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
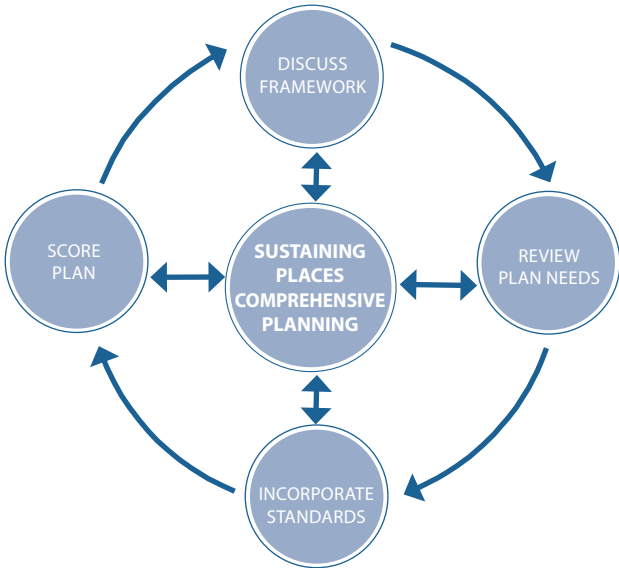

Figure 3.1. Applying the plan standards framework (David Godschalk and David Rouse)

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 Zeanah, 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 (plan**okc**) 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.

━━━━━━

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, stormwater 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 polices 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 polices 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 explictly 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 CHARACTERTISTICS		
III. TOTAL ATTRIBUTES SCORE (ADD 9 AND 10)		
TOTAL PLAN SCORE (ADD I, II, AND III)		
TOTAL POINTS AVAILABLE *Count the number of applicable practices and multiply by 3. The maximum is 255 points (if all practices are applicable).*		
PLAN SCORE PERCENTAGE *(Total Plan Score/Total Points Available)*		

Level of Achievement (based on Plan Score Percentage)

Designated: 70–79%

Silver: 80–89%

Gold: 90–100%