ability to truly change the world leading by example. The building sector is the greatest single contributor to carbon emissions in the United States, but this only means that it has the greatest potential for carbon reductions. Our local communities are leaders in sustainability and now is the time for others throughout the country to lead, because we all have a part to play in greening America.

Appendix A: Green Counties Matrix

County, State	Applies to: 1-Municipal 2-Commercial 3-Multifamily 4-Single-Family	Year Program Began	Web Site	Notes
Pima, Arizona	1	2007		The county plans to expand the program to include incentives for residential and commercial buildings later this year. The standards will be similar to other checklists but may put more emphasis on water conservation
Alameda, California	1, 2, 3, 4	2001	www.stopwaste.org ; http://www.acgov.org/gsa/Alameda%20County%20Green%20Building%20Ordinance%204-29-2003.pdf	County buildings must be LEED Silver, and 'Green Homes' must earn 50 points on the Build it Green checklist to be awarded. Alameda worked with the Sierra Club to start a 'cool counties initiative' committing to 80% CO2 reduction by 2050.
San Bernardino, California	1, 2, 3, 4	2007	http://www.sbcounty.gov/sbco/cob/	The county was sued by California after its most recent development plan failed to account for climate change. The settlement resulted in a few green building measures. 1) County buildings are required to be LEED silver. 2) Permit fee waivers are available for buildings with features that "are in the public interest" such as HVAC. 3) A voluntary County Green Builder program has a residential checklist and includes incentives for compliance.
San Diego, California	2, 3, 4	2005	http://www.sdcounty.ca.gov/dplu/docs/DPLU%20273.pdf	The county offers incentives on plan checks and permit fees to promote green design. The county focuses primarily on energy efficiency right now, requiring projects that wish to comply to exceed Title 24 standards.
Santa Barbara, California	1	2001	http://www.sustainabilityproject.org/DesktopDefault.aspx?pageid=88	In 2001 they passed the Facility Policy Framework to establish a standard for county facilities that was broadly based on sustainability. The county is set to update that document, possibly adding to LEED and 2030 goals. In addition, the county recently created a position for an energy conservation manager
Santa Clara, California	1	2006	http://www.sccgov.org/portal/site/scc/aspecial?path=%252Fv7%252FSCC%2520Public%2520Portal&contentId=9ba9a5aaf7c03110VgnVCMP230004adc4a92	The county is part of the cool counties network. In addition to the green building requirement the county has been improving its fleet and retrofitting old buildings. The county also participates in the Bay Area Green Business Program to recognize and assist local businesses.
Ventura, California	2, 3, 4	2007	http://www.ventura.org/rma/buildsafe/pdf/2007_Ventura_County_Building_Code.pdf	It is written into the building code that green projects receive expedited plan review for no additional fee. Ordinarily developers can pay 35% extra for the quick review.
Hillsborough, Florida	2, 3, 4	2007	http://www.hillsboroughcounty.org/resources/publications/hcgreeninitiatives.pdf	In addition to expediting site plan review, the county recently passed began to focus on promoting green roof projects. Any portion of a roof that qualifies counts toward open space requirements.
Miami-Dade, Florida	1, 2, 3, 4	2005	http://www.miamidade.gov/dis-trict08/smart-growth-plan.asp#green	Currently they are working closely with the city of Miami on the Miami21 project. Soon, the county will require LEED certification for new or renovated county facilities. The county also has an office of Sustainability. The regulations only apply to the unincorporated areas, but this is over 1,000,000 people.

County, State	Applies to: 1-Municipal 2-Commercial 3-Multifamily 4-Single-Family	Year Program Began	Web Site	Notes
Orange, Florida	1	2005	http://www.orangecountyfl.net/cms/dept/growth/building/greenbldg.htm	Orange County Climate Action plan dictates that any building receiving county funds will have to be green. Right now the buildings are being certified externally, but they are also training staff. The GreenPlace program was originally designed to preserve green space and provide parks and trails but was expanded somewhat to include other sustainability initiatives.
Pinellas, Florida	1	2005		Right now the county is overhauling the comprehensive plan and has just completed their proposal. One update will transform the plan and make sustainability the theme of the whole document and consider the triple bottom line. The green building program will likely be strengthened.
Sarasota, Florida	1, 2, 3, 4	2005	http://www.scgov.net/Sustainability/default.asp	Although the first resolution was in 2005, they have had sustainability related ordinances for several years. They also have an annual conference on sustainable communities to continue educating the community.
Ada, Idaho	1	2003	http://www.adaweb.net/departments/operations/GreenBuildings.asp	The county requires all buildings over 10,000 sqft to be build to LEED standards.
Cook, Illinois	1	2001	http://www.co.cook.il.us/secretary/CommitteePages/Meeting%20Reports/Environmental%20Control%20Committee/2001/04-11-01.htm	The Capitol Projects Dept. ensures that all county buildings meet LEED certified standards.
McHenry, Illinois	1	2008		McHenry was the first county to adopt Energy Star standards in Illinois. The ordinance doesn't lock in LEED as a mandate, but has language that an analysis of the costs and benefits of getting LEED points should be done and county facilities construction should use LEED to the greatest practicable extent.
Johnson, Kansas	1	2004	http://facilities.jocogov.org/pdfs/SustainabilityGuide.pdf	From a planning standpoint, they only have jurisdiction over unincorporated portions but they do work with the cities in the county to promote various policy and incentive options. They do not certify all of the buildings, but there are 2 LEED accredited staff and the county believes it will be ahead of the 2030 challenge.
Baltimore, Maryland	3, 4	2007	http://www.baltimorecountymd.gov/Agencies/community/greenbuilding/index.html	The county just created a tax credit arrangement for affordable housing and adopted LEED for homes as well as Energy Star standards. More is planned and the county is essentially in a pilot phase of the housing program.
Montgomery, Maryland	1, 2, 3, 4	2006		The 2006 resolution stipulates any public building over 10,000 ft that receives 30% of funding from the county must be LEED Silver, any private building w/ the same specifications must be certified. The county passed several resolutions on Earth Day 2008 that have yet to take affect.
Prince George's, Maryland	1	2007	http://www.princegeorgescountymd.gov/Government/AgencyIndex/GoingGreen/	The county has a green building steering committee that consists of representatives from multiple depts. The whole Going Green program was created by executive order which mandates that the committee establish incentives for commercial buildings as well as an education component in addition to the current program.
Dakota, Minnesota	1	2000	http://www.co.dakota.mn.us/EnvironmentRoads/EnvirProtect/Sustainability/SustainableBuildings.htm	The county only has zoning authority over unincorporated areas and is trying to convince cities to take further action.

County, State	Applies to: 1-Municipal 2-Commercial 3-Multifamily 4-Single-Family	Year Program Began	Web Site	Notes
Hennepin, Minnesota	1	1997	http://www.hennepin.us/portal/site/HCIInternet/menuitem.3f94db53874f9b6f68ce1e10b1466498/?vgnextoid=3d11bbf4099fc010VgnVCM1000000f094689RCRD&vgnnextfmt=default	One of the more interesting features of the program is a \$100K Green Incentive Fund for county departments. This way there are always at least some funds available to departments attempting to reduce waste or purchase green products. They joined the 'Cool Counties' initiative and have several energy production demo projects.
Jackson, Missouri	2, 3, 4	2005	http://www.jacksongov.org/filestorage/1167/1183/1271/54_build-ing_code.pdf	The building permits department has green building permit program. This pertains to all buildings in the unincorporated areas. They created a manual on how to incorporate various aspects of low-impact design in addition to the minimum code requirements for new subdivisions.
Camden, New Jersey	1	2007	http://www.camdencounty.com/government/offices/environment/County%20Green%20Initiative.pdf	They recently passed a green county initiative that included requirements for public buildings. Right now they are focused on that since they have very little control over private building practices.
Erie, New York	1	2007		In addition to the government policy there is a green purchasing standard to buy Energy Star certified products when available.
Monroe, New York	1, 2	2007	http://www.growmonroe.org/incentives.asp	The county municipal building policy requires projects to use LEED to the "greatest extent practicable." The Green Jobs program is under the county Industrial Development Agency and allows variable tax breaks for qualifying businesses with a green building that create local jobs.
Nassau, New York	1	2008	http://www.nassaucountyny.gov/agencies/Legis/documents/LOCAL-LAWN016-2007passed95.pdf	County buildings must be certifiable to the Silver rating standard. An annual report is also required to account for the level of certification as well as costs and benefits associated with the green components. The county has no unincorporated area.
Orange, New York	1	2007	http://www.co.orange.ny.us/documentView.asp?docID=4789	The County Legislature has a Green Development sub-committee. They just recently passed the county building provision but are interested in doing more.
Suffolk, New York	1	2006		With almost no unincorporated area or control over private development, the county seems content with this policy for now.
Westchester, New York	1	2008	http://www.westchesterlegislators.com/Committees/2008_2009Term/Legislation/March10_2008AGENDA.pdf	The county also has a climate action task force to look at green building policy and other environmental issues.
Mecklenburg, North Carolina	1, 2, 3, 4	2007		North Carolina had required that all permit fees be flat rates for all projects but the county lobbied the state general assembly and they now allow a specific exemption for fee credits to sustainable projects.
Cuyahoga, Ohio	1	2007		The county has a policy that new buildings will be LEED Silver. There are at least 2 facilities that will be finished in the next few years but there aren't a lot of buildings that get funded by the county. The county also has a sustainability manager.
Franklin, Ohio	1	2007		The county commissioners only recently passed this policy and are content with it for now.

County, State	Applies to: 1-Municipal 2-Commercial 3-Multifamily 4-Single-Family	Year Program Began	Web Site	Notes
Clackamas, Oregon	1	2001	http://www.clackamas.us/sustainability/policy.htm	The county policy consists of 1) use of resources 2) disposal of waste 3) measuring goals. The county has a central campus for its offices which have been built green since 2001. There is also a sustainability advisory committee that meets quarterly. This involves a representative, as well as goals for each county department.
Multnomah, Oregon	1	2004		There is another bill that may expand the program later in 2008 but it is a work in progress. The options being discussed currently seem very strong.
Montgomery, Texas	3	2008		Multi-family projects are encouraged to utilize Energy Star
Salt Lake, Utah	1	2007		
Fairfax, Virginia	1, 2, 3, 4	2007	http://www.fairfaxcounty.gov/living/environment/coolcounties/	Fairfax is a "Cool County" and has a number of environmental initiatives. The comprehensive plan will likely include green development features. The government building policy was only formalized in February. The private program is completely voluntary. They are working on incentives right now and the plan is to be very flexible for high density areas.
King, Washington	1, 2, 3, 4	2001	http://www.metrokc.gov/dnrp/swd/greenbuilding/index.asp	The county does education and outreach with the Cascadia USGBC. They have incentives and grants for private developers. The county Green Tools program is funded through the county waste management authority. It collaborates well with Seattle but the program has a different pool of resources.
Pierce, Washington	1	2006		The county has adopted the Kyoto Protocol and made sustainability a priority. The County Council is also looking into the potential to complement the state and city initiatives with private incentives of its own but this is still preliminary.

Appendix B:

The Top 200 Counties by Population

County	State	Population	Contacted	County	State	Population	Contacted
Los Angeles County	California	9948081	Y	Salt Lake County	Utah	978701	Y
Cook County	Illinois	5288655	Y	Fulton County	Georgia	960009	Y
Harris County	Texas	3886207	Y	Westchester County	New York	949355	Y
Maricopa County	Arizona	3768123	Y	Pima County	Arizona	946362	Y
Orange County	California	3002048	Y	DuPage County	Illinois	932670	Y
San Diego County	California	2941454	Y	Montgomery County	Maryland	932131	Y
Kings County	New York	2508820	na	Pinellas County	Florida	924413	Y
Miami-Dade County	Florida	2402208	Y	Erie County	New York	921390	Y
Dallas County	Texas	2345815	1	Travis County	Texas	921006	Y
Queens County	New York	2255175	na	Milwaukee County	Wisconsin	915097	N
Riverside County	California	2026803	Y	Shelby County	Tennessee	911438	Y
San Bernardino County	California	1999332	Y	Honolulu County	Hawaii	909863	na
Wayne County	Michigan	1971853	Y	Bergen County	New Jersey	904037	Y
King County	Washington	1826732	Y	Fairfield County	Connecticut	900440	na
Broward County	Florida	1787636	Y	Fresno County	California	891756	Y
Clark County	Nevada	1777539	Y	Hartford County	Connecticut	876927	na
Santa Clara County	California	1731281	Y	Marion County	Indiana	865504	na
Tarrant County	Texas	1671295	Y	New Haven County	Connecticut	845244	na
New York County	New York	1611581	na	Prince George's County	Maryland	841315	Y
Bexar County	Texas	1555592	Y	Duval County	Florida	837964	na
Suffolk County	New York	1469715	Y	Macomb County	Michigan	832861	Y
Middlesex County	Massachusetts	1467016	na	Mecklenburg County	North Carolina	827445	Y
Alameda County	California	1457426	Y	Hamilton County	Ohio	822596	Y
Philadelphia County	Pennsylvania	1448394	na	Ventura County	California	799720	Y
Sacramento County	California	1374724	Y	Baltimore County	Maryland	787384	Y
Bronx County	New York	1361473	na	Middlesex County	New Jersey	786971	Y
Nassau County	New York	1325662	Y	Wake County	North Carolina	786522	Y
Cuyahoga County	Ohio	1314241	Y	Essex County	New Jersey	786147	N
Palm Beach County	Florida	1274013	Y	Worcester County	Massachusetts	784992	na
Allegheny County	Pennsylvania	1223411	Y	Kern County	California	780117	Y
Oakland County	Michigan	1214255	Y	Montgomery County	Pennsylvania	775688	Y
Hillsborough County	Florida	1157738	Y	Pierce County	Washington	766878	Y
Hennepin County	Minnesota	1122093	Y	Gwinnett County	Georgia	757104	Y
Franklin County	Ohio	1095662	Y	San Francisco County	California	744041	na
Orange County	Florida	1043500	Y	El Paso County	Texas	736310	Y
Contra Costa County	California	1024319	Y	Essex County	Massachusetts	735958	na
Fairfax County	Virginia	1010443	Y	Monroe County	New York	730807	Y
St. Louis County	Missouri	1000510	Y	DeKalb County	Georgia	723602	Y

County	State	Population	Contacted	County	State	Population	Contacted
Lake County	Illinois	713076	Y	Volusia County	Florida	496575	Y
San Mateo County	California	705499	N	Lancaster County	Pennsylvania	494486	Y
Jefferson County	Kentucky	701500	na	Lake County	Indiana	494202	Y
Hidalgo County	Texas	700634	na	Kane County	Illinois	493735	Y
Collin County	Texas	698851	Y	Plymouth County	Massachusetts	493623	na
Oklahoma County	Oklahoma	691266	Y	Ramsey County	Minnesota	493215	Y
Suffolk County	Massachusetts	687610	na	Fort Bend County	Texas	493187	Y
Multnomah County	Oregon	681454	Y	Morris County	New Jersey	493160	Y
Cobb County	Georgia	679325	Y	Douglas County	Nebraska	492003	Y
San Joaquin (wa-keen) County	California	673170	Y	Chester County	Pennsylvania	482112	Y
Snohomish County	Washington	669887	Y	Richmond County	New York	477377	na
Will County	Illinois	668217	Y	Sedgwick County	Kansas	470895	Y
Jackson County	Missouri	664078	Y	Sonoma County	California	466891	Y
Jefferson County	Alabama	656700	N	Utah County	Utah	464760	Y
Norfolk County	Massachusetts	654753	na	Dane County	Wisconsin	463826	Y
Providence County	Rhode Island	635596	na	Hampden County	Massachusetts	460520	na
Monmouth County	New Jersey	635285	N	Onondaga County	New York	456777	Y
Bucks County	Pennsylvania	623205	Y	Guilford County	North Carolina	451905	N
Bernalillo County	New Mexico	615099	Y	Burlington County	New Jersey	450627	N
Hudson County	New Jersey	601146	Y	Pasco County	Florida	450171	Y
Kent County	Michigan	599524	Y	Spokane County	Washington	446706	Y
Denton County	Texas	584238	Y	Lucas County	Ohio	445281	Y
Davidson County	Tennessee	578698	na	Genesee County	Michigan	441966	Y
Tulsa County	Oklahoma	577795	N	Virginia Beach city	Virginia	435619	na
El Paso County	Colorado	576884	Y	Jefferson Parish	Louisiana	431361	N
Lee County	Florida	571344	Y	East Baton Rouge Parish	Louisiana	429073	na
Denver County	Colorado	566974	Y	Tulare County	California	419909	N
Ocean County	New Jersey	562335	Y	Greenville County	South Carolina	417166	Y
Polk County	Florida	561606	Y	York County	Pennsylvania	416322	Y
Delaware County	Pennsylvania	555996	Y	Adams County	Colorado	414338	Y
Summit County	Ohio	545931	Y	Clark County	Washington	412938	N
Bristol County	Massachusetts	545379	na	Knox County	Tennessee	411967	Y
Montgomery County	Ohio	542237	Y	Solano County	California	411680	Y
Arapahoe County	Colorado	537197	Y	Monterey County	California	410206	N
Brevard County	Florida	534359	Y	Polk County	Iowa	408888	Y
Union County	New Jersey	531088	Y	Seminole County	Florida	406875	Y
Jefferson County	Colorado	526994	Y	Mobile County	Alabama	404157	Y
New Castle County	Delaware	525587	Y	Hillsborough County	New Hampshire	402789	Y
Camden County	New Jersey	517001	Y	Berks County	Pennsylvania	401149	Y
Johnson County	Kansas	516731	Y	Santa Barbara County	California	400335	Y
Washington County	Oregon	514269	N	Montgomery County	Texas	398290	Y
Stanislaus County	California	512138	Y	Washoe County	Nevada	396428	N
Anne Arundel County	Maryland	509300	Y	Dakota County	Minnesota	388001	Y
Passaic County	New Jersey	497093	N	Cameron County	Texas	387717	N
				Waukesha County	Wisconsin	380985	Y

County	State	Population	Contacted
Stark County	Ohio	380575	Y
Orange County	New York	376392	Y
Clackamas County	Oregon	374230	Y
Sarasota County	Florida	369535	Y
Mercer County	New Jersey	367605	Y
Pulaski County	Arkansas	367319	Y
Westmoreland County	Pennsylvania	366440	N
Ada County	Idaho	359035	Y
Prince William County	Virginia	357503	Y
Butler County	Ohio	354992	Y
Williamson County	Texas	353830	N
Richland County	South Carolina	348226	Y
Allen County	Indiana	347316	Y
Washtenaw County	Michigan	344047	N
St. Charles County	Missouri	338719	Y
Lane County	Oregon	337870	N
Lehigh County	Pennsylvania	335544	Y
Forsyth County	North Carolina	332355	na
Charleston County	South Carolina	331917	Y
Anoka County	Minnesota	327005	N
Placer County	California	326242	N
Somerset County	New Jersey	324186	N
Nueces County	Texas	321457	na
Marion County	Florida	316183	Y
Collier County	Florida	314649	Y
Manatee County	Florida	313298	Y
Luzerne County	Pennsylvania	313020	Y
Hamilton County	Tennessee	312905	Y
McHenry County	Illinois	312373	Y
Marion County	Oregon	311304	Y
Madison County	Alabama	304307	Y
Lorain County	Ohio	301993	Y
Cumberland County	North Carolina	299060	Y
Albany County	New York	297556	Y
Chesterfield County	Virginia	296718	N

PHOTO CREDITS

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*Yale Sculpture Building and Gallery, AIA/COTE 2008
Top Ten Green Project award recipient
KieranTimberlake Associates, LLP, Philadelphia
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*Camp Arroyo, AIA/COTE 2002 Top Ten award recipient
Siegel & Strain Architect, Emeryville, CA
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*Brookdale Regional Center
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*Discovery Center at South Lake Union, AIA/COTE 2008
Top Ten Green Project award recipient
Miller/Hull Partnership, Seattle
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*Eastern Village Co-Housing Project
Architect? Ecohousing Corporation, Bethesda, MD
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*COR Building (proposed)
Oppenheim Architecture+Design, Miami, FL
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*WMNF Community Radio Station 88.5
Spacecoast Architects, P.A., Indialantic, FL
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*Langston-Brown Community Center
BeeryRio Architecture + Interiors, Springfield, VA
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*Mohave County Administration Building
Architect: Opus West Corporation, a member of
The Opus Group, Phoenix, AZ
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*Nueva School Hillside Learning Complex, AIA/COTE
2008 Top Ten Green Project award recipient
Ledly Maytum Stacy Architects, San Francisco
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