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PAS REPORT 578

SUSTAINING PLACES: BEST PRACTICES FOR COMPREHENSIVE PLANS

David R. Godschalk, FAICP, and David C. Rouse, AICP

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APA's publications office is at 205 N. Michigan Ave., Suite 1200, Chicago, IL 60601-5927.
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ON THE COVER

Aerial view of Seattle skyline in Washington State.
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EXECUTIVE SUMMARY

OVERVIEW: BACKGROUND OF THE SUSTAINING PLACES INITIATIVE

Sustaining Places: Best Practices for Comprehensive Plans is the result of a four-year effort by the American Planning Association (APA) to define the role of comprehensive plans in addressing the sustainability of human settlements. The comprehensive plan, also called the general plan or community master plan, is the official statement of a local government establishing policies for its future long-range development. APA announced the Sustaining Places Initiative at the World Urban Forum in Rio de Janeiro in 2010, after which a 11-member Sustaining Places Task Force was appointed to explore the role of the comprehensive plan as the leading policy document and tool to help communities of all sizes achieve sustainable outcomes. The task force's work culminated in the 2012 APA report *Sustaining Places: The Role of the Comprehensive Plan* (PAS Report 567). Focusing on both the comprehensive planning process and its outcomes, the task force termed the process "planning for sustaining places" and the goal of that process, the desired outcomes, "sustainable communities":

Planning for sustaining places is a dynamic, democratic process through which communities plan to meet the needs of current and future generations without compromising the ecosystems upon which they depend by balancing social, economic, and environmental resources, incorporating resilience, and linking local actions to regional and global concerns. (Godschalk and Anderson 2012, 4)

As documented in the PAS Report, the task force identified eight principles that make up the foundation of planning for sustaining places. In addition, the task force reviewed leading comprehensive plans to evaluate the extent to which they incorporated these principles.

Following publication of the report, APA established a working group to develop these principles into a resource for communities to use to integrate sustainability into comprehensive plans. The working group developed a set of best practice standards derived from the principles, drafted a scoring system and procedure to recognize and potentially designate plans for achievement in "sustaining places," and held a workshop to test the draft standards and scoring system at APA's 2013 National Planning Conference in Chicago. Following the conference, work continued on the project to refine the standards and address issues identified by the working group and workshop participants. As part of this work, APA enlisted the assistance of 10 "pilot communities" that were developing comprehensive plans. These communities applied the standards to their plans and planning processes. Four communities with completed comprehensive plans (including one of the pilot communities) agreed to pilot-test the draft standards and scoring procedure with their plans. The communities re-

ported on their findings at a second workshop held at the 2014 National Planning Conference in Atlanta.

This report presents the completed set of standards and the scoring system that incorporates the work of the pilot communities and the results of the Atlanta workshop. While these standards may evolve further as they are refined and applied more widely, they are offered here as a resource and toolkit for communities seeking to integrate sustainability principles and practices into their comprehensive plans. In addition to describing the standards, the report outlines a voluntary procedure for APA recognition of comprehensive plans that achieve defined levels of quality for inclusion of sustainability best practices.

COMPREHENSIVE PLAN STANDARDS FOR SUSTAINING PLACES

The comprehensive plan standards are organized into a framework of related components: (1) six principles, (2) two processes, and (3) two attributes. Each of these components is implemented through a set of best practices. Collectively, these principles, processes, attributes, and supporting best practices define what the comprehensive plan for sustaining places *should do*.

Principles are normative *statements of intent* that underlie a plan's overall strategy, including its goals, objective, policies, maps, and other content. The six principles are:

- 1. Livable Built Environment:** Ensure that all elements of the built environment—including land use, transportation, housing, energy, and infrastructure—work together to provide sustainable, green places for living, working, and recreating, with a high quality of life.

2. **Harmony with Nature:** Ensure that the contributions of natural resources to human well-being are explicitly recognized and valued and that maintaining their health is a primary objective.
3. **Resilient Economy:** Ensure that the community is prepared to deal with both positive and negative changes in its economic health and to initiate sustainable urban development and redevelopment strategies that foster green business growth and build reliance on local assets.
4. **Interwoven Equity:** Ensure fairness and equity in providing for the housing, services, health, safety, and livelihood needs of all citizens and groups.
5. **Healthy Community:** Ensure that public health needs are recognized and addressed through provisions for healthy foods, physical activity, access to recreation, health care, environmental justice, and safe neighborhoods.
6. **Responsible Regionalism:** Ensure that all local proposals account for, connect with, and support the plans of adjacent jurisdictions and the surrounding region.

Processes are *planning activities* that take place during the preparation of a comprehensive plan and define how it will be implemented. The two processes are:

7. **Authentic Participation:** Ensure that the planning process actively involves all segments of the community in analyzing issues, generating visions, developing plans, and monitoring outcomes.
8. **Accountable Implementation:** Ensure that responsibilities for carrying out the plan are clearly stated, along with metrics for evaluating progress in achieving desired outcomes.

Attributes are *plan-making design standards* that shape the content and characteristics of comprehensive plans. The two attributes are:

9. **Consistent Content:** Ensure that the plan contains a consistent set of visions, goals, policies, objectives, and actions that are based on evidence about community conditions, major issues, and impacts.
10. **Coordinated Characteristics:** Ensure that the plan includes creative and innovative strategies and recommendations and coordinates them internally with each other, vertically with federal and state requirements, and horizontally with plans of adjacent jurisdictions.

Best practices are the *planning action tools* that communities employ to activate the principles, processes, and

PILOT COMMUNITIES

Community	Population
Savona, New York	822
Foxborough, Massachusetts	16,865
Wheeling, West Virginia	28,213
Goshen, Indiana	31,719
Rock Island, Illinois	39,018
Auburn, Washington	70,180
New Hanover County, North Carolina	202,677
Oklahoma City, Oklahoma	599,199
Seattle, Washington	634,535
Memphis/Shelby County, Tennessee	927,644
	1,178,211*

*in regional planning area

COMPLETED PLANS USED TO TEST THE STANDARDS AND SCORING PROCEDURE

1. *Imagine Austin*, Austin, Texas (adopted 2012)
2. *plaNorfolk2030*, Norfolk, Virginia (adopted 2013)
3. *The 2030 Comprehensive Plan for the City of Raleigh*, Raleigh, North Carolina (adopted 2009)
4. *City of Rock Island Comprehensive Plan*, Rock Island, Illinois (pilot community plan adopted 2014)

attributes in their comprehensive plans. For example, the best practices for the Livable Built Environment principle include, among others, planning for multimodal transportation and transit-oriented development, conserving and reusing historic resources, and discouraging development in hazard zones. Chapter 2 of the report identifies a series of best practices for each principle, process, and attribute. Appendix B provides definitions for each best practice.

The comprehensive plan standards framework includes a plan-scoring procedure for use by communities that want to systematically compare their plans against a national standard. This procedure yields a numeric score based on a review of how the plan addresses the best practices for each principle, process, and attribute. The procedure is available now for communities that want to evaluate their plans by conducting internal reviews; Appendix C contains a scoring matrix that can be used for this purpose. The procedure may become available later for formal external evaluation, should APA establish a comprehensive plan review and designation program. Appendix D describes how such an external designation program would work and Appendix E includes a plan designation application form for communities that elect to participate.

APPLYING THE STANDARDS

Communities desiring to apply the comprehensive plan standards framework to local plans and planning processes will find it useful to follow a basic four-step process:

1. Discuss the standards framework with the community to determine if it will be helpful in the comprehensive planning process.
2. Review the needs of the plan and planning process in order to highlight areas where use of the standards will improve the plan quality and relevance.
3. Incorporate the standards into the plan, using them to fill gaps or upgrade existing plan policies and practices.
4. Score the plan, in order to determine its comparative ranking against a fully realized comprehensive plan for sustaining places.

The experience of the pilot communities provides examples of how the standards framework can be applied at different stages of plan development—from evaluation of an existing comprehensive plan to community engagement during the planning process to providing a best practices “checklist” against which a draft plan can be measured. The pilot communities were selected to represent a vari-

ety of community types and sizes, from Savona, New York (a village with a population of less than one thousand) to Memphis/Shelby County, Tennessee (with a population of over one million in the planning area for the *Mid-South Regional Greenprint & Sustainability Plan*). All pilot community representatives reported that they found the plan standards framework to be a practical tool and resource that improved their comprehensive planning processes. The following are examples of how different pilot communities used the framework.

Planners in **Goshen, Indiana**, used the standards to evaluate their existing 2004 comprehensive plan and discovered that it contained a number of low-achievement practices. They presented these practices to the public in community workshops during the plan update process and received strong support for addressing them in the new comprehensive plan.

Oklahoma City was in the process of creating a new comprehensive plan when selected as a pilot community. Planners used the standards as a checklist to ensure that plan policies being developed through the public engagement process were complete, comprehensive, and conformed to best practices.

Rock Island, Illinois, was nearing completion of its first-ever comprehensive plan when selected as a pilot community. Planners used the standards in combination with public input to ensure that they met the sustainability goals of the grant from the State of Illinois to prepare the plan. Rock Island also volunteered its completed plan to test the scoring procedure.

New Hanover County, North Carolina, established six “theme” committees, each focused on one of the principles, as it was developing policies and recommendations for its new comprehensive plan. Among other benefits of the framework, planners found the Responsible Regionalism principle useful in integrating data and policies from other regional and local plans into the comprehensive plan.

THE FUTURE OF COMPREHENSIVE PLANNING PRACTICE

Planning for sustainability is the defining challenge of the twenty-first century (Godschalk and Anderson 2012). As the leading policy document guiding the long-range development of local jurisdictions across the country, the comprehensive plan has a critical role to play in meeting challenges such as resource depletion, climate instability, and economic and social disparities. In the twentieth century,

the typical comprehensive plan was a general policy document focused on land use and physical development. The plan was divided into separate elements, and it was prepared through a “top-down” process. This model began to change towards the close of the century in response to societal change and trends in planning practice, such as increased demand for citizen participation and a greater focus on implementation.

The following are some key trends that likely will significantly affect comprehensive planning practice in the twenty-first century:

Resilience: The increasing frequency and impacts of natural disasters, as well as severe economic downturns, have highlighted the need for communities to become more resilient—in other words, they need the ability to recover from disturbance and change.

Systems thinking: The traditional model of separate topical elements is being replaced by an approach that views these topics as complex systems whose interactions determine the form and function of an even more complex system—the community as a whole.

Community engagement: Rapid advances in digital technology are transforming the ways citizens can be involved in the comprehensive planning process. At the same time, a critical need exists to reach groups that are traditionally underrepresented in the process.

Equity: Increasing inequality—not just in economic status but also in basic quality-of-life issues such as health outcomes and vulnerability to disasters—is a major national and global concern.

Implementation: In a time of fiscal constraints and questioning of the role of government, successful implementation is vital to establish the value of planning. For the comprehensive plan, this means establishing priorities, responsibilities, and timeframes; effectively allocating resources; developing new implementation models; using targets and metrics to monitor progress; and communicating stories of success.

Adaptation: Conditions that used to be considered stable, such as the climate, resource availability and costs, and the local employment base, are increasingly subject to forces beyond the control of local governments. Such uncertainties call for an adaptive approach that uses monitoring and feedback mechanisms (a form of systems thinking) to adjust implementation programs on an ongoing basis.

There are no easy paths to addressing these and other complexities affecting comprehensive planning practice in the twenty-first century. The plan standards framework described in this report is not a prescription or recipe. Rather it is a resource and benchmark for communities to use as they develop solutions that work for their particular circumstances. The ultimate aim is to help planners and the communities they serve realize the powerful potential of the comprehensive plan to sustain twenty-first-century places.

CHAPTER 1

**BACKGROUND OF
THE SUSTAINING
PLACES INITIATIVE**

“The general plan is the official statement of a municipal legislative body which sets forth its major policies concerning desirable future physical development. The published general plan document must include a single, unified physical design for the community, and it must attempt to clarify the relationships between physical-development policies and social and economic goals.”

—T.J. Kent Jr. (1990, 18)

The comprehensive plan (also referred to as the general plan or community master plan) has traditionally focused on the physical development of a local governmental jurisdiction, typically in the form of a series of discrete elements, including future land use, transportation, and community facilities (Kaiser and Godschalk 1995). Fifty years after T.J. Kent Jr.’s (1990) classic work on the topic, *The Urban General Plan* (first published in 1964), contemporary comprehensive plans differ in form and substance from their traditional predecessors. Spurred by serious concerns about long-range global sustainability, as well as advances in modern communications technology, community planning is breaking out of yesterday’s mold of standard elements within a generic format (Berke, Godschalk, and Kaiser 2006; Quay 2010). With recent advances in planning and technology, the new comprehensive plans open up a creative range of possibilities in coverage, design, and plan-making processes. While this is an innovative time, it is also a challenging one as communities seek to foster sustainability through new and sometimes unfamiliar strategies and practices.

The overall rationale for adapting comprehensive plans to address the sustainability challenge was established by APA’s Sustaining Places Initiative, which began in 2010 during the term of President Bruce Knight, FAICP. Announced at the World Urban Forum in Rio de Janeiro, this initiative is a multiyear, multifaceted program to define the role of comprehensive planning in addressing the sustainability of human settlement. This report is the second volume on comprehensive planning published by APA’s Planning Advisory Service for the Sustaining Places Initiative. The first volume, *Sustaining Places: The Role of the Comprehensive Plan* (Godschalk

and Anderson 2012) discussed the issues posed by increasing concerns over long-term global sustainability, identified the need for incorporating sustainability goals and policies in local plans, and defined a set of principles to guide plans aimed at sustaining places.

This second volume in the series, *Sustaining Places: Best Practices for Comprehensive Plans*, translates the general principles into recommended planning practices to guide the preparation of local comprehensive plans. It provides a set of tools and resources for communities to draw on as they grapple with the challenges of planning to sustain their physical, social, economic, and environmental infrastructures in an era of global instability and change.

As stated in the report of the 2010 APA Task Force initially charged with carrying out the Sustaining Places Initiative, the local comprehensive plan is an ideal vehicle to implement the initiative’s objectives:

Planning for sustainability is the defining challenge of the 21st century. Overcoming deeply ingrained economic and cultural patterns that result in resource depletion, climate instability, and economic and social stress requires holistic problem solving that blends the best scientific understanding of existing conditions and available technologies with the public resolve to act. Planning processes allow communities to look past immediate concerns, evaluate options for how best to proceed, and to move towards a better future. The Comprehensive Plan has the legal authority to act as the vehicle for guiding community development, the scope to cover the necessary functions and facilities, and the history of practice to inspire

public acceptance of its policies. Planning can provide the necessary analysis, the requisite communitywide reflection and education, and the momentum required to respond to these monumental challenges. (Godschalk and Anderson 2012, 7)

The Brundtland Commission of the United Nations (1987) published the report *Our Common Future* and defined sustainable development as development that meets the needs of the present without compromising the ability of future generations to meet their own needs. Since then, the definition of sustainability has expanded to include balance and coordination among the “Three E’s” of environment, economy, and equity (sometimes stated as the “Three P’s” or “Triple Bottom Line” of planet, prosperity, and people), as well as development that minimizes the negative impact on the environment and other systems. This definition has shaped a body of planning research analyzing the application in local plans of the concept of sustainability (see Berke and Conroy 2000, Godschalk 2004, Herman 2010, Jacobson and Hinds 2008, and Schilling 2010). In recognition of this broader definition, the APA Sustaining Places Initiative focuses on process characteristics (named “planning for sustaining places” by the 2010 task force) as well as outcome measures (which the task force defined as achieving the goal of “sustainable communities”):

Planning for sustaining places is a dynamic, democratic process through which communities plan to meet the needs of current and future generations without compromising the ecosystems upon which they depend by balancing social, economic, and environmental resources, incorporating resilience, and linking local actions to regional and global concerns. (Godschalk and Anderson 2012, 4)

The primary purpose of this report is to provide guidance for communities seeking to integrate sustainability principles and practices into their comprehensive plans. It describes a set of best practice standards for comprehensive plans that have been developed by an APA task force and an APA working group over a four-year period. The standards were piloted by volunteer communities who applied them to their plans and planning processes. While these standards may evolve further as they are refined and applied in a wider set of communities, they are offered here as a resource and toolkit for planners who are involved today in the continuing search for comprehensive plans aimed at long-term community sustainability.

A secondary purpose of this report is to recommend a voluntary procedure for APA recognition of comprehensive plans that incorporates defined levels of quality through inclusion of best practices for sustainability. By recognizing such high-quality plans, APA can set national standards for sustainable planning, promulgate knowledge and information about the state-of-the art in plan making, and demonstrate institutional leadership in the overall field of sustainability.

SUSTAINING PLACES TASK FORCE AND PLAN STANDARDS WORKING GROUP

As part of the Sustaining Places Initiative, APA appointed a Sustaining Places Task Force (see sidebar “Sustaining Places Task Force Members”) in 2010, assisted by a 42-member corresponding committee that reviewed its report. The members were selected to represent professional and academic communities that had prepared plans or conducted research on sustainable development issues. The task force was charged with: (1) exploring the role of the comprehensive plan as the leading policy document and tool to help communities of all sizes achieve sustainable outcomes; (2) examining related changes in the practice of planning, including best practices as recognized in the professional literature and in leading comprehensive plans and planning processes oriented toward sustainable outcomes; and (3) reviewing how comprehensive plans effect change and are evaluated and held accountable by citizens, interest groups, and professional organizations.

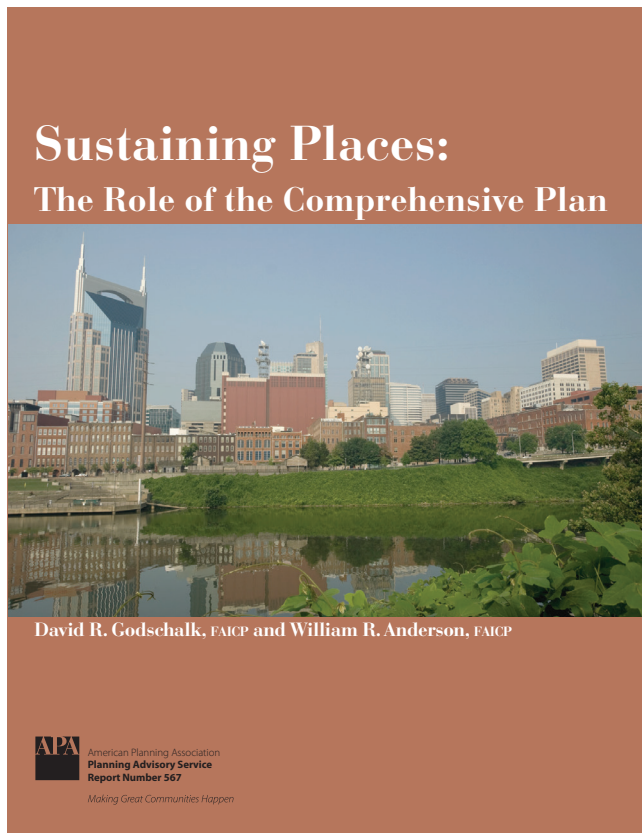
The task force looked at a broad selection of materials related to sustainability and analyzed ten leading comprehensive plans, chosen on the basis of recent awards and literature citations, in order to derive the basic planning principles that are the foundation of sustaining places. Each plan was scored by two task force members and the resulting scorecards were included in the task force report. With the help of the corresponding committee, which reviewed, commented on, and made suggested changes to the report draft, the task force prepared a report to the APA Board that documented its findings and called on the planning profession to take the lead in furthering the public interest through plans aimed at sustaining places. Its report was published in 2012 by APA as *Sustaining Places: The Role of the Comprehensive Plan* (PAS Report 567) (Godschalk and Anderson 2012).

A follow-up effort commenced in 2012 during the term of APA President Mitchell Silver, FAICP, with the appointment of a seven-member Plan Standards Working Group, assisted by APA staff. Members were chosen based on their current

work in preparing contemporary comprehensive plans and analyzing planning issues related to sustainable development. Over the course of a year, this group developed a set of best practice standards for integrating sustainability into comprehensive plans (derived from the principles established by the task force), drafted a procedure and scoring system to recognize and potentially designate high-quality plans based on those standards, and held a plan standards workshop to test the draft standards and scoring system at APA's 2013 National Planning Conference in Chicago.

In developing the draft standards and designation procedure, the working group wrestled with a number of issues that also later came up during the 2013 workshop. These ranged from concerns about the fairness and universal applicability of a national plan designation procedure carried out under the auspices of APA to questions about the content, framing, and impact of the standards themselves:

- **One size does not fit all:** How to devise a single set of plan standards that could be applied to the plans of large and



SUSTAINING PLACES TASK FORCE MEMBERS

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David R. Godschalk, FAICP (co-chair)
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Eric D. Shaw

PLAN DESIGNATION PROCEDURE

Plan designation would be a voluntary program through which communities apply for recognition of comprehensive plans that meet best practice standards for sustaining places. The procedure would include an application form and numeric scoring system that independent reviewers trained by APA would use to rate the extent to which the plan addresses the standards. See Appendix D for a description of how the plan designation procedure would work.

small, growing and declining, urban and rural communities with different development concerns and needs.

- **Scoring:** How to devise a plan-scoring procedure that could be uniformly and fairly applied to identify plan elements of higher and lower degrees of quality.
- **Innovation:** How to overcome the possibility that encouraging plans to conform to a single set of standards could diminish creativity.
- **Outside evaluation:** How to deal with the perception that if an external plan-review process were to be created, then the outside reviewers would not understand the distinctive local community qualities that helped to determine the planning possibilities.
- **Implementation:** How to assess plan outcomes rather than simply the plan document itself because this would require review of not just the plan document, but also progress in implementing the plan, presumably over a period of years.
- **Self-rating or formal designation:** How to decide if a national designation program is necessary and desirable or if simply publishing the standards as a resource to be used by communities in updating or preparing their plans would be sufficient to achieve the desired planning improvements.

While the working group viewed these as serious issues, it believed that they could be resolved with further analysis and effort. (See Chapter 4 for more discussion about how these issues were subsequently addressed.) The working group addressed the issue of “one-size-fits-all” standards, when the localities preparing the plans vary widely from urban to rural, large to small, city to county, and progressive to conservative, by recommending that APA should enlist several pilot communities of varying characteristics to apply the standards to their comprehensive planning efforts. This would provide a trial of the scoring system’s logic and practicality, and reveal whether using standards would dampen creativity and innovation. It also noted that an external plan-recognition program should include a robust procedure for including important local background information and a way of assessing plan implementation.

PILOT COMMUNITIES

During the term of APA President William Anderson, FAICP, in 2013 and 2014, work continued on the plan standards project. As recommended by the working group, the

draft standards and designation procedure were piloted with the assistance of 10 communities in the process of developing their comprehensive plans (Table 1.1). Similar to the beta testing of software products, the standards were provided to a selected group of users who were asked to report on their usefulness and feasibility and ways they might be improved. The process included three stages: (1) application of the standards by the pilot communities to their own plan-making efforts, (2) reviews of additional adopted plans by pilot community representatives, and (3) reports on pilot community experience and participant reviews of the adopted plans at a national planning workshop. Each stage included opportunities for critiques of the standards.

The pilot communities were selected from a group of volunteers to provide a representative cross section of different types of places in different regions of the country at different stages in the planning processes. They ranged in size from the Village of Savona, New York, with less than 1,000 residents, to the metropolitan region of Memphis and Shelby County, Tennessee, with approximately 1.2 million residents. They were located throughout the country, representing New England, the Southeast, the Midwest, and the Northwest. At the time of selection, their plans fell along a continuum from pre-planning to midway through the planning process to almost complete.

Pilot Community Planning Applications

Over the course of several months leading up to and including the 2014 National Planning Conference (NPC) in Atlanta, the pilot communities applied the plan standards framework to their planning processes. Communicating via conference calls, e-mails, and a Basecamp web site, they shared their experiences and pilot tested the standards and designation procedure under their communities’ particular circumstances, including growth and development characteristics, community strengths and weaknesses, and political and institutional constraints.

Some of the communities were preparing or starting the process to create new or updated plans. Others had recently drafted or completed, but not yet adopted, their plans. In order to determine if the standards were useful in adding value to their own planning efforts, each community scored its plan against the standards to see if they had considered or included the complete slate of best practices. In many cases, the communities found that they had omitted some important practices which they believed needed to be incorporated either into the draft plan or into subsequent updates.

Reviews of Adopted Plans

In addition to applying the standards to their own plans, the pilot community representatives agreed to act as outside reviewers of plans that had already been completed and adopted by other communities, as another way of assessing the usefulness of the standards and review process. Thus, three additional communities—Austin, Texas, Norfolk, Virginia, and Raleigh, North Carolina (see sidebar “Adopted Plans Used to Test the Draft Designation Procedure”)—volunteered to have their completed comprehensive plans reviewed with the draft designation procedure and scoring system. Rock Island, one of the pilot communities, also volunteered to have its comprehensive plan,

which was completed in draft form early in 2014, reviewed by the pilot group.

The pilot community representatives worked in groups to assess the four adopted comprehensive plans using the standards and designation procedure. Assuming the role of outside plan reviewers, they read and scored the adopted plans. Their findings were used to refine the procedure in advance of the 2014 NPC in Atlanta, where they reported on their review outcomes.

In the course of this work, the standards and scoring system emerged as an extremely useful set of plan making and evaluation resources. The remainder of this PAS Report describes the outcome of the four-year effort to develop and

TABLE 1.1. PILOT COMMUNITIES

Community	Population	Notes
Savona, New York	822	Located in Steuben County in western New York State, about a 15-minute drive from Corning, N.Y.; small community with a traditional downtown and relatively stable neighborhoods
Foxborough, Massachusetts	16,865	Suburban town located midway between Boston and Providence; home to the New England Patriots; grappling with growth and change
Wheeling, West Virginia	28,213	Historic river town located in the northern panhandle of West Virginia; surrounded by steep topography; has been a center for the coal-mining industry; impacted by increase in natural gas extraction
Goshen, Indiana	31,719	Small, growing city with an industrial and agricultural heritage; located about a two-hour drive east of Chicago
Rock Island, Illinois	39,018	Located on the Mississippi River in the Quad Cities metropolitan area; a historic “rust-belt” city that has experienced economic decline over the past several decades
Auburn, Washington	70,180	Historic farming community that has experienced rapid population growth; challenged to create a new community identity in response to changing demographics and economic base
New Hanover County, North Carolina	202,677	Located in coastal (southeastern) area of North Carolina; diverse county ranging from agricultural to urban; heavily reliant on tourism
Oklahoma City, Oklahoma	599,199	Capital of Oklahoma; the state’s largest city in terms of population, employment, and land area; the energy sector is a major contributor to a strong economy
Seattle, Washington	634,535	Largest city in King County and the Seattle-Tacoma-Bellevue metropolitan area; home to major corporations; <i>Towards a Sustainable Seattle</i> (1994) was an early example of integrating sustainability into a comprehensive plan
Memphis/Shelby County, Tennessee	927,644 (1,178,211 in regional planning area)	Received a U.S. Housing and Urban Development Regional Planning Grant to develop the <i>Mid-South Regional Greenprint & Sustainability Plan</i> (2014); planning area includes Fayette County, Tennessee, Crittenden County, Arkansas, and DeSoto County, Mississippi

ADOPTED PLANS USED TO TEST THE DRAFT DESIGNATION PROCEDURE

- *Imagine Austin*, Austin, Texas (adopted 2012)
- *plaNorfolk2030*, Norfolk, Virginia (adopted 2013)
- *The 2030 Comprehensive Plan for the City of Raleigh*, Raleigh, North Carolina (adopted 2009)
- *City of Rock Island Comprehensive Plan*, Rock Island, Illinois (pilot community plan adopted 2014)

pilot test best practice standards and an evaluation system for comprehensive plans aimed at sustaining places. It provides resources for communities concerned with sustainability planning to use in evaluating, preparing, and updating their comprehensive plans, including comparison against national levels of best practice. It also presents a proposed designation system that would formally recognize those communities whose plans meet high levels of best practices.

Plan Standards Workshop

The pilot community phase of the plan standards project culminated in a day-long workshop at the 2014 APA National Planning Conference attended by representatives of nine of the ten pilot communities, as well as representatives of the communities with adopted plans. Workshop attendees were provided with digital copies of the adopted plans in advance and asked to become familiar with them prior to the conference. During the morning of this workshop, the pilot representatives shared the lessons learned and insights gained from applying the standards during their comprehensive plan making.

During the afternoon of the workshop, the pilot community representatives acted as facilitators, working with workshop attendees in small groups to apply the standards and designation procedure to the four additional adopted plans that had been provided to them in advance of the conference. Each workshop group also included a representative from the adopted plan community who was familiar with the plan structure and content. Participants compared their evaluations of the adopted plans and identified opportunities to improve them through the plan standards framework. Through this interactive process, the standards and evaluation system proposed by the working group was evaluated and refined. A number of small revisions were suggested, along with some amendments of concept definitions, but the group unanimously supported the basic structure of the standards and scoring system.

In the course of this work, the standards and scoring system emerged as an extremely useful set of plan making and evaluation resources. The remainder of this PAS Report describes the outcome of the four-year effort to develop and pilot test best practice standards and an evaluation system for comprehensive plans aimed at sustaining places. It provides resources for communities concerned with sustainability planning to use in evaluating, preparing, and updating their comprehensive plans, including comparison against national levels of best practice. It also presents a proposed designation system that would formally recognize those communities whose plans meet high levels of best practices.

REPORT FRAMEWORK

This report is organized into four chapters and five appendices. Chapter 1 has outlined the background of the four-year APA effort to define the role of the comprehensive plan in addressing the sustainability of human settlement (referred to as “sustaining places”). It described the rationale and process by which the principles developed in the previous PAS Report, *Sustaining Places: The Role of the Comprehensive Plan*, have been carried forward and refined into a working toolkit of best practices and plan-scoring procedures.

Chapter 2 describes the product of that four-year process—a plan standards framework for developing comprehensive plans aimed at sustaining places. It defines the framework components, including principles, processes, and attributes; identifies contemporary best practices to achieve these principles, processes, and attributes; and describes the refined plan-scoring procedure that was developed with the pilot communities. The result is a practical toolkit of standards based on best practices and a procedure for evaluating plans.

Chapter 3 discusses how communities can apply the standards and evaluation procedure to their comprehensive plans. It covers the use of the standards and scoring system by communities developing and updating their comprehensive plans. Examples of applications from the pilot communities illustrate how the standards framework can be used in various sizes and types of pilot communities.

Chapter 4 addresses the future of comprehensive plans for sustaining places. It begins by relating lessons learned by working with the pilot communities. It then explores twenty-first-century challenges—such as the need to increase resilience, address inequality, and adapt to climate change—that the comprehensive plan standards for sustaining places can help position communities to address.

Appendix A includes a list of links to plan documents from pilot communities and existing sustainability certification programs. Appendix B provides definitions of individual best practices for the plan principles, processes, and attributes. Appendix C shows the plan scoring matrix. Appendix D outlines how a formal plan designation program would work. Appendix E includes a sample application form for use in the designation program.

CHAPTER 2

**COMPREHENSIVE
PLAN STANDARDS
FOR SUSTAINING
PLACES**

One of the main roles of the Sustaining Places Working Group was to develop a set of standards that would capture the various aspects of sustainability that communities should incorporate into their plans. The standards presented in this chapter constitute a complete, concise guide to state-of-the-art comprehensive planning for sustainability. They address not only the substance of the comprehensive plan, but also the accompanying processes and attributes that support and define successful plan development and implementation.

The plan standards are organized into a framework of related components: six principles, two processes, and two attributes (numbered 1 to 10), each of which is implemented with a set of best practices. Collectively, these principles, processes, attributes, and supporting best practices define what the comprehensive plan for sustaining places should do. The framework's principles and processes are adapted from those derived from leading plans by APA's Sustaining Places Task Force (Godschalk and Anderson 2012). Its plan attributes are synthesized from the literature on comprehensive plan-making (see Baer 1997; Berke and Godschalk 2009; Berke, Godschalk, and Kaiser 2006; Kaiser and Davies 1999; Ryan 2011). Its best practices are pulled together from contemporary plans and professional reports. These components of the framework are defined below and their relationships are illustrated in Figure 2.1 (p. 16).

- **Principles** are *normative statements of intent* that underlie a plan's overall strategy, including its goals, objectives, policies, maps, and other content. In the framework, each principle is activated by a number of specific best practices for sustainability. For example, the Interwoven Equity Principle states that the plan goals and policies should ensure fairness and equity in providing for the housing, services, health, safety, and livelihood needs of all citizens and groups. An example of a best practice for meeting the Interwoven Equity Principle is to provide affordable and workforce housing.
- **Processes** are *planning activities* that take place during the preparation of a comprehensive plan and define how it will be carried out—public participation and plan im-

plementation. For example, the Authentic Participation Process states that planning should actively involve all segments of the community in analyzing issues, generating visions, developing plans, and monitoring outcomes. An example of a best practice for meeting the Authentic Participation Process is to seek diverse participation in plan making.

- **Attributes** are *plan-making design standards* that shape the content and characteristics of comprehensive plans. For example, the Consistent Content Attribute states that the plan should contain a consistent set of visions, goals, policies, objectives, and actions that are based upon evidence about community conditions as well as major issues and impacts. An example of a best practice for meeting the Consistent Content Attribute is to identify major strengths, weaknesses, opportunities, and threats in the community.
- **Best Practices** are the *planning action tools* employed by communities to activate the desired principles, processes, and attributes of their comprehensive plans. They are analogous to the body's muscles and tendons, linking and moving the components of the planning structure. Based on state-of-the-art practices found in leading plans and planning literature, they represent the best thinking of the planning profession on how to carry out the visions and goals of their plans. Complete definitions of these best practices are provided in Appendix B.

While the principles, processes, and attributes are described separately below, it is important to keep in mind that they are closely related and work together to achieve plan

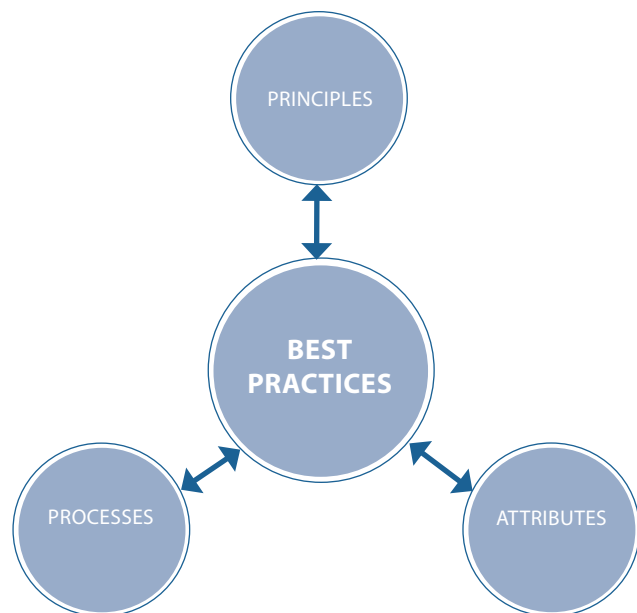


Figure 2.1. Plan standards framework (David Godschalk and David Rouse)

goals and objectives. Addressing the interrelationships between different plan components is a key characteristic that distinguishes comprehensive plans for sustaining places from traditional comprehensive plans.

REQUIRED PRINCIPLES

The six principles that must be recognized in the plan were derived from a review of leading comprehensive plans by the APA Sustaining Places Task Force. As outlined in *Sustaining Places: The Role of the Comprehensive Plan* (Godschalk and Anderson 2012), the principles are the following:

1. **Livable Built Environment**
2. **Harmony with Nature**
3. **Resilient Economy**
4. **Interwoven Equity**
5. **Healthy Community**
6. **Responsible Regionalism**

Best practices in support of these principles range across a wide spectrum of plan statements, policies, and actions. Collectively they provide the substantive direction of the comprehensive plan.

1. Livable Built Environment

Ensure that all elements of the built environment, including land use, transportation, housing, energy, and infrastructure, work together to provide sustainable, green places for living, working, and recreation, with a high quality of life.

The built environment encompasses physical features (such as buildings, streets, and utilities) and the systems and processes associated with them (such as movement of people, flow of water). As such, it defines the multifaceted community that people experience through their daily lives—the places where they live, work, and recreate. Because the built environment shapes quality of life for the entire population, sustaining its livability and ensuring that it functions at the highest possible level are primary tasks for comprehensive planning. Traditional comprehensive plans typically treat the different components of the built environment as separate elements, such as land use and transportation. However, the built environment is a complex system made up of many interacting and dynamic elements, and planners face ongoing challenges in sustaining and coordinating the overall system as well as its component parts. By virtue of its scope and mandate, the comprehensive plan is the logical tool for an integrated systems approach to ensuring a livable built environment.

Best practices in support of the Livable Built Environment principle include the following (see Appendix B for definitions):

- 1.1 Plan for multimodal transportation.
- 1.2 Plan for transit-oriented development.
- 1.3 Coordinate regional transportation investments with job clusters.
- 1.4 Provide complete streets serving multiple functions.
- 1.5 Plan for mixed land-use patterns that are walkable and bikeable.
- 1.6 Plan for infill development.
- 1.7 Encourage design standards appropriate to the community context.
- 1.8 Provide accessible public facilities and spaces.
- 1.9 Conserve and reuse historic resources.
- 1.10 Implement green building design and energy conservation.
- 1.11 Discourage development in hazard zones.

2. Harmony with Nature

Ensure that the contributions of natural resources to human well-being are explicitly recognized and valued and that maintaining their health is a primary objective.

The natural environment comprises the earth's interrelated systems of air, water, soil, and vegetation and their ongoing processes. Human well-being depends upon a healthy natural environment to provide the services of nourishing food, breathable air, drinkable water, hazard protection, energy, and spiritual sustenance. Because urban development and human activities can disturb nature's balance and damage the resources it provides, comprehensive plans and implementation programs must monitor the health of and mitigate negative impacts to the natural environment. A healthy environment is a common resource that belongs to everyone but is owned by no one. Therefore, the community through its plan must advocate for, and present the value of, the contributions of natural systems and services to the triple bottom line (environment, economy, and equity). While some natural resources are protected through separate functional plans, such as those for air and water quality, the comprehensive plan is the proper tool for the overall coordination and maintenance of natural systems within the full community and regional context. This includes integrating natural features and processes into the built environment (the Livable Built Environment principle).

Best practices in support of the Harmony with Nature principle include the following (see Appendix B for definitions):

- 2.1 Restore, connect, and protect natural habitats and sensitive lands.
- 2.2 Plan for the provision and protection of green infrastructure.
- 2.3 Encourage development that respects natural topography.
- 2.4 Enact policies to reduce carbon footprints.
- 2.5 Comply with state and local air quality standards.
- 2.6 Encourage climate change adaptation.
- 2.7 Provide for renewable energy use.
- 2.8 Provide for solid waste reduction.
- 2.9 Encourage water conservation and plan for a lasting water supply.
- 2.10 Protect and manage streams, watersheds, and floodplains.

3. Resilient Economy

Ensure that the community is prepared to deal with both positive and negative changes in its economic health and to initiate sustainable urban development and redevelopment strategies that foster green business growth and build reliance on local assets.

The community's economy is made up of the businesses, trades, productive facilities, and related activities that provide the livelihoods of the population. Economic health is critical in providing jobs and incomes to support the community; as it rises or falls, so do the livelihoods of people. Because local economies depend upon outside (regional, national, and even global) inputs and trends, their employment base is affected not only by local business formation and activity but also by the decisions of distant firms or governments. Therefore, more reliance on local assets increases the economic resilience of the community, as well as contributing to place-based revitalization. Because some productive activities generate negative impacts, green businesses (such as solar-powered energy systems) may be preferable to those with greater impacts and can reduce reliance on outside resources (imported fossil fuels, for example). Although some communities develop and implement separate economic development strategies, the comprehensive plan provides the instrument for placing those strategies within the context of the broader community development agenda.

Best practices in support of the Resilient Economy principle include the following (see Appendix B for definitions):

- 3.1 Provide the physical capacity for economic growth.
- 3.2 Plan for a balanced land-use mix for fiscal sustainability.
- 3.3 Plan for transportation access to employment centers.
- 3.4 Promote green businesses and jobs.
- 3.5 Encourage community-based economic development and revitalization.
- 3.6 Provide and maintain infrastructure capacity in line with growth or decline demands.
- 3.7 Plan for post-disaster economic recovery.

4. Interwoven Equity

Ensure fairness and equity in providing for the housing, services, health, safety, and livelihood needs of all citizens and groups.

Equity in the provision of community decisions and services involves the fair distribution of benefits and costs. It results from applying basic fairness tests that ask whether the needs of the full range of the population served—rich and poor, young and old, native and immigrant—are served. Because disadvantaged, young, or immigrant populations often do not participate in debates over community policies and programs, their needs

may fail to be recognized. Poor, underserved, and minority populations are often disproportionately affected by polluting land uses and natural disasters. Because such populations may not have the skills or community connections necessary for access to jobs, economic resources, and health care, the community may have to provide special programs to assist them. Decent, affordable housing is another critical need that falls under this principle. By weaving equity questions into the comprehensive plan, the community and its government can ensure the consideration of “who benefits” as it develops its policies, priorities, and expenditures.

Best practices in support of the Interwoven Equity principle include the following (see Appendix B for definitions):

- 4.1 Provide a range of housing types.
- 4.2 Plan for a jobs/housing balance.
- 4.3 Plan for the physical, environmental, and economic improvement of at-risk, distressed, and disadvantaged neighborhoods.
- 4.4 Plan for improved health and safety for at-risk populations.
- 4.5 Provide accessible, quality public services, facilities, and health care to minority and low-income populations.
- 4.6 Upgrade infrastructure and facilities in older and substandard areas.
- 4.7 Plan for workforce diversity and development.
- 4.8 Protect vulnerable populations from natural hazards.
- 4.9 Promote environmental justice.

5. Healthy Community

Ensure that public health needs are recognized and addressed through provisions for healthy foods, physical activity, access to recreation, health care, environmental justice, and safe neighborhoods.

The World Health Organization defines health as a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity. The Healthy Community principle and the previous four principles work together to support the mission of public health: to fulfill society’s interest in assuring conditions in which people can be healthy (Institute of Medicine 1988). In a healthy community, residents are assured that the air and water are safe, open space and recreation are convenient to use, local food outlets are located near neighborhoods, public schools and

access to health care are provided equitably, and active public safety programs are in place. Because the normal operations of the private economic market may not ensure that these common public benefits are uniformly available, it may be necessary for the government to fill the gaps. For example, disadvantaged neighborhoods are often located in unsafe or unhealthy areas of the community, such as brownfields or floodplains, and public programs may be needed to address these locational hazards. The comprehensive plan is the appropriate tool for identifying and mitigating public health hazards, and for promoting effective healthy community goals.

Best practices in support of the Healthy Community principle include the following (see Appendix B for definitions):

- 5.1 Reduce exposure to toxins and pollutants in the natural and built environments.
- 5.2 Plan for increased public safety through reduction of crime and injuries.
- 5.3 Plan for the mitigation and redevelopment of brownfields for productive uses.
- 5.4 Plan for physical activity and healthy lifestyles.
- 5.5 Provide accessible parks, recreation facilities, greenways, and open space near all neighborhoods.
- 5.6 Plan for access to healthy, locally grown foods for all neighborhoods.
- 5.7 Plan for equitable access to health care providers, schools, public safety facilities, and arts and cultural facilities.

6. Responsible Regionalism

Ensure that all local proposals account for, connect with, and support the plans of adjacent jurisdictions and the surrounding region.

Regional planning agencies, although typically without regulatory authority, provide perspectives broad enough to encompass the scope of various regional systems, such as transportation and water supply, which extend beyond local jurisdictional boundaries. As authorized by federal surface transportation legislation, transportation planning is the core responsibility of designated metropolitan planning agencies (MPOs). Increasingly, progressive MPOs and other regional planning agencies are addressing other issues with regional implications, such as open space and environmental protection, housing, economic development, utility infrastructure, and hazard mitigation. Because regional agencies

coordinate the activities of groups of local governments, they provide an institutional setting for joint decision making that transcends local politics. From the local governmental perspective, the plans and policies of adjacent jurisdictions have reciprocal impacts, in terms of factors such as the location of new development, commuting patterns, and stormwater flows. Therefore, connecting these plans and policies through the comprehensive plan is a way to understand and manage these and other overlapping functions, such as regional greenway systems, and to responsibly integrate a community's plan with those of its neighbors.

Best practices in support of the Responsible Regionalism principle include the following (see Appendix B for definitions):

- 6.1 Coordinate local land-use plans with regional transportation investments.
- 6.2 Coordinate local and regional housing plan goals.
- 6.3 Coordinate local open space plans with regional green infrastructure plans.
- 6.4 Delineate designated growth areas that are served by transit.
- 6.5 Promote regional cooperation and sharing of resources.
- 6.6 Enhance connections between local activity centers and regional destinations.
- 6.7 Coordinate local and regional population and economic projections.
- 6.8 Include regional development visions and plans in local planning scenarios.
- 6.9 Encourage consistency between local capital improvement programs and regional infrastructure priorities.

REQUIRED PROCESSES

The following two processes for involving the public and for carrying out plan objectives and proposals are key requirements for developing and implementing comprehensive plans for sustaining places:

7. **Authentic Participation**
8. **Accountable Implementation**

Best practices in support of these processes include a variety of activities, procedures, and commitments. While some of these will be evident in the comprehensive plan itself,

it may be necessary to evaluate others using knowledge about the specific local planning process and how it was carried out.

7. Authentic Participation

Ensure that the planning process actively involves all segments of the community in analyzing issues, generating visions, developing plans, and monitoring outcomes.

Public participation in planning is a mainstay of democratic governance and decision making. By actively involving the whole community in making and implementing plans, the government fulfills its responsibilities to keep all citizens informed and to offer them the opportunity to influence those actions that affect them. In the past, public participation processes did not necessarily reach all segments of the community and may have been viewed by public agencies more as a requirement to meet (for example, by conducting public hearings) than as an opportunity to garner meaningful input. This means that authentic participation processes may have to overcome the perception that what participants say will not be respected. Authentic participation programs go beyond the minimum legal requirements to connect with citizens through innovative communication and outreach channels, such as creative use of the Internet and interactive workshops in locations where people work and live. The comprehensive planning process is an ideal vehicle for opening all stages of plan making to the public, from early issue analysis to finalizing and implementing the plan.

Best practices in support of the Authentic Participation process include the following (see Appendix B for definitions):

- 7.1 Engage stakeholders at all stages of the planning process.
- 7.2 Seek diverse participation in the planning process.
- 7.3 Promote leadership development in disadvantaged communities through the planning process.
- 7.4 Develop alternative scenarios of the future.
- 7.5 Provide ongoing and understandable information for all participants.
- 7.6 Use a variety of communications channels to inform and involve the community.
- 7.7 Continue to engage the public after the comprehensive plan is adopted.

8. Accountable Implementation

Ensure that responsibilities for carrying out the plan are clearly stated, along with metrics for evaluating progress in achieving desired outcomes.

Implementation is the set of actions that carry out the proposals of the comprehensive plan over time. Accountable implementation ties these actions to defined timetables, activities, budgets, and agencies; reports their effectiveness to the public; and revises the plan based on the reported findings. Traditional comprehensive plans have been subject to criticism because they do not connect goals and policies to actual implementation, with the possible exception of revising zoning and development regulations. By contrast, accountable implementation weaves the plan into the daily activities of the local jurisdiction and its various departments, including budgeting and capital program funding. The most effective programs reach outside the local government to engage partners in the public, private, and nonprofit sectors in implementation. Because the public is often unaware of the effectiveness of actions taken to carry out the plan, an accountable implementation program establishes and regularly publishes metrics that report on progress; the relevant adage is “what gets measured, gets done.” While some metrics and progress reports are made at the program or operational level, the comprehensive plan is the right place to establish the connection between adopted goals and actual outcomes through local governmental activities.

Best practices in support of the Accountable Implementation process include the following (see Appendix B for definitions):

- 8.1 Indicate specific actions for implementation.
- 8.2 Connect plan implementation to the capital planning process.
- 8.3 Connect plan implementation to the annual budgeting process.
- 8.4 Establish interagency and organizational cooperation.
- 8.5 Identify funding sources for plan implementation.
- 8.6 Establish implementation indicators, benchmarks, and targets.
- 8.7 Regularly evaluate and report on implementation progress.
- 8.8 Adjust the plan as necessary based on the evaluation.

REQUIRED ATTRIBUTES

To be effective, plans must be coherent and well presented, while articulating persuasive visions and clearly communicating goals and ideas. The following two attributes embody these traits:

9. Consistent Content

10. Coordinated Characteristics

While these attributes apply to all comprehensive plans, not just those designed for sustaining places, they are especially important for advancing plan proposals which may be innovative or unique. In most cases, best practices in support of these attributes will be evident in the language and content of the plan. In other cases, they must be deduced or derived from other sources, such as the community context and other background information not necessarily included in the comprehensive plan document, in order to establish consistency or coordination.

9. Consistent Content

Ensure that the plan contains a consistent set of visions, goals, policies, objectives, and actions that are based on evidence about community conditions, major issues, and impacts.

Plan content includes the basic features of the plan, their purposes, how they are devised, and how they are blended into a coordinated, compelling, and consistent comprehensive plan document. Every plan should be based on a careful assessment of community needs and conditions, a candid evaluation of strengths and weaknesses, a future vision, and goals, policies, and actions to achieve the vision. Because plans tend to include many policies and goals, some of which may be in conflict, it is important to assess the consistency of the proposed policy set to ensure there are no irreconcilable differences. Plans deal with major community issues and impacts—some of which may be controversial—and so are subject to close scrutiny. Therefore, their proposals must be supported with solid evidence. The comprehensive plan is the appropriate platform to integrate and adopt the visions, goals, actions, and evidence into a consistent and logical statement of community intent for future development.

Best practices in support of the Consistent Content attribute include the following (see Appendix B for definitions):

- 9.1 Assess strengths, weaknesses, opportunities, and threats.
- 9.2 Establish a fact base.
- 9.3 Develop a vision of the future.
- 9.4 Set goals in support of the vision.
- 9.5 Set objectives in support of the goals.
- 9.6 Set policies to guide decision making.
- 9.7 Define actions to carry out the plan.
- 9.8 Use clear and compelling features to present the plan.

10. Coordinated Characteristics

Ensure that the plan includes creative and innovative strategies and recommendations and coordinates them internally with each other, vertically with federal and state requirements, and horizontally with plans of adjacent jurisdictions.

Plan characteristics are the identifying features of the plan—its unique blend of strategies and coordinated recommendations, as well as its linkages to intergovernmental plans and requirements. Innovative plans are characterized by creative approaches and problem-solving strategies that seek new solutions to contemporary challenges, as well as new formats that better communicate proposals to the public. The plan must include broader connections because communities must recognize and conform with many federal and state requirements and because communities have crosscutting relationships with neighboring communities. Traditional comprehensive plans often are not widely read because they are too long and contain too much planning jargon. Therefore, it is important to translate plans into concise, easily readable, and understandable content—including not only text and tables, but also maps, graphics, and digital images. Advances in technology and communications techniques make it possible to create comprehensive plans that are more interesting, attractive, and accessible.

Best practices in support of the Coordinated Content attribute include the following (see Appendix B for definitions):

- 10.1 Be comprehensive in the plan's coverage.
- 10.2 Integrate the plan with other local plans and programs.
- 10.3 Be innovative in the plan's approach.
- 10.4 Be persuasive in the plan's communications.
- 10.5 Be consistent across plan components.
- 10.6 Coordinate with the plans of other jurisdictions and levels of government.
- 10.7 Comply with applicable laws and mandates.
- 10.8 Be transparent in the plan's substance.
- 10.9 Use plan formats that go beyond paper.

PLAN SCORING PROCEDURE

The Plan Standards Working Group developed a plan-scoring procedure for use by communities that want to systematically compare their plans against a national stan-

dard based on the above principles, processes, attributes, and best practices. It yields an overall numeric score based on a review of how the plan addresses the best practices for each principle, process, and attribute. The procedure is available now for communities that want to evaluate their plans by conducting internal reviews. It may become available later for formal external evaluation, depending on whether APA establishes a comprehensive plan review and designation program.

The internal scoring process is simple and may be carried out by local planning staff and shared with community boards and officials. To guide the process, a scoring matrix lists the practices and provides spaces for assessing and scoring them (see the scoring matrix in Appendix C). Using this matrix, the internal review team can review the community's plan against the best-practice standards and assign a score for each practice. The scoring system is based on three levels of achievement: Low, Medium, and High. It also includes categories of Not Applicable and Not Present.

While determination of scores will require a measure of professional judgment, some general scoring criteria are definable. These are illustrated below for principles, processes, and attributes, each of which has a slightly different application.

Scoring Criteria: Best Practices for Principles (Livable Built Environment, Harmony with Nature, Resilient Economy, Interwoven Equity, Healthy Community, Responsible Regionalism)

- **Not Applicable:** assigned only if it can be demonstrated that community conditions or legal constraints prevent the use of the practice. Since they are subtracted from the overall potential plan score total, Not Applicable scores do not penalize the plan rating.
- **Not Present (0 points):** assigned if the practice is applicable but not referenced or included in the plan. Not Present scores do reduce the plan rating.
- **Low (1 point):** assigned if the practice is mentioned in the plan at a basic level, but is not carried further.
Example: A plan that mentions a green infrastructure network (practice 2.2) as a goal but does not address it in the plan policies, strategies, or implementation.
- **Medium (2 points):** assigned if the practice is discussed in the narrative, goals, and policies of the plan, but is not carried forward to implementation steps.
Example: A plan that has a goal and policy related to a green infrastructure network (practice 2.2) but does

not define the components of the network and how it is to be implemented.

- **High** (3 points): assigned if the practice is defined and addressed through data, analysis, and support, and included in goals, policies, and implementation actions of the plan. *Example:* A plan that has a goal and policy related to a green infrastructure network (practice 2.2), describes the components of the network via data and mapping, and defines how the network will be implemented.

Scoring Criteria: Best Practices for Processes (Authentic Participation and Accountable Implementation)

- **Not Applicable:** unlikely to be assigned for process evaluation since all plans must address participation and implementation.
- **Not Present** (0 points): assigned if the process practice is not addressed in the plan.
- **Low** (1 point): assigned if the process practice is mentioned in the plan, with no supporting data, analysis, or other documentation provided. *Examples:* A plan that mentions including stakeholders in the planning process (practice 7.1) but provides no documentation of having done so, or a plan that mentions strategies for implementing plan goals and objectives (practice 8.1) but provides no direction on how this is to be done.
- **Medium** (2 points): assigned if the process practice is discussed to some degree in the plan, with minimal supporting data, analysis, or other documentation provided. *Examples:* A plan that generally describes how stakeholder participation was used in the planning process (practice 7.1) but does not document how this participation informed the plan implementation program, or a plan that ties implementation strategies (practice 8.1) to plan goals and objectives but does not provide detail on how these strategies are to be implemented (e.g., responsible parties and timeframes).
- **High** (3 points): assigned if the process practice is fully addressed and completely defined in the plan, with supporting data, analysis, or other documentation provided. *Examples:* A plan that documents how stakeholders were involved in the planning process (practice 7.1) and how their involvement is reflected in the implementation program (e.g., assignment of responsibilities for action) or a plan that clearly demonstrates the connection from plan goals and objectives to implementation

strategies (practice 8.1), including detail on how these strategies are to be implemented (responsible parties, timeframes, etc.).

Scoring Criteria: Best Practices for Attributes (Consistent Content and Coordinated Characteristics)

- **Not Applicable:** unlikely to be assigned for attribute evaluation since all plans must address the basic content and characteristic practices.
- **Not Present** (0 points): assigned if the attribute practice is not addressed in the plan.
- **Low** (1 point): assigned if the attribute practice is minimally addressed in the plan based on data, analysis, written and graphic communication, or other demonstrable form of support. *Examples:* A plan that mentions major issues facing the community (practice 9.1) without providing supporting analysis (such as forecast trends and planning implications), or a plan that contains standard or required comprehensive plan elements (practice 10.1) but does not indicate how these elements comprehensively address the characteristics and issues of the community.
- **Medium** (2 points): assigned if the attribute practice is moderately addressed in the plan based on data, analysis, written and graphic communication, or other demonstrable form of support. *Examples:* A plan that identifies major issues facing the community (practice 9.1) and provides some degree of supporting analysis (e.g., general trends and planning implications), or a plan that covers multiple topics beyond standard or required comprehensive plan elements (practice 10.1), with some indication as to how these topics comprehensively address the characteristics and issues of the community.
- **High** (3 points): assigned if the attribute practice is fully addressed in the plan based on data, analysis, written and graphic communication, or other demonstrable form of support. *Examples:* A plan that articulates major issues facing the community (practice 9.1) with robust supporting analysis (e.g., forecast trends and planning implications), or a plan that covers multiple topics beyond standard or required comprehensive plan elements (practice 10.1), addresses how these topics interrelate, and demonstrates how they comprehensively address the characteristics and issues of the community.

The framework of required components described here is aimed at setting standards for preparing and revising comprehensive plans that seek to sustain places. It can also be used to evaluate existing plans and to serve as an outline for dialogue with citizens, planning boards, and elected officials about community sustainability. Chapter 3 suggests an approach for local governments interested in applying this framework.

CHAPTER 3

**APPLYING THE
STANDARDS**

The plan standards framework described in Chapter 2 has been designed for use by local governments that wish to evaluate existing comprehensive plans or are beginning the process of updating or preparing new plans. As with all resource toolkits, use of the framework is a matter of individual community choice. However, once use of the framework is initiated, community expectations will likely arise that it will be followed through to completion. The commitment should not be taken lightly.

PLAN EVALUATION PROCESS

Communities desiring to apply the standards to local plans and planning processes will find it useful to follow a basic four-step process such as the one outlined in Figure 3.1. The process steps include the following:

1. Discuss the standards framework with the community to determine if it will be helpful in the comprehensive planning process.
2. Review the needs of the plan and planning process in order to highlight areas where use of the standards will improve the plan quality and relevance.
3. Incorporate the standards into the plan, using them to fill gaps or upgrade existing plan policies and practices.
4. Score the plan in order to determine its comparative ranking against a fully realized comprehensive plan for sustaining places.

To be most effective this process should be carried out jointly with community representatives, planning boards, stakeholders, and government staff. This collaboration will help to develop a shared understanding of the framework's contribution to increasing community sustainability, along with support for meeting the framework requirements. Thus, the first step is to involve the community in a discussion of the standards and their implications.

Step One: Discuss the Standards Framework

The first step is to develop a community understanding of the plan standards framework and its components. By reading and discussing the materials in this report, a community can

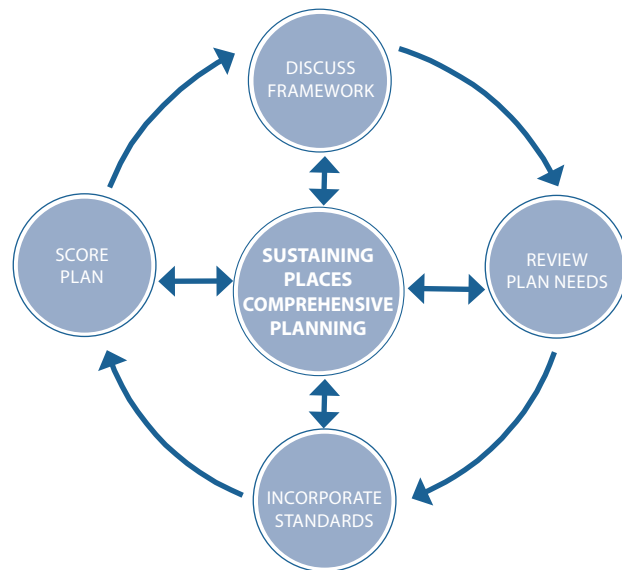


Figure 3.1. Applying the plan standards framework (David Godschalk and David Rouse)

decide if the framework can be helpful in preparing or revising its comprehensive plan.

Planning staff can take the lead by circulating the standards framework to planning boards, government officials, and interested stakeholder groups. In doing so, they can arrange forums, discussion sessions, and other opportunities for facilitating conversations about community sustainability and the potential for using the framework to strengthen the comprehensive plan. Staff can facilitate this discussion

by preparing slides, web presentations, and other types of educational materials. These can be illustrated with examples from communities that have adopted plans aimed at improving sustainability, such as the plans analyzed in *Sustaining Places: The Role of the Comprehensive Plan* (Godschalk and Anderson 2012) and those prepared by the pilot communities involved in this Plan Standards project (see Appendix A for a listing of plan websites).

To simplify the task of reviewing the comprehensive framework content and to enhance understanding of the value of the framework, planners could lead small group discussions on individual principles or groups of principles. These could have the benefit of illustrating more concretely how the standards might apply to problems or needs specific to the community. This would lead naturally to step two, which is to think about changes or improvements to the local plan and planning process.

Step Two: Review Planning Needs

The second step is to review an existing plan or proposed planning process in light of the principles, processes, attributes, and best practices contained in the framework. Communities should use the standards framework as a set of prompts, laying out questions to consider. How could the standards be applied during compilation and analysis of a planning database, the public participation process, plan preparation or updating, and plan monitoring and implementation? Planners should think about which standards are applicable and how they might employ them. They can think of the planning needs review as a plan sustainability audit, looking for needed additions or improvements that will raise the quality of the plan. Reviewers should ask hard questions, for example:

Where are the gaps in the plan? Reviewers should look for important areas that have been overlooked in past planning efforts. This is especially important to ensure that contemporary issues—such as climate change and community resilience—have been addressed, and that contemporary objectives—such as community health, safety, and social equity—have been incorporated into the plan.

Is the planning database credible? The standards assume that comprehensive plan strategies are built on solid and up-to-date factual evidence. Compilation and analysis of planning databases should provide an accurate picture of existing and projected community conditions. In current times of evolving and dynamic data on trends such as climate change, economic instability, and environmental degradation, the maintenance and regular updating of the plan's fact base are especially important.

Does the participation process operate on a continuing community-wide basis? The standards assume that all stakeholders will be involved, not just the dedicated group that shows up for every meeting. They assume that the planning staff will make full use of all channels of communication, including social media, in generating two-way participation. To maintain trust in the local government and its planning, transparency is vital. Applying process practices will illuminate issues and point out needed fixes in the involvement program.

Does the plan itself incorporate the basic intent of each principle, process, and attribute? The standards assume that plans meeting the definition of sustaining places will be truly comprehensive. They assume that the plans will demonstrate a genuine desire to meet the basic intent of each standard component through the adoption of a full range of applicable best practices. This means that there should be a proactive attempt to address issues and fill gaps in existing plans.

Does the plan contain solid provisions for monitoring outcomes and evaluating implementation? The standards assume a conscious and continuing effort to see that plan recommendations are carried out. This is important not only on the basis of efficiency and effectiveness in deploying community resources, but also on the basis of informing the public about the degree to which plan objectives have been realized. It is also important in terms of keeping plans current and focused on critical priorities.

Once these questions have been answered, it will be possible to proceed to the next step, which is to begin to incorporate the applicable standards into the new or existing plan to respond to the objectives of the standards framework.

Step Three: Incorporate Applicable Standards

The third step is to incorporate the applicable standards into the plan and planning process. Depending on the local situation, this may be a relatively simple process of adding some best practices or it may be a more complex process of rethinking the plan. Because each community will have a different local context, it is not possible to outline a singular planning process that is relevant to all communities. However, the experience of the pilot communities can offer some guidance. As described later in this chapter, they used the standards in different ways, depending upon the local context and stage of preparation of their comprehensive plans.

Once the plan has been prepared or updated, the final step is to conduct an overall evaluation using the plan standards framework. This evaluation presently can only

INCORPORATING THE COMPREHENSIVE PLAN STANDARDS INTO GOSHEN'S COMPREHENSIVE PLAN UPDATE

Abby Wiles, Assistant Planning and Zoning Administrator, Department of Planning & Zoning, City of Goshen, Indiana

Goshen, Indiana, is a small, growing city in north-central Indiana approximately a half hour southeast of South Bend, Indiana, and two hours east of Chicago. Goshen has about 32,000 residents and is demographically diverse, with 28.2 percent of the population Hispanic or Latino.

The city has a strong agricultural and industrial heritage. According to national occupational employment data for May 2012, the Elkhart-Goshen metropolitan statistical area (MSA) is the metropolitan area in the United States with the highest concentration of production occupations (U.S. Bureau of Labor Statistics 2014). The MSA is best known as a hub for recreational vehicle manufacturing. Despite the community's high concentration of manufacturing, Goshen continues to attract members of the creative class and young entrepreneurs. The community also touts one of the most vibrant downtowns in Indiana.

Goshen's existing comprehensive plan, Comprehensive Plan & Community Vision: 2004–2013, is focused on sustainability. The plan was developed by a local nonprofit, Community Sustainability Project, Inc. It highlights the importance of sustainable, well-managed growth, promotion of sustainable living and business practices, and strong protection of environmentally sensitive areas. The plan's transportation chapter emphasizes the development of nonmotorized transportation and the importance of a highly connected network of sidewalks, trails, and bike paths. Staff and citizens wanted to continue this focus in the plan update.

Because the existing comprehensive plan had a sustainability focus, Goshen's

participation in the Sustaining Places initiative seemed natural. One of the first tasks we undertook after selection as a pilot community was to review our existing plan against the draft comprehensive plan standards. We were surprised to find a number of standards that were only loosely discussed or missing altogether in the plan. Of the 53 total best practices, 17 scored "Low." These practices included access to locally grown foods for all neighborhoods and planning for the provision of green infrastructure.

Staff decided that the standards scored as "Medium" or "High" were sufficiently represented in the plan and would be carried forward into the plan update. We addressed the low-achieving standards in the public engagement process and asked the community if these best practices should be included in the plan. Community members were invited to help develop specific actions and strategies for these best practices.

Public support for the plan standards was very strong. Several citizens requested a copy of the APA scoring matrix. By participating as a pilot community and considering the plan standards during our plan update, we were able to identify sustainability standards that were missing or weak in our plan. We also were able to work with and integrate the public into our plan update process in a meaningful way.

take the form of an internal scoring process; if the external review and designation program described in Appendix D is instituted, then communities could apply for such outside designation.

Step Four: Score the Plan

The fourth step is to score the plan against the standards. The benefit of this scoring is to provide an indication of the degree to which the plan takes a comprehensive approach to sustaining places. By assessing the level of achievement for the practices in the standards, reviewers will be able to judge the overall quality of the plan. As mentioned earlier, this assessment may be done internally within the community to generate a comparative benchmark of the plan's achievement versus the full slate of possible best practices. In the future, it may also be offered through an external review and designation process (see Appendix D). This report focuses on internal scoring.

As noted in Chapter 2, the scoring approach involves assigning a rating of Not Applicable, Not Present, Low, Medium, or High to a plan's incorporation of each practice in the standards framework. To assist planners in scoring, a matrix has been prepared with brief descriptions of the practices associated with each principle, process, and attribute. A copy of this matrix is located in Appendix C.

To ensure that the scoring is accurate as possible, a team of at least two planners knowledgeable about the plan's structure and content should carry out the scoring separately. Once each team member has read and scored the plan, they can meet to identify and discuss differences in scoring, including any judgment calls made about the level at which a particular practice should be scored. This should be continued until the team is able to come to consensus on the scoring.

What will the final scores tell communities? The scores will identify any areas where the plan departs from the level of plan quality set forth in the standards framework. They will highlight areas of strength and areas where further improvement may be warranted. If a plan has a high overall score, then a community can be assured that they are staking their future sustainability on a strong planning foundation. If it has a low overall score, then this can help a community understand the need to invest further resources in its planning program. As noted in the pilot community examples provided below, scoring a plan is a useful diagnostic procedure, which may turn up previously undiscovered gaps. It can also be used as a prescriptive process, which will suggest remedies for filling the gaps.

PILOT COMMUNITY EXAMPLES

The experience of the pilot communities provides examples of how various types and sizes of jurisdictions applied the standards at different stages in the planning process.¹ For example, planners in **Goshen, Indiana**, used the standards to evaluate their existing 2004 plan and were surprised to find that it contained a number of low-achievement practices. With strong community support, planners were able to add new practices to improve weak areas, such as access to local foods. (See sidebar "Incorporating the Standards in Goshen's Comprehensive Plan Update," p. 27)

Planners in **Austin, Texas**, whose comprehensive plan was evaluated by the pilot communities and by the participants in the workshop at the 2014 National Planning Conference, used the standards to review the *Imagine Austin* comprehensive plan (adopted by the city council in 2012). Even though this plan has received numerous awards—including the inaugural Sustainable Plan Award from APA's Sustainable Communities Division in 2014—the planning staff discovered that it lacked some important practices. (See sidebar "Staff Review of the 2012 *Imagine Austin* Comprehensive Plan.")

Seattle, Washington, used the plan standards to conduct an assessment of its existing 1994 plan in preparation for an update. According to senior planner Patrice Carroll, some of the insights that staff derived from the assessment were the needs to reassess the city's view of what constitutes authentic participation, address a gap in its procedures for accountable implementation, and implement a stronger focus on equity. Equity has become increasingly important for fast-growing Seattle to ensure the broad sharing of the benefits of



Public meetings, part of the Seattle 2035 comprehensive plan update (City of Seattle Department of Planning and Development)

STAFF REVIEW OF THE 2012 *IMAGINE AUSTIN* COMPREHENSIVE PLAN

Paul DiGiuseppe, Principal Planner, City of Austin Planning and Development Review Department

The City of Austin, Texas, began the three-year process of updating its comprehensive plan in 2009. The 2012 Imagine Austin plan has a planning horizon to 2039 and replaces the 1980 plan called Austin Tomorrow. Both the city council and community residents support making the city more sustainable and expect the comprehensive plan to address sustainability.

When Austin was asked to pilot-test the plan-scoring procedure with its existing plan, the planning process was complete and the plan had been adopted for over a year. Although the plan standards were not available when we were undergoing our planning process, they proved useful in evaluating how successful we had been at incorporating elements that would make our city more sustainable.

We were confident that our plan would fare well when measured against the standards, and we were happy to have our expectations confirmed. Imagine Austin focuses on the following major themes that encompass sustainability: grow as a compact and connected city; integrate nature into the city; provide paths to prosperity for all; develop as an affordable and healthy community; sustainably manage water, energy and our environmental resources; and think creatively and work together as a community. These themes align well with the principles included in the plan standards framework.

Checking our existing plan against the plan standards revealed a few gaps in the plan, such as promoting leadership in disadvantaged communities through the planning process. Considering Austin's history of racial segregation and income disbursement, this is something we will

consider as we continue implementing the plan. The plan also does not reference post-disaster economic recovery. We will follow up to see if this practice should be added to Imagine Austin. Finally, the review confirmed that we must focus on articulating our implementation framework.

While the evaluation process was time intensive, it proved useful to us after the adoption of the plan. We were able to identify the strengths of our plan as well as gaps that could lead to plan amendments in the future and that could be focal points for implementation.

The results of the evaluation will be shared with the public and city departments so that we can gain more support for the implementation of Imagine Austin initiatives. We feel it is extremely important for communities currently developing or updating their comprehensive plans to consider these standards. They can provide important points of engagement with the public, help staff identify public priorities, and ensure a complete assessment of community issues.



Austin residents share their visions for Austin's future as part of Imagine Austin (City of Austin)

a strong economy. The review also confirmed the need for a more accessible, persuasive, and consistent plan with more graphics. Carroll noted that these insights would be valuable in preparing Seattle 2035, the updated comprehensive plan, due for adoption in 2015.

New Hanover County, North Carolina, reviewed the standards during preparation of its first comprehensive plan after having only a state-mandated land-use plan for a number of years. Because the county has a population of about 200,000 and faces projected growth of up to 337,000, local planners saw the need for a comprehensive planning approach. To develop plan policies and recommendations, long-range planner Jennifer Rigby, AICP, reported at the 2014 National Planning Conference that the county set up six themed committees, each focused on one of the plan principles. They found that the standards provided a clear framework to address politically sensitive issues, such as climate change and sea-level rise, which might otherwise have been difficult to discuss. They also found the emphasis on regionalism very germane to their efforts to integrate data and policies from the regional plan, the regional transportation plan, county economic development and infrastructure plans, and the Greater Wilmington city plan.

Memphis/Shelby County, Tennessee, was a special case in that the standards were applied not to a comprehensive planning process but to the *Mid-South Regional Greenprint & Sustainability Plan* funded by a Sustainable Communities Regional Planning Grant through the U.S. Department of Housing and Urban Development. The plan seeks to create a unified vision for a network of green spaces connecting a four-county, tri-state region. The plan would not only protect open space and environmental resources, but it also addresses ways in which this network can influence housing, transportation, and health. According to program manager John Zeannah, AICP, Memphis and Shelby County benefited from using the standards as a guide for the regional plan. Specifically, the standards were a valuable tool for project planners to evaluate how effectively the regional vision addresses sustainability best practices.

Wheeling, West Virginia, used the standards in preparing the 2014 *Envision Wheeling* comprehensive plan update. Wendy Moeller, AICP, consultant for the updated plan, noted that the community embraced many of the standards, including increased density, adaptive reuse, improved transit, walkable neighborhoods, and housing choice. Others were more challenging due to Wheeling's circumstances. For example, the "discouraging development in hazard-prone areas" best practice came up against the city's desire to encourage rede-

velopment and reinvestment and the reality that more than 25 percent of lots are located in designated floodplains.

Oklahoma City, Oklahoma, was in the process of creating a new comprehensive plan (planokc) during the time that the standards were being developed and pilot tested by communities. According to planning director Aubrey Hammontree, AICP, this timing could not have been better for informing the development of plan policies through the various stages of the public engagement process. The community, specialized stakeholders, and city staff generated hundreds of policies that city planners then filtered using the standards as a framework. The standards provided a good "check" to ensure the plan's policies were complete and comprehensive, and that they conformed to best practices.

Rock Island, Illinois, was nearing completion of its first ever city-wide comprehensive plan when it was selected as a pilot community. In 2012 Rock Island received a grant from the State of Illinois to prepare a forward-thinking comprehensive plan meeting certain sustainability principles; however, the guidance provided by the granting agency was somewhat limited in terms of how standards should be met. Urban planner Brandy Howe, AICP, reported that the scoring matrix, together with public feedback, was a valuable tool used during the planning process to ensure that the plan content met all the sustainability requirements of the granting agency. Howe noted that the majority of APA's standards were seamlessly integrated into the city's 2014 comprehensive plan, but certain standards—such as climate change adaptation—may require "soft stepping" in certain communities.

A number of pilot community representatives commented that, as an objective set of best practices developed by a well-known national organization, the standards provided a credible framework for discussing issues and approaches with elected officials and the public, ones that otherwise might have been difficult to address.

PLAN EVALUATION: NEXT STEPS

The experience of the pilot communities confirms that the plan standards framework and scoring procedure are a resource that can be used by jurisdictions with widely varying characteristics to evaluate their comprehensive plans at different stages in the planning process. The plan evaluation process described in this chapter provides a systematic approach to applying the framework, including use of the scoring procedure to compare a local comprehensive plan against a national standard. Such "self-scoring" differs from

the possibility of an external review, scoring, and designation system for comprehensive plans that meet the definition of sustaining places, which depends upon future action by APA and could include additional features such as bonus points for plans with particularly innovative approaches.

The final chapter of this report considers the future of comprehensive planning practice in the context of the sustainability challenges of the twenty-first century. It addresses how the plan standards for sustaining places can play an important role in helping planners to meet these challenges, including lessons learned from the pilot communities. APA leadership had not decided whether or not to move forward with a formal designation program for plans that meet these standards at the time of this report's publication. Such a system, however, could make a valuable contribution to comprehensive planning practice. Appendix D provides additional information on how such an APA-managed program might work.

1. The sources of the information provided in this section include presentations made by pilot community representatives at the workshop held at the 2014 National Planning Conference in Atlanta, blogs written by several of the representatives of APA's Sustaining Places website, and personal communications with representatives.

CHAPTER 4

**THE FUTURE OF
COMPREHENSIVE
PLANNING
PRACTICE**

Planning for sustainability is the defining challenge of the twenty-first century. Overcoming deeply ingrained economic and cultural patterns that result in resource depletion, climate instability, and economic and social stress requires holistic problem-solving that blends the best scientific understanding of existing conditions and available technologies with the public resolve to act. Planning processes allow communities to look past immediate concerns, evaluate options for how best to proceed, and move toward a better future (Godschalk and Anderson 2012).

As the leading policy document guiding the long-range development of local jurisdictions in the United States, the comprehensive plan plays a critical role in planning for sustainability. The standards described in this report are designed to provide a concise resource and planning tool for communities across the country to use in evaluating existing comprehensive plans and developing new ones that advance the “triple bottom line” of sustainability: environmental, economic, and social goals. They also provide the opportunity to establish a national standard and designation system to promote excellence in comprehensive planning.

This chapter begins by summarizing lessons learned from working with the pilot communities to finalize the plan standards framework and evaluation system, including resolution of issues identified during the multiyear initiative. The chapter then presents observations on how the traditional comprehensive planning model continues to evolve to meet the challenges faced by planners and their communities in the twenty-first century—a trend that is epitomized by the comprehensive plan standards for sustaining places.

LESSONS LEARNED FROM THE PILOT COMMUNITIES

The two major lessons learned from piloting the standards with a diverse group of communities and participants in the workshop at the 2014 National Planning Conference (NPC) in Atlanta are the following:

1. The standards framework and plan evaluation process work when applied to real comprehensive plans that are under development.
2. The standards framework has a significant contribution to make to the practice of comprehensive planning.

Each pilot community representative reported that using the standards was a positive experience that improved the comprehensive planning process. They all found the best practices to be a practical tool and resource for guiding plan making in their communities. While the standards depart from the typical comprehensive plan table of contents of the past century, they capture the leading edge of contemporary planning for sustaining places. Based on the pilot community experience, the issues that arose during development of the standards are manageable and are outweighed by the potential value of incorporating the best practices into the “DNA” of the next generation of comprehensive plans.

As noted in Chapter 1, APA’s Plan Standards Working Group and participants in the workshop at the 2013 NPC in Chicago identified six specific issues related to the draft standards and proposed scoring procedure in particular. Working with the pilot communities provided clear evidence to resolve four of the six issues, as follows:

- **One size fits all:** This issue related to the question as to whether one set of standards could apply to a variety of different types and sizes of jurisdictions, each with its own distinctive characteristics. However, it did not prove to be a problem, even with the wide range of community types in the pilot group. The standards were flexible enough to

accommodate large and small communities in different areas of the country. With respect to scoring, the “Not Applicable” category was added to allow for elimination of practices that are not applicable due to local conditions (e.g., transit-oriented development in a rural community lacking transit service).

- **Scoring:** The Plan Standards Working Group found it challenging to develop objective, quantitative scoring criteria to evaluate plan quality, and recommended that further work be done to address this issue. The scoring criteria for different categories of achievement described in Chapter 2 were developed with the input of the pilot communities to provide direction for plan reviewers. While reviewers still need to apply a level of professional judgment, these criteria proved helpful for the pilot community representatives and participants in the 2014 NPC in Atlanta in clarifying the differences between the categories.
- **Outsider evaluation:** This issue would pertain to a formal plan designation process with outside reviewers (see Appendix D). The concern was that such reviewers might not understand the distinctive characteristics of the local community applying for designation. To resolve this issue, the pilot communities working group developed a draft application form for Sustaining Places comprehensive plan designation. This form was filled out by the communities that volunteered their completed comprehensive plans to test the plan scoring procedure (see the application template in Appendix E). In addition to background information and context for the comprehensive plan, the form asks the applicant to provide a self-rating of the plan. This will ensure that the outside reviewers are aware of the community’s own assessments of plan strengths and weaknesses, as a comparative check for their ratings. Information is also requested on the locations within the plan of the referenced best practices. This will tell reviewers where to find specific practices, which could be difficult if the plan is structured in an uncommon format. The pilot community representatives and participants in the 2014 NPC workshop in Atlanta found this information to be extremely useful for their independent review of the plans.
- **Self-rating versus formal designation:** This issue was raised by participants in the 2013 NPC workshop in Chicago who generally endorsed the plan standards as providing a valuable resource for communities on comprehensive planning but questioned whether a formal designation program is necessary or desirable. Many of their concerns, such as the “one-size-fits-all” and the “scoring” issues, were resolved

with the input of the pilot communities as described above. Moreover, the pilot community representatives agreed that a designation program would bring a level of credibility and rigor that would not be possible if the plan standards were made available only as an informal resource.

The other two issues, innovation and implementation, were not fully resolved during the pilot community process and will require further study if a formal plan designation program is to be established. They do not significantly affect the applicability of the plan standards and scoring system, which communities can use now to evaluate their comprehensive plans.

- **Innovation:** This issue is concerned with whether the plan standards could be used by communities as a checklist leading to “cookie-cutter” plans. To help address this issue, the draft scoring system developed with the input of the pilot communities allowed for up to 15 points to be awarded to the total plan score at the discretion of the reviewer for plans with particularly innovative approaches. However, none of the pilot community representatives or NPC workshop participants opted to apply these bonus points in their reviews of the test comprehensive plans. So it remains to be seen if such a provision is desirable or necessary to inspire innovative plans and, if it is to be included, whether the number of potential points is appropriate or should be adjusted. As a general comment, the standards were designed to provide a framework within which communities have the flexibility to pursue creative approaches in the content, processes, and outcomes of the comprehensive plan, without being penalized if their unique approach does not include all of the required practices.
- **Implementation:** This issue relates not just to how well the plan itself addresses implementation but also to how well communities achieve plan goals and objectives over time, including both the performance of assigned responsibilities and the outcomes of those actions. This issue would need to be a topic of further study in establishing a formal designation program. From a practical standpoint, taking into account implementation progress would add a level of complexity (and a timescale) beyond the more straightforward assessment of the comprehensive plan described in this report. One possibility is the establishment of a maintenance provision as part of the designation system whereby a community would need to demonstrate implementation progress after a certain period of years to retain Sustaining Places designation.

THE TWENTY-FIRST-CENTURY COMPREHENSIVE PLAN

I believe that the preparation and maintenance of the general plan is the primary, continuing responsibility of the city-planning profession. It will continue to be our most significant contribution to the art of local government. (Kent 1990, 2)

Originally published in 1964, T.J. Kent Jr.'s book *The Urban General Plan* highlighted the key role of the general (or comprehensive) plan. It traced the roots of the plan back to the work of Frederick Law Olmsted Jr., Edward Bassett, and Alfred Bettman in the second and third decades of the twentieth century, thus representing the culmination of about 50 years of comprehensive planning practice to that point. According to Kent, the general plan should be long-range, comprehensive, a top-down general statement of policy (as opposed to a specific implementation program), and focused on physical development. Kent called for the plan to be divided into a series of elements addressing different subject matters. He identified the city council (or similar governing body) as the “principal client” of the plan and called for making the completed plan available to citizens—rather than engaging them in its preparation.

In the last decades of the past century, spurred by societal trends and their impacts on planning practice, the traditional comprehensive planning model that Kent described began to change. Key influences included, among others, a new emphasis on community engagement in the planning process; a broadening of planners' concerns to encompass the social and environmental in addition to the physical realms; and increasing attention to implementation (to counter the proverbial “plan that sits on the shelf”). In 1987 the World Commission on Environment and Development published *Our Common Future* (also known as the Brundtland Report), which defined sustainable development as “development which meets the needs of the present without compromising the ability of future generations to meet their own needs (United Nations 1987)” The idea of sustainability is commonly framed as the “three Es”—environment, economy, and equity—or the “triple bottom line” of people, prosperity, and planet.

A session at the 1999 National Planning Conference in Seattle and accompanying article in the conference proceedings explored the significant changes to the practice of comprehensive planning that occurred during the latter part of the twentieth century and what these changes might mean

for the twenty-first century comprehensive plan. The authors described the emerging comprehensive plan model as values driven, collaborative, thematic based, linking process and outcome, regional in focus, and beyond paper (Rouse, Chandler, and Arason 1999):

- **Values driven:** The plan addresses the issues and manifests the values expressed by the community.
- **Collaborative:** The planning process meaningfully engages citizens, organizations, businesses, and other community stakeholders.
- **Thematic based:** The plan is organized into cross-cutting themes rather than discrete elements.
- **Linking process and outcome:** The plan connects community values to a clearly defined action agenda.
- **Regional in focus:** The plan addresses issues that are regional in scope.
- **Beyond paper:** The plan uses digital technology, visualizations, and other techniques that transcend the traditional limitations of written documents.

The above characteristics address process, structure, and scope more than the substance of the comprehensive plan. In the plan standards framework described in this report, they are mostly reflected in the best practices under Processes and Attributes. Fifteen years following the Seattle conference—with issues such as climate change, inequality, and environmental deterioration becoming ever more prominent—it is appropriate to add “sustainable” as a seventh characteristic of the twenty-first century comprehensive plan. In the plan standards framework, the best practices under Principles address substantive sustainability issues.

Looking toward the future, the following are some key trends that likely will significantly affect comprehensive planning practice.

Resilience

Hurricane Katrina, Superstorm Sandy, and other extreme weather events have highlighted the need for communities to become more resilient. Resilience (the ability to recover from disturbance and change) applies not just to anticipating natural disasters and planning for post-disaster recovery but to other shocks such as severe economic downturns. Some have referred to resilience as the “new sustainability”; however, it is important to distinguish between the two. Resilience allows a community to respond to and recover from specific disruptive events, while (per the Brundtland Report definition) sustainability seeks to preserve for future generations the re-

sources and opportunities that exist for current generations. The two concepts need to work hand in hand (Schwab 2014).

Systems Thinking

The traditional comprehensive plan is organized into discrete plan elements such as land use, transportation, housing, and community facilities, a structure reinforced by many state planning statutes that mandate plan content. In reality, these subject areas operate as complex systems whose interactions determine the form and function of an even more complex system: the community as a whole. To apply systems thinking to comprehensive planning, planners should consider how elements that are typically prepared separately (such as land use and transportation) interconnect, as well as how an understanding of basic system characteristics might inform plan development. For example, the City of Albany, New York, organized the Albany, NY 2030 Comprehensive Plan around eight interrelated systems and used system principles (such as leverage points, feedback loops, and levels of the system hierarchy) to help determine implementation priorities (cited in Godschalk and Anderson 2012). (For a good overview of systems thinking, including 12 places to intervene in complex systems, see Meadows 2008.)

Community Engagement

Rapid advances in digital technology—from social media to web-based GIS platforms to robust sources of “open data”—are transforming the ways citizens can be involved in comprehensive planning processes. Digital tools allowing for real-time assessment of the impacts of alternative future scenarios in public meetings is an example, as are online tools for citizen outreach, generation of ideas, and voting on priorities. In using such tools, planners need to be cognizant of the so-called “digital divide” in order to ensure that traditionally underrepresented groups are not further marginalized in the planning process, and planners need to consider other means of reaching these groups. This may involve, for example, connecting with trusted leaders and engaging in settings comfortable and accessible to these citizens.

Equity

Increasing inequality—as reflected in the income gap between the richest and poorest members of society—has emerged as a major national concern, particularly in the years following the Great Recession of 2007 to 2009. This trend relates not only to economic status but also to basic quality-of-life issues such as resilience (minority and low-income populations are especially vulnerable to the impacts of natural disasters; see

Schwab 2014) and public health (minority and low-income populations have higher incidences of chronic conditions such as obesity and lower life expectancies than more affluent populations; see Flegal et. al. 2010; Haley et al. 2012). Equity, one of the three “Es” of sustainability, is arguably the most difficult for planners to address. Along these lines, planners should consider the implications for their work of the AICP Code of Ethics, which as an aspirational principle calls on planners to “seek social justice by working to expand choice and opportunity for all persons, recognizing a special responsibility to plan for the needs of the disadvantaged and promote racial and economic integration” (American Planning Association 2009).

Implementation

In a time of fiscal constraints and questioning of the role of government, effective implementation is vital to establish the value of planning. Applied to the comprehensive plan, this means not just revising development regulations but also tying the capital improvements program to plan goals, objectives, and actions, and—very importantly—demonstrating returns on investment. It means building new implementation models, such as diverse partnerships and coalitions across sectors. It means setting priorities and measures of accountability, including feasible targets and metrics to determine progress. And it means communicating with the community in ways that help planners connect with citizens, such as telling stories about tangible successes.

Adaptation

Planning can no longer follow a simple linear process in which public policies and investments are based on trend-line projections of local population and economic growth. Conditions that used to be considered stable—such as the climate, resource availability and costs, and the local employment base—are increasingly unstable and outside the control of local governments. Present-day planning must proceed as a learning and adaptation process, in which ongoing plan updates factor evidence of regional, national, and global change into local decisions. This means that today’s plans need to account for, and adjust to, a wider range of information about outside impacts. For example, coastal communities have to track up-to-date estimates of sea level rise resulting from climate change in order to ensure that their comprehensive plans adequately protect future public safety. This approach has been termed “adaptive governance” (Brunner and Lynch 2010) or “anticipatory governance” (Quay 2010). As a form of systems thinking, an adaptive approach would use monitor-

ing and feedback mechanisms to adjust implementation programs on an ongoing basis.

The Comprehensive Plan Moving Forward

There are no easy paths to addressing these and other complexities affecting comprehensive planning practice in the twenty-first century. The plan standards framework described in this report is not a prescription or a recipe. Rather, it is a resource and benchmark for communities to use as they develop solutions that work in their particular circumstances. For example, best practices under Principles provide direction for addressing issues related to resilience; the Authentic Participation best practices provide direction for community engagement; the Accountable Implementation best practices provide direction for implementation; and best practices under Attributes provide direction for communication.

Systems thinking is embedded in the six principles and associated best practices, which cut across traditional plan elements, and can be utilized in applying all components of the plan framework. Adaptability is reflected in best practices for Attributes and includes creative strategies for dealing with community change, uncertainty, and development needs, as well as Accountable Implementation best practices that call for monitoring and measuring implementation progress. Interwoven equity is one of the principles and is integrated into best practices throughout the framework. The ultimate aim is to help planners and the communities realize the powerful potential of the comprehensive plan to sustain twenty-first century places.

APPENDIX A: LINKS TO PLAN DOCUMENTS AND UPDATES AND SUSTAINABILITY CERTIFICATION PROGRAMS

PLAN DOCUMENTS AND UPDATES

Auburn, Washington

City of Auburn Comprehensive Plan (2011). Available at www.auburnwa.gov/doing_business/community_development/planning/comprehensive_plan.htm.

Austin, Texas

Imagine Austin (2012). Available at www.austintexas.gov/department/our-plan-future.

Goshen, Indiana

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Town of Foxborough, Massachusetts

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SUSTAINABILITY CERTIFICATION PROGRAMS*

Audubon International, Sustainable Communities Program

www.auduboninternational.org/sustainable-communities-program

STAR Communities, STAR Community Rating System

www.starcommunities.org/certification/SustainableJersey
www.sustainablejersey.com/

Sustainable Sites Initiative (SITES™)

www.sustainablesites.org/

U.S. Green Building Council, Leadership in Energy & Environmental Design (LEED)

www.usgbc.org/leed

U.S. Green Building Council, LEED for Neighborhood Development (LEED-ND)

www.usgbc.org/resources/leed-neighborhood-development

*See Appendix D for descriptions of these programs (p. 57).

APPENDIX B: BEST PRACTICE DEFINITIONS

This appendix provides definitions of the best practices for the principles, processes, and attributes that comprise the comprehensive plan standards framework for sustaining places (see Chapter 2). These definitions are intended as a resource for communities seeking to understand the framework and how its individual components apply to their circumstances. They are organized into three sections: (1) Best Practices for Plan Principles, (2) Best Practices for Plan Processes, and (3) Best Practices for Plan Attributes.

Comprehensive plans for sustaining places should endeavor to incorporate the full slate of best practices while allowing for each community's unique context, environment, and issues. By addressing and implementing all possible best practices, a community can set a path towards a high level of sustainability.

BEST PRACTICES FOR PLAN PRINCIPLES

1. Livable Built Environment. *Ensure that all elements of the built environment, including land use, transportation, housing, energy, and infrastructure, work together to provide sustainable, green places for living, working, and recreation, with a high quality of life.*

There are 11 recommended best practices for the first plan principle, Livable Built Environment:

- 1.1 Plan for multimodal transportation.** A multimodal transportation system allows people to use a variety of transportation modes, including walking, biking, and other mobility devices (e.g., wheelchairs), as well as transit where possible. Such a system reduces dependence on automobiles and encourages more active forms of personal transportation, improving health outcomes and increasing the mobility of those who are unable or unwilling to drive (e.g., youth, persons with disabilities, the elderly). Fewer cars on the road also translates to reduced air pollution and greenhouse gas emissions with associated health and environmental benefits.
- 1.2 Plan for transit-oriented development.** Transit-oriented development (TOD) is characterized by a concentration of higher-density mixed use development around transit stations and along transit lines, such that the location and the design of the development

encourage transit use and pedestrian activity. TOD allows communities to focus new residential and commercial development in areas that are well connected to public transit. This enables residents to more easily use transit service, which can reduce vehicle-miles traveled and fossil fuels consumed and associated pollution and greenhouse gas emissions. It can also reduce the need for personal automobile ownership, resulting in a decreased need for parking spaces and other automobile-oriented infrastructure.

- 1.3 Coordinate regional transportation investments with job clusters.** Coordinating regional transportation systems and areas of high employment densities can foster both transportation efficiency and economic development. This is important for creating and improving access to employment opportunities, particularly for disadvantaged populations without easy access to personal automobiles.
- 1.4 Provide complete streets serving multiple functions.** Complete streets are streets that are designed and operated with all users in mind—including motorists, pedestrians, bicyclists, and public transit riders (where applicable) of all ages and abilities—to support a multimodal transportation system. A complete street network is one that safely and conveniently accommodates all users and desired functions, though this does not mean that all modes or functions will be equally prioritized on any given street segment.

Streets that serve multiple functions can accommodate travel, social interaction, and commerce to provide for more vibrant neighborhoods and more livable communities.

- 1.5 Plan for mixed land-use patterns that are walkable and bikeable.** Mixed land-use patterns are characterized by residential and nonresidential land uses located in close proximity to one another. Mixing land uses and providing housing in close proximity to everyday destinations (e.g., shops, schools, civic places, workplaces) can increase walking and biking and reduce the need to make trips by automobile. Mixed land-use patterns should incorporate safe, convenient, accessible, and attractive design features (e.g., sidewalks, bike street furniture, bicycle facilities, street trees) to promote walking and biking.
- 1.6 Plan for infill development.** Infill development is characterized by development or redevelopment of undeveloped or underutilized parcels of land in otherwise built-up areas, which are usually served by or have ready access to existing infrastructure and services. Focusing development and redevelopment on infill sites takes advantage of this existing infrastructure while helping to steer development away from greenfield sites on the urban fringe, which are more expensive to serve with infrastructure and services.
- 1.7 Encourage design standards appropriate to the community context.** Design standards are specific criteria and requirements for the form and appearance of development within a neighborhood, corridor, special district, or jurisdiction as a whole. These standards serve to improve or protect both the function and aesthetic appeal of a community. Design standards typically address building placement, building massing and materials, and the location and appearance of elements (such as landscaping, signage, and street furniture). They can encourage development that is compatible with the community context and that enhances sense of place. While the design standards will not be specified in the comprehensive plan itself, the plan can establish the direction and objectives that detailed standards should achieve.
- 1.8 Provide accessible public facilities and spaces.** Public facilities play an important role in communities and they should be able to accommodate persons of all ages and abilities. Public facilities and spaces should be equitably distributed throughout the community.

They should be located and designed to be safe, served by different transportation modes, and accessible to visitors with mobility impairments.

- 1.9 Conserve and reuse historic resources.** Historic resources are buildings, sites, landmarks, or districts with exceptional value or quality for illustrating or interpreting the cultural heritage of a community. They can include resources eligible for listing on the National Register of Historic Places, a state inventory of historic resources in association with a program approved by the secretary of the interior, or a local inventory of historic resources in association with a program approved by a state program or directly by the secretary of the interior (in states without approved programs). It is important to address the conservation and reuse of historic resources due to their cultural and historic significance to a community and the role they play in enhancing a community's sense of place, economy (through tourism and other economic activity), and environment (by reducing the need to construct new buildings that consume land and resources).
- 1.10 Implement green building design and energy conservation.** Green building designs that meet the standards of the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) or similar rating system are energy and resource efficient, reduce waste and pollution, and improve occupant health and productivity. Energy conservation refers to measures that reduce energy consumption through energy efficiency or behavioral change. Together these approaches reduce energy costs and improve environmental quality and community health. They can be implemented through strategies such as code requirements, regulatory incentives, and investment programs (e.g., grants to homeowners for weatherization of their homes).
- 1.11 Discourage development in hazard zones.** A hazard zone is an area with a high potential for natural events, such as floods, high winds, landslides, earthquakes, and wildfires. Plans should discourage development in hazard zones, including any construction or site disturbance within an area of high risk relative to other areas within a jurisdiction. Hazards that occur within these zones are known to cause human casualties and damage to the built environment. Discouraging development in hazard zones protects the natural environment, people, and property.

2. Harmony with Nature. *Ensure that the contributions of natural resources to human well-being are explicitly recognized and valued and that maintaining their health is a primary objective.*

There are 10 recommended best practices for the second plan principle, Harmony with Nature:

2.1 Restore, connect, and protect natural habitats and sensitive lands. Natural habitats are areas or landscapes—such as wetlands, riparian corridors, and woodlands—inhabited by a species or community of species, and can include those designated as rare and endangered. Sensitive lands, including steep slopes and geographically unstable areas, contain natural features that are environmentally significant and easily disturbed by human activity. These resources provide important environmental benefits. Restoring degraded habitat can reestablish natural diversity and associated ecosystem services.

2.2 Plan for the provision and protection of green infrastructure. Green infrastructure is a strategically planned and managed network of green open spaces, including parks, greenways, and protected lands. Green infrastructure may also be defined as features that use natural means such as vegetation to capture, store, and infiltrate stormwater runoff, often in urban settings. This includes features such as bioswales, rain gardens, and green roofs. Green infrastructure provides a range of critical functions and ecosystem services to communities, such as wildlife habitat, stormwater management, and recreational opportunities.

2.3 Encourage development that respects natural topography. Sensitive natural topography includes features such as hillsides, ridges, steep slopes, or lowlands that can pose challenges to development. Taking these features into account in planning for private development and public infrastructure can reduce construction costs, minimize natural hazard risks from flooding or landslides, and mitigate the impacts of construction on natural resources, including soils, vegetation, and water systems.

2.4 Enact policies to reduce carbon footprints. The term “carbon footprint” is used to describe the amount of carbon dioxide and other greenhouse gases emitted by a given entity (such as an individual, company, or city) in a certain time frame. It provides a measure of the environmental impact of a particular lifestyle or operation, and encompasses both the direct consumption of

fossil fuels as well as indirect emissions associated with the manufacture and transport of all goods and services the entity consumes. Policies designed to reduce the carbon footprint benefit the environment and have associated benefits on air quality and health. Because these policies are often associated with energy conservation, they can also have positive economic benefits for local governments and community members.

2.5 Comply with state and local air quality standards. Air quality standards are limits on the quantity of pollutants in the air during a given period in a defined area. Under the Clean Air Act, the U.S. Environmental Protection Agency has established air quality standards for ground-level ozone, lead, particulate matter, carbon monoxide, sulfur dioxide, and nitrogen dioxide to protect public health and the environment and enforced by state and local governments. Pollutants may come from mobile sources (e.g., cars and trucks), area sources (e.g., small businesses), or point sources (e.g., power plants).

2.6 Encourage climate change adaptation. Adapting to climate change involves adjusting natural and human systems to projected impacts such as sea level rise and increased frequencies of extreme weather events as well as long-term shifts in precipitation levels, growing season length, and native vegetation and wildlife populations. Successful adaptation strategies reduce community vulnerability and minimize adverse effects on the environment, economy, and public health.

2.7 Provide for renewable energy use. Renewable energy sources, which are derived directly or indirectly from the sun or natural movements and mechanisms of the environment—including solar, wind, biomass, hydropower, ocean thermal, wave action, and tidal action—are local sources of energy that are naturally regenerated over a short timescale and do not diminish. Use of renewable energy reduces reliance on coal-fired energy plants and other sources of fossil fuels.

2.8 Provide for solid waste reduction. Solid waste is garbage or refuse resulting from human activities. It can include food scraps, yard waste, packaging materials, broken or discarded household items, and construction and demolition debris. Many common solid waste items—such as glass, aluminum and other metals, paper and cardboard, certain plastics, and food scraps and other organic materials—can be diverted from the waste stream and recycled into new products or composted.

- 2.9 Encourage water conservation and plan for a lasting water supply.** Reducing water use by buildings and landscapes through water conservation and planning for a lasting water supply are critical to a community's long-term sustainability, particularly in regions with limited precipitation or other sources of water. Access to ground or surface water sources sufficient for anticipated future water use levels and a well-maintained supply system to deliver this water to end users are important to ensure.
- 2.10 Protect and manage streams, watersheds, and floodplains.** A stream is a body of water flowing over the ground in a channel. A watershed is an area of land drained by a river, river system, or other body of water. A floodplain is an area of low-lying ground adjacent to a body of water that is susceptible to inundation. These resources have typically been extensively altered in urban environments—for example, by replacing streams with underground culverts or constructing buildings in the floodplain—negatively affecting the natural and beneficial functions they provide. Watershed management is important to protecting water supply, water quality, drainage, storm-water runoff and other functions at a watershed scale.
- 3. Resilient Economy.** *Ensure that the community is prepared to deal with both positive and negative changes in its economic health and to initiate sustainable urban development and redevelopment strategies that foster green business growth and build reliance on local assets.*
 There are seven recommended best practices for the third plan principle, Resilient Economy:
- 3.1 Provide the physical capacity for economic growth.** Economic growth is characterized by an increase in the amounts of goods and services that an economy is able to produce over time. Providing the physical capacity for economic growth means ensuring that adequate space will be available for commercial and industrial development and redevelopment for non-residential land uses. Communities need to plan for the necessary amount of land and structures appropriately built, sized, and located to support existing and future production of goods and services based on current and projected economic conditions. This could entail decline as well as growth in demand depending on market conditions and as certain economic sectors become obsolete.
- 3.2 Plan for a balanced land-use mix for fiscal sustainability.** A balanced land-use mix for fiscal sustainability is characterized by a pattern that includes both residential and nonresidential uses, such that the long-term cost of providing a desirable level of public services to residents, business owners, and visitors is closely matched to the tax or user-fee revenue generated by those uses.
- 3.3 Plan for transportation access to employment centers.** Plans should ensure that areas with high job density are accessible to employees via one or more travel modes (automobile, transit, bicycling, walking). More transportation modes serving the employment center offer employees a wider range of commuting options. This is important for improving access to employment opportunities, particularly among populations that may not have personal vehicles.
- 3.4 Promote green businesses and jobs.** A green business is any business offering environmentally friendly products and services through sustainable business models and practices. Green jobs are provided by agricultural, manufacturing, research and development, administrative, service, or other business activities that contribute substantially to preserving or restoring environmental quality. Green businesses and jobs may include, but are not limited to, those associated with industrial processes with closed-loop systems in which the wastes of one industry are the raw materials for another.
- 3.5 Encourage community-based economic development and revitalization.** Community-based economic development is development that promotes, supports, and invests in businesses that serve local needs and are compatible with the vision, character, and cultural values of the community. This approach encourages using local resources in ways that enhance economic opportunities while improving social conditions and supporting locally owned and produced goods and services. These activities foster connections and a sense of place, reduce the need for imports, and stimulate the local economy. This in turn can increase investment in and revitalization of downtowns, commercial areas, neighborhoods, and other place-based community resources.
- 3.6 Provide and maintain infrastructure capacity in line with growth or decline demands.** Keeping infrastructure capacity in line with demand involves ensuring that structures and networks are appropri-

ately sized to adequately serve existing and future development. This is important in balancing quality of service provision with costs to the local government. Infrastructure planning may include decommissioning or realigning infrastructure in neighborhoods experiencing protracted population decline—for example, to facilitate a transition from residential uses to green infrastructure, urban agriculture, or renewable energy production.

3.7 Plan for post-disaster economic recovery. Planning for post-disaster economic recovery before a disaster happens helps communities resume economic activities following damage or destruction by a natural or human-made disaster (e.g., hurricane, landslide, wildfire, earthquake, terrorist attack). Plans for post-disaster recovery are characterized by officially adopted policies and implementation tools put in place before or after an event to direct recovery after a disaster event has occurred.

4. Interwoven Equity. *Ensure fairness and equity in providing for the housing, services, health, safety, and livelihood needs of all citizens and groups.*

There are nine recommended best practices for Interwoven Equity, the fourth plan principle:

4.1 Provide a range of housing types. A range of housing types is characterized by the presence of residential units of different sizes, configurations, tenures, and price points located in buildings of different sizes, configurations, ages, and ownership structures. Providing a range of housing types accommodates varying lifestyle choices and affordability needs and makes it possible for households of different sizes and income levels to live in close proximity to one another.

4.2 Plan for a jobs-housing balance. A jobs/housing balance is characterized by a roughly equal number of jobs and housing units (households) within a commuter shed. A strong jobs-housing balance can also result in jobs that are better matched to the labor force living in the commuter shed, resulting in lower vehicle-miles traveled, improved worker productivity, and higher overall quality of life. When coordinated with multimodal transportation investments, it improves access to employment opportunities for disadvantaged populations.

4.3 Plan for the physical, environmental, and economic improvement of at-risk, distressed, and disadvantaged neighborhoods. At-risk neighborhoods are experiencing falling property values, high real estate

foreclosure rates, rapid depopulation, or physical deterioration. Distressed neighborhoods suffer from disinvestment and physical deterioration for many reasons, including (but not limited to) the existence of cheap land on the urban fringe, the financial burdens of maintaining an aging building stock, economic restructuring, land speculation, and the dissolution or relocation of anchor institutions. A disadvantaged neighborhood is a neighborhood in which residents have reduced access to resources and capital due to factors such as high levels of poverty and unemployment and low levels of educational attainment. These neighborhoods often exhibit high rates of both physical disorder (e.g., abandoned buildings, graffiti, vandalism, litter, disrepair) and social disorder (e.g., crime, violence, loitering, drinking and drug use). Such neighborhoods often need targeted interventions to prevent further decline and jump-start revitalization.

4.4 Plan for improved health and safety for at-risk populations. An at-risk population is characterized by vulnerability to health or safety impacts through factors such as race or ethnicity, socioeconomic status, geography, gender, age, behavior, or disability status. These populations may have additional needs before, during, and after a destabilizing event such as a natural or human-made disaster or period of extreme weather, or throughout an indefinite period of localized instability related to an economic downturn or a period of social turmoil. At-risk populations include children, the elderly, persons with disabilities, those living in institutionalized settings, those with limited English proficiency, and those who are transportation disadvantaged.

4.5 Provide accessible, quality public services, facilities, and health care to minority and low-income populations. A public service is a service performed for the benefit of the people who live in (and sometimes those who visit) the jurisdiction. A public facility is any building or property—such as a library, park, or community center—owned, leased, or funded by a public entity. Public services, facilities, and health care should be located so that all members of the public have safe and convenient transportation options to reach quality services and facilities that meet or exceed industry standards for service provision. Minority and low-income populations are often underserved by public services and facilities and health care providers.

4.6 Upgrade infrastructure and facilities in older and substandard areas. Infrastructure comprises the physical systems that allow societies and economies to function. These include water mains, storm and sanitary sewers, electrical grids, telecommunications facilities, and transportation facilities such as bridges, tunnels, and roadways. Upgrading is the process of improving these infrastructure and facilities through the addition or replacement of existing components with newer versions. An older area is a neighborhood, corridor, or district that has been developed and continuously occupied for multiple decades. A substandard area is a neighborhood, district, or corridor with infrastructure that fails to meet established standards. Targeting infrastructure in older and substandard areas provides a foundation for further community revitalization efforts and improves quality of life for residents in these neighborhoods.

4.7 Plan for workforce diversity and development. Workforce diversity is characterized by the employment of a wide variety of people in terms of age, cultural background, physical ability, race and ethnicity, religion, and gender identity. Workforce development is an economic development strategy that focuses on people rather than businesses; it attempts to enhance a region's economic stability and prosperity by developing jobs that match existing skills within the local workforce or training workers to meet the labor needs of local industries. Promoting workforce diversity and development is a vital piece of economic development efforts, making areas attractive to employers and enabling residents to find employment in their communities.

4.8 Protect vulnerable populations from natural hazards. A natural hazard is a natural event that threatens lives, property, and other assets. Natural hazards include floods, high wind events, landslides, earthquakes, and wildfires. Vulnerable neighborhoods face higher risks than others when disaster events occur and may require special interventions to weather those events. A population may be vulnerable for a variety of reasons, including location, socioeconomic status or access to resources, lack of leadership and organization, and lack of planning.

4.9 Promote environmental justice. Environmental justice is defined as the fair treatment and meaningful involvement of all people, regardless of race, color, national origin, or income, in the development, implementation, and enforcement of environmental laws,

regulations, and policies. Its goal is to provide all communities and persons across the nation with the same degree of protection from environmental and health hazards and equal access to decision making processes. This results in healthy environments for all in which to live, learn, and work.

5. Healthy Community. *Ensure that public health needs are recognized and addressed through provisions for healthy foods, physical activity, access to recreation, health care, environmental justice, and safe neighborhoods.*

There are seven recommended best practices for Healthy Community, the fifth plan principle:

5.1 Reduce exposure to toxins and pollutants in the natural and built environments. Toxins are poisonous substances capable of causing disease in living organisms. Pollutants are waste substances or forms of energy (noise, light, heat), often resulting from industrial processes, that can contaminate air, water, and soil and cause adverse changes in the environment. Examples include carbon monoxide and other gases as well as soot and particulate matter produced by fossil fuel combustion; toxic chemicals used or created in industrial processes; pesticides and excess nutrients from agricultural operations; and toxic gases released by paints or adhesives. Reducing exposure to toxins and pollutants improves the health of individuals and communities, with concomitant improvements in quality of life and health care cost savings.

5.2 Plan for increased public safety through the reduction of crime and injuries. Public safety involves prevention of and protection from events such as crimes or disasters that could bring danger, injury, or damage to the general public. Although addressing crime is typically considered a governmental responsibility (police, fire, and emergency services), it can also be reduced through environmental design using crime prevention through environmental design (CPTED) principles.

5.3 Plan for the mitigation and redevelopment of brownfields for productive uses. A brownfield is defined by the federal government as any abandoned, idled, or underused real property where expansion or redevelopment is complicated by the presence or potential presence of environmental contamination. Redevelopment of these sites requires an environmental assessment to determine the extent of con-

tamination and to develop remediation strategies. The feasibility of site cleanup, market forces, and other factors may help define appropriate reuse options, which range from open space to mixed use development. Reusing brownfield sites returns underutilized land to productive use and reduces pressure to develop greenfield sites.

5.4 Plan for physical activity and healthy lifestyles. A healthy lifestyle is characterized by individual practices and behavioral choices that enhance health and wellbeing. Barriers to the design of the physical environment can influence rates of physical activity and health benefits. Active transportation facilities (e.g., sidewalks and bike lanes) and accessible, equitably distributed recreational opportunities support physical activity and healthy lifestyles.

5.5 Provide accessible parks, recreation facilities, greenways, and open space near all neighborhoods. Parks are areas of land—often in a natural state or improved with facilities for rest and recreation—set aside for the public’s use and enjoyment. Greenways are strips of undeveloped land that provide corridors for environmental and recreational use and connect areas of open space. These facilities offer a range of benefits to residents, including opportunities for increased physical activity. The proximity of parks to neighborhoods supports increased physical activity among residents; however, social and environmental impediments such as crime, unsafe pedestrian conditions, and noxious land uses may decrease accessibility and subsequent use of these facilities. Plans should ensure that the type of park and its function and design are appropriate for its locational context.

5.6 Plan for access to healthy, locally grown foods for all neighborhoods. A lack of access to fresh, healthy foods contributes to obesity and negative health outcomes. In many urban areas, residents face difficulties in buying affordable or good-quality fresh food, a situation commonly referred to as a “food desert.” Healthy foods include those that are fresh or minimally processed, naturally dense in nutrients, and low in fat, sodium, and cholesterol. Locally grown goods are those produced in close proximity to consumers in terms of both geographic distance and the supply chain. Though there is no standard definition of locally grown, sources can range from backyards and community gardens to farms within the region or state.

5.7 Plan for equitable access to health care providers, schools, public safety facilities, and arts and cultural facilities. Equitable access ensures services and facilities are reachable by all persons, regardless of social or economic background. Healthcare providers are those individuals, institutions, or agencies that provide healthcare services to consumers. Schools are institutions that provide education or instruction. Public safety facilities provide safety and emergency services to a community, including police and fire protection. Arts and cultural facilities provide programs and activities related to the arts and culture, including performing arts centers, concert halls, museums, galleries, and other related facilities.

6. Responsible Regionalism. *Ensure that all local proposals account for, connect with, and support the plans of adjacent jurisdictions and the surrounding region.*

There are nine recommended best practices for Responsible Regionalism, the sixth and final plan principle:

6.1 Coordinate local land-use plans with regional transportation investments. A local land-use plan is an officially adopted long-range comprehensive or sub-area (i.e., a neighborhood, corridor, or district) plan describing or depicting desirable future uses of land within a jurisdiction. Regional transportation investments are any projects listed in a transportation improvement program intended to improve a transportation network serving a multi-jurisdictional area, often included in metropolitan planning organization plans. These projects include investments in highways and streets, public transit, and pedestrian and bicycle systems. Coordinating the two ensures that local land-use decisions take advantage of regional transportation networks where possible to improve mobility and access for residents.

6.2 Coordinate local and regional housing plan goals. A regional housing plan is any officially adopted plan assessing current housing conditions and describing or depicting desirable future housing conditions across a multijurisdictional area. If applicable, these plans include state-mandated regional “fair share” plans establishing target affordable housing unit allocations among constituent jurisdictions. Local communities should provide for affordable housing in a manner consistent with the needs and targets defined in regional housing plans.

- 6.3 Coordinate local open space plans with regional green infrastructure plans.** A local open space plan is any officially adopted functional plan or comprehensive plan element describing or depicting desirable future locations or conditions for open space within a local jurisdiction. A regional green infrastructure plan is any officially adopted functional plan or comprehensive plan element describing or depicting desirable future locations or conditions for parks, greenways, protected lands, and other types of green infrastructure within a multijurisdictional area. Coordinating local open space plans with regional green infrastructure plans can maximize both the ecological and public benefits that green infrastructure provides and can help leverage investment in parks, greenways, trails, and other green infrastructure projects.
- 6.4 Delineate designated growth areas that are served by transit.** A designated growth area is an area delineated in an officially adopted local or regional comprehensive plan where higher density development is permitted or encouraged and urban services—including public transportation (where feasible)—are (or are scheduled to be) available. The purpose of a designated growth area is to accommodate and focus projected future growth (typically over a 20-year timeframe) within a municipality, county, or region through a compact, resource-efficient pattern of development. Ensuring that new growth areas are served by transit improves residents' access and mobility and helps reduce dependence on personal automobiles for travel throughout the region.
- 6.5 Promote regional cooperation and sharing of resources.** Regional cooperation and sharing of resources covers any situation where multiple jurisdictions coordinate the provision of public services and facilities. This includes instances where separate jurisdictions share equipment or facilities, where jurisdictions consolidate service or facility provision, and where jurisdictions share a tax base. The latter is a revenue-sharing arrangement whereby local jurisdictions share tax proceeds from new development for the purposes of alleviating economic disparities among constituent jurisdictions and/or financing region-serving infrastructure and facilities. Exploring opportunities for regional cooperation may allow for improved efficiency and cost savings in local government operations.
- 6.6 Enhance connections between local activity centers and regional destinations.** A local activity center is a node containing a high concentration of employment and commerce. A regional destination is a location that is responsible for a high proportion of trip ends within a regional transportation network, such as a job cluster, a major shopping or cultural center (e.g., large performance art venues and museums) or district, or a major park or recreational facility. A connection between a local activity center and a regional destination may be one or more surface streets, grade-separated highways, off-road trails, or transit corridors. Enhancing connections makes it easier to residents to move throughout the region to access employment opportunities, services, and recreational amenities.
- 6.7 Coordinate local and regional population and economic projections.** A population projection is an estimate of the future population for a particular jurisdiction or multi-jurisdictional area. An economic projection is an estimate of future economic conditions (e.g., employment by industry or sector, personal income, public revenue) for a particular jurisdiction or multijurisdictional area. Common time horizons for population and economic projections are 20 to 30 years. Coordinating local and regional projections minimizes the risk of planning cross purposes as the result of inconsistent data.
- 6.8 Include regional development visions and plans in local planning scenarios.** A regional development vision or plan is a description or depiction of one or more potential future development patterns across a multijurisdictional area, based on a set or sets of policy, demographic, and economic assumptions. A local planning scenario is a description or depiction of a potential future development pattern for a jurisdiction, based on a set of policy, demographic, and economic assumptions. While many scenario planning efforts present preferred scenarios, the real value of such planning is to allow participants to consider alternative ways of realizing a collective vision, including different outcomes that may be likely given the difficulty of accurately predicting certain demographic and economic trends. Considering regional development visions and plans may introduce new opportunities for local development or intergovernmental collaboration.

6.9 Encourage consistency between local capital improvement programs and regional infrastructure priorities. A local capital improvement program is an officially adopted plan describing or depicting capital projects that will be funded within a local jurisdiction during a multiyear (usually five-year) time horizon. Regional infrastructure priorities and funding are the capital projects and monetary resources designated in officially adopted plans or investment policies that identify regional infrastructure facility needs throughout a multijurisdictional area. Coordinating the two helps ensure that local investments are in line with regional visions and mobility goals.

BEST PRACTICES FOR PLAN PROCESSES

7. Authentic Participation. *Ensure that the planning process actively involves all segments of the community in analyzing issues, generating visions, developing plans, and monitoring outcomes.*

There are seven recommended best practices for Authentic Participation:

7.1 Engage stakeholders at all stages of the planning process. Engaging stakeholders throughout the planning process—from creating a community vision to defining goals, principles, objectives, and action steps, as well as in implementation and evaluation—is important to ensure that the plan accurately reflects community values and addresses community priority and needs. In addition, engagement builds public understanding and ownership of the adopted plan, leading to more effective implementation.

7.2 Seek diverse participation in the planning process. A robust comprehensive planning process engages a wide range of participants across generations, ethnic groups, and income ranges. Especially important is reaching out to groups that might not always have a voice in community governance, including representatives of disadvantaged and minority communities.

7.3 Promote leadership development in disadvantaged communities through the planning process. Leaders and respected members of disadvantaged communities can act as important contacts and liaisons for planners in order to engage and empower community members throughout the planning process. Participation in the process can encourage

development of emerging leaders, especially from within communities that may not have participated in planning previously.

7.4 Develop alternative scenarios of the future. Scenario planning is a technique in which alternative visions of the future are developed based upon different policy frameworks and development patterns, allowing communities to envision the consequences of “business as usual” as compared to changed development strategies. Comparing scenarios helps to frame choices and inform community decision making during the planning process.

7.5 Provide ongoing and understandable information for all participants. Information available in multiple, easily accessible formats and languages is key to communicating with all constituents, including non-English speakers. Such communication may involve translating professional terms into more common lay vocabulary.

7.6 Use a variety of communications channels to inform and involve the community. Communications channels that can be used throughout the planning process include traditional media, social media, and Internet-based platforms. Different constituencies may prefer to engage through different channels.

7.7 Continue to engage the public after the comprehensive plan is adopted. Stakeholder engagement should not end with the adoption of the comprehensive plan. An effective planning process continues to engage stakeholders during the implementing, updating, and amending of the plan, so that the public remains involved with ongoing proposals and decisions.

8. Accountable Implementation. *Ensure that responsibilities for carrying out the plan are clearly stated, along with metrics for evaluating progress in achieving desired outcomes.* There are eight recommended best practices for Accountable Implementation:

8.1 Indicate specific actions for implementation. Accountable implementation begins with identification of recommended policy, regulatory, investment, and programmatic actions that indicate the responsible agency, recommended timeframe, and possible sources of funding. These actions are often provided in a matrix or similar format in the implementation section of the comprehensive plan.

- 8.2 Connect plan implementation to the capital planning process.** Capital improvement plans guide and prioritize investments in facilities and infrastructure. A comprehensive plan can be connected to the capital planning process by ensuring that comprehensive plan goals and recommended action strategies align with capital improvement plan priorities and programs.
- 8.3 Connect plan implementation to the annual budgeting process.** Plan objectives linked to budget categories and the timeframe of the community’s annual budgeting process facilitates decision making by elected and appointed officials concerning desired planning outcomes.
- 8.4 Establish interagency and organizational cooperation.** Coordinating the activities and schedules of internal departments and external agencies and organizations increases implementation effectiveness and can leverage resources for achieving local and regional planning goals.
- 8.5 Identify funding sources for plan implementation.** Coordinating public and private funding sources—including federal, state, and foundation grant programs—facilitates implementation of priority plan items. A comprehensive plan that has consistent, clearly presented goals, objectives, and action priorities, backed by demonstrated community support, puts the community in a strong position to secure external funding for implementation.
- 8.6 Establish implementation indicators, benchmarks, and targets.** Indicators allow quantitative measurement of achievement of social, environmental, and economic goals and objectives. Benchmarks are measurements of existing conditions against which progress towards plan goals can be measured. Targets are aspirational levels of achievement for a specific goal or objective often tied to a specific timeframe. Establishing these metrics allow for the monitoring of progress in plan implementation.
- 8.7 Regularly evaluate and report on implementation progress.** A process for evaluating and reporting plan implementation status and progress to both the public and elected officials following adoption ensures accountability and keeps the community informed about plan implementation progress. Such evaluation is typically done on an annual basis.
- 8.8 Adjust the plan as necessary based on evaluation.** A process for adjusting plan goals, strategies, and priorities over time as conditions change or targets are not

met keeps the plan current and in line with present conditions. This process should be tied to evaluation of and reporting on implementation progress.

BEST PRACTICES FOR PLAN ATTRIBUTES

- 9. Consistent Content.** *Ensure that the plan contains a consistent set of visions, goals, policies, objectives, and actions that are based on evidence about community conditions, major issues, and impacts.*
 There are eight recommended best practices for Consistent Content:

- 9.1 Assess strengths, weaknesses, opportunities, and threats.** A technique developed for strategic planning processes, a strengths, weaknesses, opportunities, and threats (SWOT) analysis allows for the identification of the major issues facing the community internally (strengths and weaknesses) and externally (opportunities and threats). A SWOT analysis can inform community discussions and assessment of the impacts of forecasted changes, their planning implications, and appropriate responses.
- 9.2 Establish a fact base.** Comprehensive planning should rest on a base of facts—an evidence-based description and analysis of current conditions and the best possible projection of future trends, such as land use, development, environmental factors, the economy, and population changes.
- 9.3 Develop a vision of the future.** A vision is a statement and image of the community’s desired future in terms of its physical, social, and economic conditions. Typically covering a 20-year timeframe, the vision sets the overall framework for the plan’s goals, objectives, and policies and informs stakeholders of what the plan seeks to achieve.
- 9.4 Set goals in support of the vision.** Goals are statements of community aspirations for achieving the vision. They are implemented through public programs, investments, and initiatives.
- 9.5 Set objectives in support of the goals.** Objectives are measurable targets to be met through community action in carrying out the goals.
- 9.6 Set policies to guide decision making.** Policies are the specification of principles guiding public and private actions to achieve the goals and objectives presented in the plan.

- 9.7 Define actions to carry out the plan.** The implementation section of the plan identifies commitments to carry out the plan, including actions, timeframes, responsibilities, funding sources, and provisions for plan monitoring and updating.
- 9.8 Use clear and compelling features to present the plan.** Maps, tables, graphics, and summaries should be used in addition to text to convey the information, intent, and relationships in the plan. They are important in communicating the key features of the plan and making the ideas contained therein interesting and engaging to residents.
- 10. Coordinated Characteristics.** *Ensure that the plan includes creative and innovative strategies and recommendations and coordinates them internally with each other, vertically with federal and state requirements, and horizontally with plans of adjacent jurisdictions.*
There are nine recommended best practices for Coordinated Characteristics:
- 10.1 Be comprehensive in the plan's coverage.** Comprehensive means covering a range of traditional planning topics (e.g., land use, transportation, housing, natural resources, economic development, community facilities, natural hazards), as well as topics that address contemporary planning needs (e.g., public health, climate change, social equity, local food, green infrastructure, energy). It is important to address the interrelationships among these various topics.
- 10.2 Integrate the plan with other local plans and programs.** An integrated plan includes recommendations from related functional plans and programs (e.g., hazard mitigation, climate adaptation, housing, transportation). It serves as the umbrella for coordinating recommendations from standalone plans into a systems perspective.
- 10.3 Be innovative in the plan's approach.** An innovative plan contains creative strategies for dealing with community change, uncertainty, and development needs. It is open to proposing new approaches and solutions to community problems.
- 10.4 Be persuasive in the plan's communications.** A persuasive plan communicates key principles and ideas in a readable and attractive manner in order to inspire, inform, and engage readers. It uses up-to-date visual imagery to highlight and support its recommendations.
- 10.5 Be consistent across plan components.** A consistent plan frames proposals as sets of mutually reinforcing actions in a systems approach linking the plan with public programs and regulations.
- 10.6 Coordinate with the plans of other jurisdictions and levels of government.** A coordinated plan integrates horizontally with plans and forecasts of adjacent jurisdictions and vertically with federal, state, and regional plans.
- 10.7 Comply with applicable laws and mandates.** A compliant plan meets requirements of mandates and laws concerning preparing, adopting, and implementing comprehensive plans.
- 10.8 Be transparent in the plan's substance.** A transparent plan clearly articulates the rationale for all goals, objectives, policies, actions, and key plan maps. It explains the “what, how, and why” of each recommendation.
- 10.9 Use plan formats that go beyond paper.** A plan that goes beyond paper is produced in a web-based format and/or other accessible, user-friendly formats in addition to a standard printed document. Planning websites can be used both to engage and to inform citizens and different constituencies about the plan.

APPENDIX C: PLAN SCORING MATRIX

BEST PRACTICES FOR PLAN PRINCIPLES	N/A	0	1	2	3	Source
1. LIVABLE BUILT ENVIRONMENT—Ensure that all elements of the built environment, including land use, transportation, housing, energy, and infrastructure, work together to provide sustainable, green places for living, working, and recreation, with a high quality of life.						
1.1. Plan for multimodal transportation.						
1.2. Plan for transit-oriented development.						
1.3. Coordinate regional transportation investments with job clusters.						
1.4. Provide complete streets serving multiple functions.						
1.5. Plan for mixed land-use patterns that are walkable and bikeable.						
1.6. Plan for infill development.						
1.7. Encourage design standards appropriate to the community context.						
1.8. Provide accessible public facilities and spaces.						
1.9. Conserve and reuse historic resources.						
1.10. Implement green building design and energy conservation.						
1.11. Discourage development in hazard zones.						
TOTAL SCORE: 1. LIVABLE BUILT ENVIRONMENT						
2. HARMONY WITH NATURE—Ensure that the contributions of natural resources to human well-being are explicitly recognized and valued and that maintaining their health is a primary objective.						
2.1. Restore, connect, and protect natural habitats and sensitive lands.						
2.2. Plan for the provision and protection of green infrastructure.						
2.3. Encourage development that respects natural topography.						
2.4. Enact policies to reduce carbon footprints.						
2.5. Comply with state and local air quality standards.						
2.6. Encourage climate change adaptation.						
2.7. Provide for renewable energy use.						
2.8. Provide for solid waste reduction.						
2.9. Encourage water conservation and plan for a lasting water supply.						
2.10. Protect and manage streams, watersheds, and floodplains.						
TOTAL SCORE: 2. HARMONY WITH NATURE						

N/A = Not applicable; 0 = Not present; 1 = Low achievement; 2 = Medium Achievement; 3 = High Achievement; Source (indicate where in the plan each best practice is discussed)

APPENDIX C: PLAN SCORING MATRIX

BEST PRACTICES FOR PLAN PRINCIPLES	N/A	0	1	2	3	Source
3. RESILIENT ECONOMY—Ensure that the community is prepared to deal with both positive and negative changes in its economic health and to initiate sustainable development and redevelopment strategies that foster green business growth and build reliance on local assets.						
3.1. Provide the physical capacity for economic growth.						
3.2. Plan for a balanced land-use mix for fiscal sustainability.						
3.3. Plan for transportation access to employment centers.						
3.4. Promote green businesses and jobs.						
3.5. Encourage community-based economic development and revitalization.						
3.6. Provide and maintain infrastructure capacity in line with growth or decline demands.						
3.7. Plan for post-disaster economic recovery.						
TOTAL SCORE: 3. RESILIENT ECONOMY)						
4. INTERWOVEN EQUITY—Ensure fairness and equity in providing for the housing, services, health, safety, and livelihood needs of all citizens and groups.						
4.1. Provide a range of housing types.						
4.2. Plan for a jobs-housing balance.						
4.3. Plan for the physical, environmental, and economic improvement of at-risk, distressed, and disadvantaged neighborhoods.						
4.4. Plan for improved health and safety for at-risk populations.						
4.5. Provide accessible, quality public services, facilities, and health care to minority and low-income populations.						
4.6. Upgrade infrastructure and facilities in older and substandard areas.						
4.7. Plan for workforce diversity and development.						
4.8. Protect vulnerable populations from natural hazards.						
4.9. Promote environmental justice.						
TOTAL SCORE: 4. INTERWOVEN EQUITY						

N/A = Not applicable; 0 = Not present; 1 = Low achievement; 2 = Medium Achievement; 3 = High Achievement; Source (indicate where in the plan each best practice is discussed)

APPENDIX C: PLAN SCORING MATRIX

BEST PRACTICES FOR PLAN PRINCIPLES	N/A	0	1	2	3	Source
5. HEALTHY COMMUNITY —Ensure that public health needs are recognized and addressed through provisions for healthy foods, physical activity, access to recreation, health care, environmental justice, and safe neighborhoods.						
5.1. Reduce exposure to toxins and pollutants in the natural and built environments.						
5.2. Plan for increased public safety through the reduction of crime and injuries.						
5.3. Plan for the mitigation and redevelopment of brownfields for productive uses.						
5.4. Plan for physical activity and healthy lifestyles.						
5.5. Provide accessible parks, recreation facilities, greenways, and open space near all neighborhoods.						
5.6. Plan for access to healthy, locally grown foods for all neighborhoods.						
5.7. Plan for equitable access to health care providers, schools, public safety facilities, and arts and cultural facilities.						
TOTAL SCORE: 5. HEALTHY COMMUNITY						
6. RESPONSIBLE REGIONALISM —Ensure that all local proposals account for, connect with, and support the plans of adjacent jurisdictions and the surrounding region.						
6.1. Coordinate local land-use plans with regional transportation investments.						
6.2. Coordinate local and regional housing plan goals.						
6.3. Coordinate local open space plans with with regional green infrastructure plans.						
6.4. Delineate designated growth areas that are served by transit.						
6.5. Promote regional cooperation and sharing of resources.						
6.6. Enhance connections between local activity centers and regional destinations.						
6.7. Coordinate local and regional population and economic projections.						
6.8. Include regional development visions and plans in local planning scenarios.						
6.9. Encourage consistency between local capital improvement programs and regional infrastructure priorities.						
TOTAL SCORE: 6. RESPONSIBLE REGIONALISM						

N/A = Not applicable; 0 = Not present; 1 = Low achievement; 2 = Medium Achievement; 3 = High Achievement; Source (indicate where in the plan each best practice is discussed)

APPENDIX C: PLAN SCORING MATRIX

BEST PRACTICES FOR PLAN PROCESSES	N/A	0	1	2	3	Source
7. AUTHENTIC PARTICIPATION—Ensure that the planning process actively involves all segments of the community in analyzing issues, generating visions, developing plans, and monitoring outcomes.						
7.1. Engage stakeholders at all stages of the planning process.						
7.2. Seek diverse participation in the planning process.						
7.3. Promote leadership development in disadvantaged communities through the planning process.						
7.4. Develop alternative scenarios of the future.						
7.5. Provide ongoing and understandable information for all participants.						
7.6. Use a variety of communication channels to inform and involve the community.						
7.7. Continue to engage the public after the comprehensive plan is adopted.						
TOTAL SCORE: 7. AUTHENTIC PARTICIPATION						
8. ACCOUNTABLE IMPLEMENTATION—Ensure that responsibilities for carrying out the plan are clearly stated, along with metrics for evaluating progress in achieving desired outcomes.						
8.1. Indicate specific actions for implementation.						
8.2. Connect plan implementation to the capital planning process.						
8.3. Connect plan implementation to the annual budgeting process.						
8.4. Establish interagency and organizational cooperation.						
8.5. Identify funding sources for plan implementation.						
8.6. Establish implementation benchmarks, indicators, and targets.						
8.7. Regularly evaluate and report on implementation progress.						
8.8. Adjust the plan as necessary based on evaluation.						
TOTAL SCORE: 8. ACCOUNTABLE IMPLEMENTATION						

N/A = Not applicable; 0 = Not present; 1 = Low achievement; 2 = Medium Achievement; 3 = High Achievement; Source (indicate where in the plan each best practice is discussed)

APPENDIX C: PLAN SCORING MATRIX

BEST PRACTICES FOR PLAN ATTRIBUTES	N/A	0	1	2	3	Source
9. CONSISTENT CONTENT—Ensure that the plan contains a consistent set of vision, goals, policies, objectives, and actions that are based on evidence about community conditions, major issues, and impacts.						
9.1. Assess strengths, weaknesses, opportunities, and threats.						
9.2. Establish a fact base.						
9.3. Develop a vision of the future.						
9.4. Set goals in support of the vision.						
9.5. Set objectives in support of the goals.						
9.6. Set policies to guide decision making.						
9.7. Define actions to carry out the plan.						
9.8. Use clear and compelling features to present the plan.						
TOTAL SCORE: 9. CONSISTENT CONTENT						
10. COORDINATED CHARACTERISTICS—Ensure that the plan includes creative and innovative strategies and recommendations and coordinates them internally with each other, vertically with federal and state requirements, and horizontally with plans of adjacent jurisdictions.						
10.1. Be comprehensive in the plan's coverage.						
10.2. Integrate the plan with other local plans and programs.						
10.3. Be innovative in the plan's approach.						
10.4. Be persuasive in the plan's communications.						
10.5. Be consistent across plan components.						
10.6. Coordinate with the plans of other jurisdictions and levels of government.						
10.7. Comply with applicable laws and mandates.						
10.8. Be transparent in the plan's substance.						
10.9. Use plan formats that go beyond paper.						
TOTAL SCORE: 10. COORDINATED CHARACTERISTICS						

N/A = Not applicable; 0 = Not present; 1 = Low achievement; 2 = Medium Achievement; 3 = High Achievement; Source (indicate where in the plan each best practice is discussed)

APPENDIX C: PLAN SCORING MATRIX

TOTAL SCORES		NOTES
PRINCIPLES		
1. LIVABLE BUILT ENVIRONMENT		
2. HARMONY WITH NATURE		
3. RESILIENT ECONOMY		
4. INTERWOVEN EQUITY		
5. HEALTHY COMMUNITY		
6. RESPONSIBLE REGIONALISM		
I. TOTAL PRINCIPLES SCORE (ADD 1–6)		
PROCESSES		
7. AUTHENTIC PARTICIPATION		
8. ACCOUNTABLE IMPLEMENTATION		
II. TOTAL PROCESSES SCORE (ADD 7 AND 8)		
ATTRIBUTES		
9. CONSISTENT CONTENT		
10. COORDINATED CHARACTERISTICS		
III. TOTAL ATTRIBUTES SCORE (ADD 9 AND 10)		
TOTAL PLAN SCORE (ADD I, II, AND III)		
TOTAL POINTS AVAILABLE		
<i>Count the number of applicable practices and multiply by 3. The maximum is 255 points (if all practices are applicable).</i>		
PLAN SCORE PERCENTAGE		
<i>(Total Plan Score/Total Points Available)</i>		

Level of Achievement (based on Plan Score Percentage)

Designated: 70–79%

Silver: 80–89%

Gold: 90–100%

APPENDIX D: HOW A COMPREHENSIVE PLAN DESIGNATION PROGRAM WOULD WORK

Both the Sustaining Places Task Force and the Plan Standards Working Group recommended that APA consider establishing a national program to review and designate comprehensive plans that met the standards for sustaining places established through this initiative. They believed that such an APA-managed program of recognizing high-quality plans would benefit communities, the planning profession, and the nation.

If APA were to move forward with a comprehensive plan designation program, participation would be entirely voluntary on the part of communities seeking validation that they are at the leading edge of practice in incorporating sustainability into their plans. Communities would apply to APA, using a form similar to the draft application form contained in Appendix E (likely converted to an online format), along with their plan and a self-scored matrix. The outside review would be carried out by trained, two-person teams who would recommend plan designation levels: Designated (basic achievement), Silver (medium achievement), or Gold (advanced achievement), depending on the degree to which plan standards are met.

APA would coordinate the review process: ensuring a pool of qualified reviewers, assigning plans for review, and maintaining a database of designated plan reviews. Costs of the procedure would be met by nominal application fees. A recurring community implementation report might be required to maintain designation, if this is made a part of the procedure.

The external reviewers would evaluate the plan using the scoring matrix contained in this appendix, associated materials, and their professional judgment to arrive at consensus on the level of designation. They would submit a review narrative explaining their scoring, along with an overall assessment of the plan's quality and an identification of outstanding parts of the plan.

The basic assumption of the scoring procedure is that plans would be required to meet the basic intent of every principle, process, and attribute to be designated; that is, designation is a guarantee of comprehensive planning for sustaining places. Normally, this would be demonstrated by inclusion of

best practices, but the reviewers could also assess other ways in which the plan meets the basic intent. Bonus scores of up to 15 points could be assigned to plans that, in the professional judgment of the reviewers, demonstrate a high degree of quality and innovation in principles, processes, or attributes. Such plans should represent new and creative plan making, methods, layout, implementation models, or other innovative features. The final rating would be a combination of quantitative and qualitative assessments.

Designation levels would be based on degrees of plan achievement of applicable practices associated with the principles, processes, and attributes, including any assigned bonus points. Designation scoring would be calculated by adding the total plan score assigned and dividing it by the total plan score possible (after subtracting Not Applicable practices). The levels would be:

- Designated (basic level): plan achieves 70 percent of applicable practices
- Silver (medium level): plan achieves 80 percent of applicable practices
- Gold (advanced level): plan achieves 90 percent of applicable practices

As stated, the designation program would be voluntary and would not preempt any requirements for comprehensive plans established under state or local statutes. To the contrary, best practice 10.7 under Attributes calls for the plan to comply with applicable mandates and laws concerning preparing, adopting, and implementing comprehensive plans.

RELATION TO INDEPENDENT SUSTAINABILITY CERTIFICATION PROGRAMS

Questions were raised during the development of the comprehensive plan standards as to the relationship be-

tween an APA designation program and established sustainability certification programs. There should be no duplication of other certification programs as they focus on different types of sustainability elements—ranging from buildings and neighborhoods to landscapes and communities—but do not include specific standards for comprehensive plans. Essentially, the standards fill a gap left by the other programs by providing specific guidance for comprehensive planning.

Sustainability certification programs have increased in number over the years as interest in sustainability has grown. One of the longest established and best known is the U.S. Green Building Council's Leadership in Energy & Environmental Design (LEED) green building certification program. LEED for Neighborhood Development (LEED-ND) applies the rating and certification system at the neighborhood scale by integrating principles of new urbanism, green building, and smart growth.

The Sustainable Sites Initiative (SITES™) program is a collaboration between the Lady Bird Johnson Wildflower Center at The University of Texas at Austin, the United States Botanic Garden, and the American Society of Landscape Architects. The SITES v2 Rating System evaluates landscapes at the project site scale for sustainability based on whether they “reduce water demand, filter and reduce stormwater runoff, provide wildlife habitat, reduce energy consumption, improve air quality, improve human health, and increase outdoor recreation opportunities” (Sustainable Sites Initiative 2014).

At the communitywide scale, the STAR Community Rating System from STAR Communities is a national framework and certification program for local sustainability. It awards credits for sustainability best practices in the following categories, a number of which overlap with best practices defined in the comprehensive plan standards for sustaining places:

- Built Environment
- Climate and Energy
- Economy and Jobs
- Education, Arts, and Community
- Equity and Empowerment
- Health and Safety
- Natural Systems
- Innovation and Process

Comprehensive planning is identified as a best practice under Innovation and Process, with five points available.

Audubon International's Sustainable Communities Program helps communities increase sustainability (defined as a healthy local environment, quality of life for citizens, and economic vitality) through a process of establishing priorities, developing a plan, and taking action in 15 focus areas. The definition of “community” includes planned communities, resorts, lake associations, college campuses, and others in addition to municipalities.

A number of state sustainability certification programs for municipalities have been established or are under development. One of the best known is Sustainable Jersey, described as a certification program for municipalities in New Jersey that want to go green, save money, and take steps to sustain their quality of life over the long term. Sustainable Jersey provides a “menu” of sustainable actions that municipalities choose from in order to achieve the certification. Examples of these actions include:

- Energy Efficiency
- Food
- Green Design
- Health and Wellness
- Land Use and Transportation
- Sustainability Planning

Similar to the STAR Community Rating System, many of the Sustainable Jersey actions overlap with best practices covered by the comprehensive plan standards. Comprehensive planning is not specifically referenced by Sustainable Jersey, though points can be awarded for developing a Sustainability Plan (categories include Action Plans, Indicators and Targets, and Vision Statement and Goals). (See Appendix A for a list of sustainability certification programs.)

The Sustaining Places designation would differ from the above and other sustainability certification programs in that it focuses specifically on the content and preparation of the official comprehensive plan of a local government. During development of the comprehensive plan standards, APA coordinated with representatives of STAR Communities, Sustainable Jersey, and other certification programs. They saw the comprehensive plan designation program as potentially being a valuable complement to their programs, and one that would fill an important niche in sustainability practice.

The Sustaining Places designation would be a form of branding. It would benefit communities by identifying their commitment to sustainable planning practices and demonstrating the strength of their plans within a comparative na-

tional evaluation system. It would signal to members of the development and financial industries that such communities are likely good places for investment. Finally, it would identify APA and the planning profession as leaders in sustainability and as the go-to source for comprehensive plan best practices. While formal designation might not be appropriate for all communities, a program that reached a range of communities of different types and scales in different regions of the country could have far-reaching impacts on raising the overall level of planning practice.

APPENDIX E: PLAN DESIGNATION APPLICATION FORM

Application Components (*required)			
Question	Response Type	Character Limit	Drop Down
1. Community Name*	Open-ended	100	n/a
2. Applicant Name*	Open-ended	100	n/a
3. Applicant Position and Organization*	Open-ended	100	n/a
4. Applicant Contact (address, phone, email)*	Open-ended	100	n/a
5. Describe any unique community characteristics that are not mentioned in the plan but are important for this review.	Open-ended	500	n/a
6.1 Plan budget*	Open-ended	100	n/a
6.2 Size of planning staff involved in plan preparation*	Drop-down	n/a	0–4 4–8 8–12 12+
6.3 Plan preparation timeline*	Drop-down	n/a	Less than 1 year 1–2 years 2–4 years 4+ years
6.4 Date of last comprehensive plan update*	Month/Day/Year	10	n/a
6.5 Planning horizon*	Open-ended	50	n/a
6. Plan Background	6.6 Consultant used*	Drop-down	n/a
			No Yes—minimally Yes—substantially
6.7 Top 3–5 community challenges (e.g., economic development, affordable housing)*	Open-ended	500	n/a
6.8 Top 3–5 community priorities (if distinct from challenges)	Open-ended	1,000	n/a
6.9 Describe the political and regulatory climate in your community*	Open-ended	1,000	n/a
6.10 Description of plan organization*	Open-ended	1,000	n/a
7. Strengths and weaknesses of the plan*	Open-ended	1,000	n/a
8. Are certain practices minimally defined in the plan because they conflict with other practices? (example: community x is a fully built-out mountain community. The only opportunity for new development is in steep slope areas. The community cannot “Provide the physical capacity for economic growth” without jeopardizing the practice “Encourage development that respects natural topography.”)	Drop-down	n/a	Yes No
9. If yes, explain the conflict and how it is addressed in the plan.	Open-ended	1,000	
10. Are certain practices not applicable to your comprehensive plan?*	Drop-down	n/a	Yes No

APPENDIX E: PLAN DESIGNATION APPLICATION FORM

Question	Response Type	Character Limit	Drop Down
11. If yes, list the practices and describe why they are not applicable.	Open-ended	1,000	n/a
12. Organizations and departments involved in the planning process* (e.g., manager's office, housing agency)	List	n/a	n/a
13. Explain how other organizations were involved in the planning process.	Open-ended	1,000	n/a
14. Other plans/planning efforts referenced in the comprehensive plan* (e.g., regional plan, climate plan, hazard mitigation plan)	List	n/a	n/a
15. Explain how you took into account, coordinated with, or integrated other planning efforts with the comprehensive plan.	Open-ended	1,000	n/a
16. Describe your public engagement process (or indicate where it is described in your comprehensive plan).	Open-ended	3,000	n/a
17. Self-scored matrix: Complete the review matrix. In the notes column, indicate where in the plan each principle/process/attribute is discussed.*	Online form	n/a	n/a
18. Any other information you would like the reviewers to know.	Open-ended	1,000	n/a

Source: Pilot Communities Working Group

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ACKNOWLEDGMENTS

This report would not have been possible without the dedicated involvement and collaboration of a number of individuals who worked together in three groups. Their contributions shaped and developed the standards for Sustaining Places comprehensive plans in important ways.

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COMMUNITIES WITH COMPLETED COMPREHENSIVE PLANS USED TO TEST DESIGNATION AND SCORING PROCEDURE

Austin, Texas: **Paul DiGuseppe**; Norfolk, Virginia: **George Homewood, AICP**; Raleigh North Carolina: **Kenneth Bowers, AICP**; Rock Island, Illinois: **Brandy Howe, AICP**.

APA Support: **David Godschalk, FAICP**, **Erin Musiol, AICP** (APA staff); **David Rouse, AICP** (APA staff).

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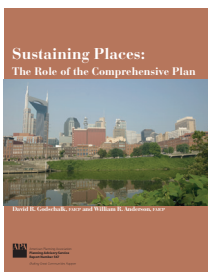
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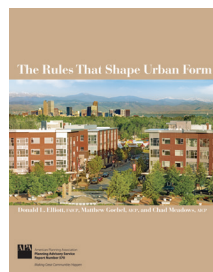


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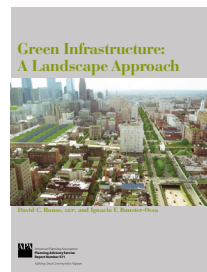


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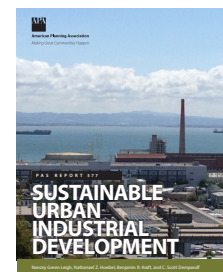


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