



## Embracing Sustainability in Community Plans

When the city of Boise, Idaho, adopts its new comprehensive plan this spring, it will include a wide range of topics—urban agriculture, energy conservation and production, community health and well-being—that reach far beyond the boundaries of a typical plan. While innovative, however, the plan is far from unique. More and more communities are embracing aspects of sustainability in their plans by incorporating long-term thinking about future needs while approaching decision making in a balanced manner based on environmental, economic, social, and cultural considerations.

There is a problem, though. In my work across the country, I have found that while cities are increasingly embracing sustainability concepts, there is little consensus among planners about what a plan for sustainability should contain. Although community sustainability efforts have been under way for two decades—Sustainable Seattle started in 1990—there are few criteria to follow.

What follows is intended to provide guidance for planners seeking to learn more—and do more.

### **Sustainability: what does it mean?**

The most widely accepted definition of sustainability comes from the work of the United Nations' Brundtland Commission, established in 1983. The commission defined sustainability as “meeting the needs of the present without compromising the

ability of future generations to meet their own needs.”

I prefer a simpler definition (attributed to a number of sources): Sustainability is a balanced approach that considers people, planet, and prosperity. By “people,” it means community well-being and equity. “Planet” refers to the environment and resource conservation. And “prosperity” means economic vitality. In the long run, sustainability means adapting human activities to the constraints and opportunities of the natural systems we need to support life.

No matter the definition, it is important to keep in mind that in most communities, sustainability is a process, not an end-state. A fully sustainable community would be one that has zero net impact on our environment and other systems—a noble but unreachable goal. Rather, sustainability is a process of continuous, ongoing improvement, and a realignment of community goals and practices to grow in a more responsible and resilient manner.

Cities are approaching sustainable planning in a variety of ways. Some are preparing a separate sustainability plan as a guiding document for community-wide action. Others are adopting climate action plans that focus on strategies to reduce greenhouse gas emissions through energy conservation and other activities.

Still others are incorporating the concept of sustainability in their comprehensive plans, either by adding an element to an existing plan or by making sustainability

the overarching theme for a complete re-vamping of their plan.

As in most things related to planning, there is no single right answer. Planners and communities must follow the path that best meets their needs and tailor their approach to the specific issues and characteristics of their community. Most importantly, they should do this in a comprehensive, integrated way that focuses on tangible results.

### **Sustainable vs. conventional plans**

The basic characteristics of sustainable plans are the same as those of conventional plans: taking a long-range view; integrating physical, environmental, social, and economic considerations; and focusing on implementation and accountability. But the environmental and energy-related issues that underlie sustainable plans require a more nuanced local approach to global issues. They are different in several ways:

**A different way of organizing.** Typical community plans include a wide but relatively consistent set of topics, including planning basics such as land use, transportation, housing, natural resources, open space, economy, community facilities, parks and recreation, and utilities and services. In contrast, sustainable plans take a more integrated approach to the plan's topics while adding others.

In some cases this means organizing the plan into groupings of related topics reflecting the sustainability triad—environment, economy, and community—



By Benjamin A. Herman, FAICP

## How to undertake the newest—and greenest—planning efforts.

Blueprint Boise, the Idaho city's new comprehensive plan, is one among many nationwide that put a priority on sustainability.

rather than maintaining them as separate elements. The countywide plan in Marin County, California, often cited as an example of the new generation of sustainable community plans, is organized into three elements: natural systems and agriculture, built environment, and socioeconomic factors. This simple structure reinforces the interrelationships between topics.

Other communities, such as Commerce City, Colorado, have retained a conventional plan structure while placing emphasis on how a particular topic or element can contribute to community sustainability.

**Linking issues.** Sustainable community plans focus more heavily on the linkages between environmental, economic, and social issues, recognizing that policies or actions in one area have impacts on another. Good sustainable community plans focus on integrating land use, housing, transportation, and other core topics with energy use, community health and well-being, a resilient economy, and local food production.

This approach can lead to improved levels of cooperation among city departments and agencies. An example is Fort Collins, Colorado, which has just started updating its comprehensive and transportation plans by involving staff members from a wide range of departments: planning, utilities, transportation, energy, natural resources, finance, police, and others. They are working on ways to implement sustainability.

The hope is that this process will lead to more creative, cross-sector approaches, more efficiency, and better results. To date, more than 50 local staff members are working in eight multidisciplinary teams focusing on the built environment, arts and culture, community wellness and safety, utilities and natural resources, and others. New ways of thinking and problem solving could emerge.

**Incorporating new approaches and new topics.** Sustainable community plans address a wide range of topics that rarely, if ever, are mentioned in traditional comprehensive plans. These topics include global issues such as climate change and energy resources, which are affected by planning's core areas of housing, land use, and transportation. Policies calling for compact growth patterns that use land efficiently and make travel choices viable, a broader mix and variety of housing types to meet the changing needs of our communities, and multiple travel modes that create more walkable and transit-accessible communities all contribute significantly to community sustainability.

An example: A traditional plan's transportation element typically focuses on adequate road capacity and acceptable levels of service. The sustainable plan will expand the scope to tackle transportation's relationship to energy consumption and greenhouse gas emissions, the cost of transportation and social equity, alternative live-work arrangements, and level-of-service standards for

bicyclists and pedestrians.

Sustainable community plans also introduce a variety of new topics such as renewable energy, greenhouse gas reduction, community health, waste stream reduction and recycling, and food production and security. Just as all communities are different, sustainability topics embraced by communities will differ, too.

**Measuring and monitoring progress.** More emphasis is being placed on analyses to determine whether the plan's goals are being met—and to adjusting quickly if they are not. This is usually done using three distinct metrics: indicators (measurements used to demonstrate movement toward or away from a desired goal); benchmarks (a reflection of current conditions, used as a starting point to gauge progress); and targets (a desired outcome or goal that the plan's actions are intended to move toward). While indicator programs are familiar tools, sustainable plans create stronger links between policies and outcomes and integrate indicators into plans in a more comprehensive way.

By way of example, for a community seeking to improve walkability from neighborhoods to parks, the following might be used:

- Indicator: number of households within a quarter-mile of a city park.
- Benchmark: In 2009, 50 percent of households are within a quarter-mile of a city park.



## Climate Change Snapshot

Citizens and leaders want to know more about their communities' contributions to climate change, and how to address them. With the U.S. Environmental Protection Agency's recent ruling that greenhouse gases pose a threat to human health and welfare and the likelihood of future federal regulations, planners will need to become well-versed in this topic.

GHGs come primarily from the burning of fossil fuels, the key contributors being transportation, energy generation, and residential, business, and industrial energy use. Transportation accounts for about one-third of the nation's carbon emissions. Buildings of all sorts account for 40 percent of U.S. energy use and 33 percent of U.S. carbon emissions.

Sustainable communities put policies and goals in place to reduce GHGs. Those emissions are directly linked to land use—something that plans can address, largely through the following key areas:

- development patterns that reduce auto dependency and avoid sprawl
- renewable energy development to reduce reliance on fossil fuels
- tree protection and planting to sequester carbon dioxide, provide shade, buffer winds, and encourage people to walk and recreate

Potential policies and goals for climate change include:

**Transportation goals:** Reduce vehicle-generated pollutants. Reduce vehicle trips and emissions, and improve vehicle efficiency.

**Policy:** Support a transportation program that reduces vehicle trips, increases ride-sharing, and encourages alternative modes of travel.

**Implementation strategies:**

- Amend development regulations to support transit-oriented development and require the installation of bikeways, sidewalks, and pathways.
- Adopt mixed use, accessory, and work-live uses in selected commercial and residential districts.
- Require transportation demand management programs in new development. Examples include bus passes, bike fleets and bike parking, work shuttles, and preferential parking for car pool users.

**Air quality goals:** Promote planning and programs that result in the reduction of airborne pollutants.

**Policy:** Reduce greenhouse gas emissions. Promote renewable energy and fuels for government and community use.

**Implementation strategies:**

- Establish energy-efficiency programs and the use of renewable energy by amending regulations.
- Require that new development include a percentage of units or square feet dedicated to renewable energy sources.

**Policy:** Preserve existing trees and plant additional trees to remove carbon dioxide and reduce urban heat islands.

**Implementation strategies:**

- Enact regulations that require tree preservation and planting as part of development.

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- **Target:** By 2020, 80 percent of city residents will be within a quarter-mile of a city park.

In its recently adopted comprehensive plan, the city of Northampton, Massachusetts, included specific measurements of progress for each of its 12 elements. To track the goal of preserving agricultural uses, measurement metrics include acres of land classified in agricultural production and yearly farm revenues, with a plan target of maintaining current amounts of farmland in production and increasing annual revenues by 25 percent.

### Becoming a more sustainable community

While much has been made of big-city sustainability plans and programs, such as Greenprint Denver, Sustainable Seattle, and PlaNYC, smaller communities are doing their share to embrace sustainability.

Boise, Idaho, just completed Blueprint Boise, a comprehensive plan that incorporates numerous initiatives, including climate change, air and water quality, waste reduction, energy conservation and alternative energy production, and the protection of environmentally sensitive areas. Other key themes of its plan include compact development patterns that use public facilities and services efficiently; stable neighborhoods served by mixed use activity centers; a community that values its culture and a diverse economy; and efforts to promote health and wellness.

The Sustainability Management Plan adopted by Asheville, North Carolina, is a separate community sustainability plan that covers a broad range of topics, including buildings and public facilities, transportation, water, solid waste, land use, and education and communication. The plan is not meant to replace other city plans and programs, but rather to provide an integrated structure for addressing sustainability citywide.

Perhaps best known as the town that was nearly destroyed by a tornado in 2007, Greensburg, Kansas, completed its Sustainable Comprehensive Master Plan as part of a FEMA-supported Long-Term Community Recovery Plan. It is an excellent example of a citywide strategy that addresses all aspects of sustainability: development patterns, transportation and walkability, carbon footprint reduction, housing, and many others, presented in a creative and usable format.

### Regional and statewide initiatives

More than a dozen states have ongoing state-level or regional sustainability efforts that provide resources for communities, with more emerging regularly. The following are examples of programs that offer technical assistance to local governments and leverage resources by aligning with other state-level programs and incentives.

Sustainable Jersey is a voluntary certification program for New Jersey municipalities that offers participants a package of tools, training, and financial incentives. To be considered for certification, communities must earn points by completing a number of actions, at least two of four identified as "priority": energy audits, measuring the greenhouse gas footprint, incorporating smart growth principles, or adopting a water conservation ordinance.

Additional points can be earned by taking steps to deal with factors such as air and water quality, social equity, local economies, and sustainable agriculture. Initial incentive programs in-

clude funding for municipal energy audits and greenhouse gas reduction planning and programs.

According to Donna Drewes, AICP, a planner with the Municipal Land Use Center who helps oversee the effort, “our first year has been an amazing success. We expected to attract perhaps 100 communities, but nearly half of the state’s municipalities—245 out of 566—registered to participate in the program in its first year alone.” By the end of 2009, 35 communities had completed the certification process.

Minnesota GreenStep Cities is a new assistance program for communities that supports implementation of sustainable development best practices, organized into five categories: buildings, land use, transportation, environmental management, and economic and community development. GreenStep grew out of a 2009 report to the state legislature that aimed at encouraging innovation as well as cost savings and greenhouse gas reductions.

Any city in the state that implements a minimum number of best practices in each category will be recognized as a GreenStep city by the Minnesota Municipal League of Cities, and it will receive technical assistance with implementation strategies.

### Using stimulus dollars

The American Recovery and Reinvestment Act (the economic stimulus package passed by Congress in 2009) makes more than \$2.7 billion in grant funding available through the Energy Efficiency and Conservation Block Grant Program. That program provides funds to state and local governments to develop projects that improve energy efficiency and reduce fossil fuel emissions.

Little known is the fact that communities may use portions of their funding to integrate energy efficiency, conservation, and climate action planning into community plans and development regulations. Communities taking advantage of the EECBG program include Salt Lake City; Miami-Dade County, Florida; Tucson, Arizona; and Greensboro, North Carolina. In all cases, planners need to be at the table with other city departments to ensure that they are getting their fair share of stimulus funding to help address these topics.

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## Greenhouse Gas Inventories: Why and How

More local governments are conducting greenhouse gas inventories as a valuable first step in establishing a baseline for measuring progress, developing forecasts and tailoring plans to priority emission sources, and benchmarking progress against peer jurisdictions.

These inventories have two distinct parts: GHG emissions associated with local government operations, and emissions associated with the larger community. Emissions are calculated using data from utilities, fleet records, regional transportation agencies, solid waste and recycling haulers, and others.

For jurisdictions seeking a basic inventory, off-the-shelf tools can help. These include the software offered by ICLEI-Local Governments for Sustainability’s Clean Air and Climate Protection and the Local Government Operations Protocol from The Climate Registry. Other jurisdictions have developed their own systems to account for regional mobility patterns, local energy sources (coal, hydro, natural gas), wastewater treatment, and the upstream impacts of purchased goods.

Having a complete and accurate GHG inventory not only provides a starting line for climate change initiatives, but it can also help document and explain the many benefits of reducing emissions, from cutting energy costs and reducing vehicle miles traveled to diverting more waste from landfills.

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Bales of cardboard ready for recycling—a start at cutting greenhouse gas emissions.

### RESOURCES



#### FROM APA

An article on sustainable zoning and development codes, “Saving the World Through Zoning,” by Chris Duerksen, appeared in *Planning* in January 2008. Go to [www.planning.org/policy/guides](http://www.planning.org/policy/guides) to read APA’s adopted policy guide, *Planning for Sustainability*. APA’s Green Communities Research Center is at [www.planning.org/nationalcenters/green](http://www.planning.org/nationalcenters/green). Sustainable Community Interest Group: At the request of members, APA formed a Sustainable Community Planning Interest Group in the fall of 2009. A launch event will be held at the APA National Conference in New Orleans. For more information, see <http://apaplanning.ning.com/group/APASustainableCommunitiesInterestGroup>.

#### ON THE WEB

Sustainability Planning Toolkit, A Comprehensive Guide for Local Governments on How to Create a Sustainability Plan, ICLEI Local Governments for Sustainability, December 2009 ([www.iclei.usa.org/sustainabilitytoolkit](http://www.iclei.usa.org/sustainabilitytoolkit)). Also from ICLEI: the STAR Community Index, a framework to guide sustainability efforts. Sustainable Jersey’s website is [www.sustainablejersey.com](http://www.sustainablejersey.com).