An aerial illustration of a suburban neighborhood. The scene shows a mix of green spaces, including a large open field in the foreground and a smaller park-like area with a winding path in the upper left. A cluster of houses with brown roofs and green lawns is situated in the middle ground, surrounded by trees. A road with several cars is visible on the left side. In the bottom right, there is a small pond or lake with reeds. The overall style is a detailed, colorful illustration.

# Ten Principles for Smart Growth on the Suburban Fringe



Urban Land  
Institute

# Foreword

**T**he face of America is changing. Across the country, land is being developed faster than ever before: more than 2 million acres of open space is converted each year. No longer is there a clear and simple distinction between urban and rural landscapes. Our metropolitan areas are expanding at an ever-increasing rate into our forests, farmland, and greenspace. This accelerated consumption with its resulting fragmentation of open land is one of the most pressing conservation challenges facing our nation in the 21st century.

It is no longer a question of whether we will grow, but rather how and where. Few would argue against the benefits of development in urban infill and brown-field sites, but such a limited view is not wholly realistic if we are to meet the needs of our nation's future growth. Over the past two decades, urbanized land in the United States has increased by nearly 50 percent, and today the majority of development occurs 25 to 35 miles from urban centers. To address this rapid growth "on the fringe" will require new partnerships, innovative ideas, and proactive approaches. It will require a new commitment to community and to the environment.

Too often conservationists and developers view one another as adversaries, focusing on competing interests rather than on common ground. The result: leapfrog development and haphazard and reactive land conservation. Only through collaboration and partnerships based on a shared vision and mutual goals—not confrontation—will we establish a framework that will guide both conservation and development to benefit the community, environment, and economy.

Perhaps the first and most important step in finding common ground is developing a common language. These ten principles for smart growth on the fringe provide the foundation that will guide future success. From advocating the efficient use of land to fostering the culture of a community to making it easy to do the right thing, these guidelines will enable public, private, and nonprofit organizations to work together to make the important and potentially profitable connection between land conservation and land development.

Smart conservation in conjunction with smart development represents the next generation of smart growth. It recognizes the powerful tool that development can be for conservation and promotes more efficient growth patterns wherever development takes place. These complementary ideas are two of the most important planks in a new environmentalism platform that focuses on protection and restoration of land but also concentrates on the pace, shape, and location of development. Smart growth in the 21st century is an all-hands-on-deck proposition, and these principles, which address both the environmental effects of proposed development and the economic well-being of communities, are a great step forward.

Lawrence A. Selzer  
*President, The Conservation Fund*

# Ten Principles for Smart Growth on the Suburban Fringe

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The Urban Land Institute gratefully acknowledges the financial support of Bank of America and the Environmental Protection Agency in underwriting this project.

**Bank of America.**



## About ULI—the Urban Land Institute

ULI—the Urban Land Institute is a non-profit education and research institute that is supported by its members. Its mission is to provide responsible leadership in the use of land in order to enhance the total environment.

ULI sponsors education programs and forums to encourage an open international exchange of ideas and sharing of experiences; initiates research that anticipates emerging land use trends and issues and proposes creative solutions based on that research; provides advisory services; and publishes a wide variety of materials to disseminate information on land use and development. Established in 1936, the Institute today has 24,000 members and associates from more than 80 countries representing the entire spectrum of the land use and development disciplines.

Richard M. Rosan  
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Recommended bibliographic listing:

Corrigan, Mary Beth, et al. *Ten Principles for Smart Growth on the Suburban Fringe*. Washington, D.C.: ULI—the Urban Land Institute, 2004.

ULI Catalog Number: T24

International Standard Book Number: 0-87420-943-9

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1025 Thomas Jefferson Street, N.W.  
Suite 500 West  
Washington, D.C. 20007-5201

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# Introduction

In 1890, the U.S. census closed the American frontier, noting, “New growth has so broken into previously unsettled places that the nation no longer has a frontier line.” The loss of the frontier shocked the country, as the first phase of the nation’s growth had come to an end.

By the turn of the 20th century, the urban core of most of today’s major American metropolitan areas was established. Over the next 100 years, development swept out of these centers and vastly expanded the area of developed land in the country. The “crabgrass frontier” of the suburbs advanced most quickly in the second half of the century, so that by the 1990s, once small metropolitan areas had spread quite widely. The Atlanta region, for example, had by then consumed a large portion of northern Georgia.

As the 21st century begins, the census provides another watershed statistic. For the first time, rural areas make up less than half the land area of the lower 48 states. Metropolitan areas and the census’s newly designated “micropolitan areas” (cities at the centers of areas that have at least 10,000 people but fewer than 50,000) have spread so far that a driver on Interstate 95 passes through only three rural counties on a trip from Maine to Florida, according to Robert Lang of the Department of Urban Affairs and Planning at Virginia Tech.

Over the past 50 years, land development has been predominantly on the urban or suburban fringe. This growth has often been characterized by low-density separated and dispersed uses dependent on automobiles and economically segregated residential areas. In a word: sprawl. Among other things, poorly planned development in the suburbs has caused environmental degradation, increased traffic congestion, undermined traditional community values, and reduced the quality of life.

If this trend continues, the greater part of population growth over the coming decades will continue to be where rural countryside meets the urban edge. This ongoing outward development presents the opportunity to reverse the mistakes of the past and build communities for our children and grandchildren with a better quality of life, economic vitality, and environmental quality.

The U.S. Census Bureau projects that by 2025 the United States will grow by almost 58 million people. Smart growth advocates promote infill development—adding households within existing city neighborhoods or inner-ring suburbs—as the responsible, resource-conscious way to meet the need. But even if everyone wanted to live in an urban or older suburban neighborhood, infill strategies cannot generate development fast enough or on a large enough scale to accommodate all the projected growth. To meet the demand for new housing, a signifi-

cant proportion of growth, perhaps 50 to 70 percent or more, will need to be accommodated in greenfield locations on the fringe, where land is abundant and relatively affordable. In recent decades, of course, the greater proportion of growth has already been taking place on the fringe—and not with the best outcomes. Although this sprawling growth on the fringe has often eaten up open space, generated excessive travel, and degraded environmental systems, it does not have to be that way. New growth on undeveloped land on the fringe can be made more attractive, more accessible, more efficient, more environmentally sensitive, more livable, and more profitable.

The fringe, however, is a complicated political and demographic terrain. The newly built places that were yesterday's fringe now are encircled by a ring of just developing places. A key dynamic at the edge is the relationship between the newly built and the still developing.

The newly built places—Plano, Texas, for example—worry that the exurbs that are just taking off such as Frisco, Texas, will offer themselves as a less expensive alternative to the still new but soon-to-be maturing suburbs like Plano. If smart growth is to be a reality on the fringe, Plano and Frisco and other communities like them must collaborate to understand, accept, and be part of it.

The smart growth methods described in this booklet will benefit both places. For the Planos, they help ensure that the next ring of development will not take advantage of a temporary cost advantage to steal businesses and development. For the Friscos, these principles offer a development process that will ensure a high-quality place and help fend off the challenge when the next new edge rises beyond them as another less expensive alternative.

As new communities are built, we can learn from past mistakes. When we began building the suburbs in earnest 50 years ago, the land use pattern we created made sense. Today, we continue to build suburbs in the very same pattern, and it simply no longer works. The urban edges are very different today, and we need to create quality, vitality, and economic value by adopting new principles for suburban development. This booklet sets out the important principles that can be used to create a new pattern for greenfield development, a pattern that will guide the development of new communities in the 21st century.

This new pattern of development involves several imperatives:

- It works, as proven by recent developments across the United States.
- It can be less expensive and lower the cost of infrastructure.

- It delivers a better product, with less travel, a better quality of life, and a safer and healthier environment for children,
- It has the best chance for rallying the support of diverse interest groups.
- It provides more choices of product types and price points.
- It helps keep jobs and housing in balance.
- It protects and enhances sensitive environments.
- It protects and enhances home values for communities that achieve these attributes.

The success of new smart growth communities supported by demographic trends is causing market demand to shift in fundamental ways, in both housing and jobs. We are no longer a country dominated by traditional family households or blue-collar employment. Families with children now represent less than one-quarter of households, while the average number of people per household is decreasing. By delivering a vision of well-designed compact communities, mixed uses, and access to open space and transit, smart growth can actually shape a new market profile. For example, families seeking a more bucolic setting may choose a home on a small lot adjacent to preserved open space and trails rather than one in a conventional large-lot subdivision. Empty nesters may choose a townhouse located in a higher-density walkable town center. First-time homebuyers may choose a bungalow near transit and jobs over a single-family house at the edge of a commute shed. Similarly, a business may choose to locate in a new mixed-use town center where its employees can walk for midday errands or use transit for their commute. In all these cases, smart growth development in the right location at the edge acknowledges the basic market shifts and segmentation while it directs it to more sustainable forms.

These concepts are not totally new. Experience gleaned from smart growth initiatives over the past six to eight years has pointed the way to what the best practices for smart growth on the fringe are. The pace of development in rapidly growing areas, however, has made it difficult to change the direction of the development process.

This document and the principles in it are intended to help those who wish to move in that new direction to responsibly accommodate the growth that will occur on the fringe and maximize the social, economic, and environmental opportunities represented by that development. It is truly smart growth, but it also presents the hope and challenge of smart growth at a higher level, that is, sustainable development for the suburbs.

# Ten Principles for Smart Growth on the Suburban Fringe

- 1 Create a Shared Vision for the Future . . . and Stick to It**
- 2 Identify and Sustain Green Infrastructure**
- 3 Remember that the Right Design in the Wrong Place Is Not Smart Growth**
- 4 Protect Environmental Systems and Conserve Resources**
- 5 Provide Diverse Housing Types and Opportunities**
- 6 Build Centers of Concentrated Mixed Uses**
- 7 Use Multiple Connections to Enhance Mobility and Circulation**
- 8 Deliver Sustainable Transportation Choices**
- 9 Preserve the Community's Character**
- 10 Make It Easy to Do the Right Thing**

# 1 Create a Shared Vision for the Future . . . and Stick to It

**S**uccessful communities always have a vision for the future because no place will retain its special character by accident. Often the communities that have a shared vision are among the most desirable and economically sound in the nation. Creating a shared vision is important because it provides a blueprint for the future of the community. People may differ on how to achieve the vision, but without a blueprint, nothing will happen.

Shaping a vision requires the power of imagination. A vision is an image of the future shared by the people of a region and comprehended in physical, social, economic, and environmental terms. A well-crafted vision is realistic and recognizes economic, political, and environmental constraints. It is regularly evaluated and if necessary modified. When everyone shares the vision, all players know what the end game is and how they participate in the process and the outcome. Creating a shared vision is hard, time-consuming work that requires collaboration, creativity, and trust. The implementation of the vision requires consistent and disciplined public policy over a long period of time. The vision should be held, nurtured, and translated into action not over one or two years but over decades.

## **A Vision Requires Leadership and Choices**

A key ingredient in the process of creating a vision is leadership. Local leadership often emerges in the form of a champion—some person or group who initiates the process, looks to ensure it is done right, and follows through to completion.

An individual champion can be a resident, a business or community leader, or an elected official such as a mayor or councilperson. The champion can also be a group, for example, a business organization such as the chamber of commerce, a local foundation, or a corporate citizen or regional planning organization. The champion should pull together a core group of involved stakeholders to guide the effort.

The initial goal of such a group should be to define alternate futures, analyze the impacts of each, and engage a larger group in using these scenarios to define a common vision. It is criti-



cal that the consequences of differing forms of growth on the fringe be identified holistically and for the long term. Only then will clear understanding of the tradeoffs truly emerge. Project-by-project, piecemeal debate will only lead to familiar old stalemates. Large-scale visions informed by long-term impacts offer differences that clarify choices in ways currently absent from the debate.

### **A Vision Is Stakeholder Centered**

To be successful, the visioning process must include all those who have a stake in the future as well as those who have the means to shape the vision. Successful visions must have their roots in the community and must accurately reflect the views and aspirations of those who live and work there. The visioning process must aggressively include landowners, developers, elected officials, environmental groups, citizen activist groups, and local business owners, among others. Bringing the stakeholders together gives each participant the opportunity to understand other points of view. The process can show the benefits of smart growth on the fringe to homebuilders, rural residents, and others who may be fearful of change or the loss of their quality of life. Participants learn to collaborate with others and turn critics into supporters.

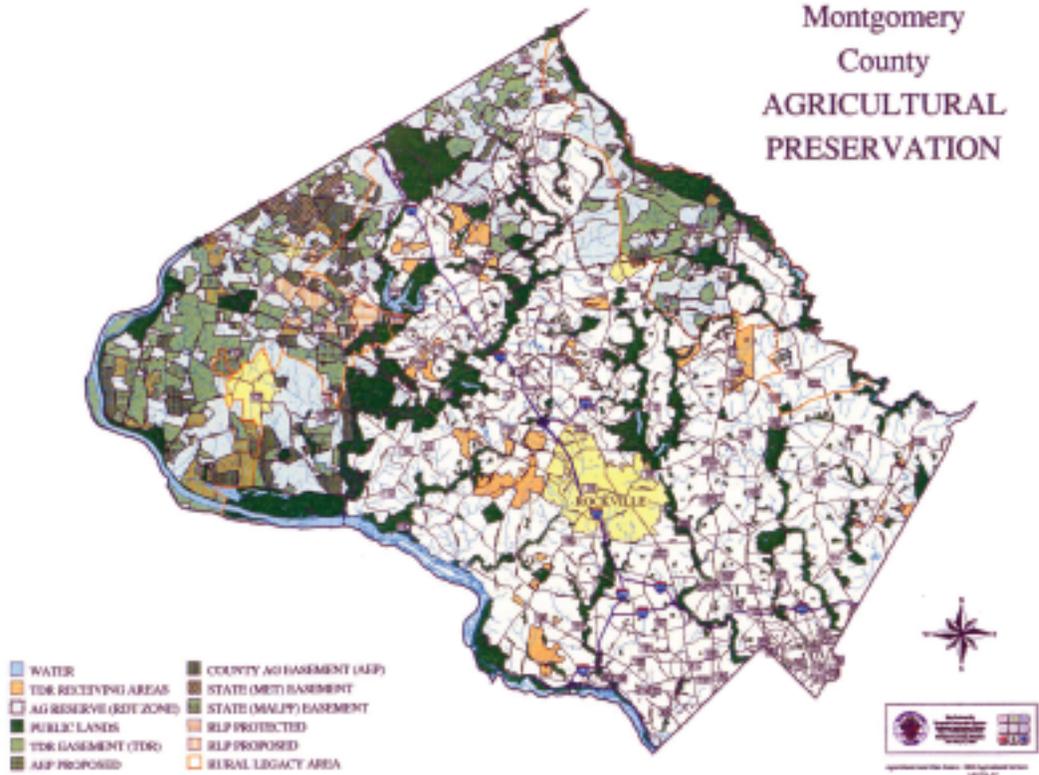
The private sector must be actively engaged in the visioning process because the business community has skills that must be brought to bear in the process and because it must be invested in the outcome. The business community must be a full partner in the process. A good way to establish such a partnership is with shared financing for the effort.

### **A Vision Is Collaborative and Educational**

The visioning process is collaborative. The vision grows from the creative interaction of the various stakeholders. The interaction initially may be characterized by disagreement and contention, but these qualities are the very ones that can make the process creative. Ideally, the vision is something that every stakeholder supports and is enthusiastic about. The process is educational when disparate stakeholders learn from each other. Through the collaborative process, for example, a developer learns that environmentalists are not antigrowth but have real concerns about protecting habitat or water quality and other issues. Conversely, environmentalists learn that developers are not focused solely on mak-



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ing money but also care about the quality of the community and its economic vitality, which is an important part of the vision.

Tools such as well-planned charrettes and focus groups help members of the community become aware of how much they agree with each other. They also highlight the inappropriateness of stereotypes, helping to build consensus in the community and identify new possibilities for agreement.

### **A Vision Is Reality Based**

A fine line exists between vision and fantasy. To be successful, a vision must be based on reality, requiring a practical analysis of market conditions, growth projections, and demographics to ensure that the vision is not so grand that it will fail or so timid that it is overwhelmed by the reality of rapid growth. The development community should bring market reality to the process while it is still flexible and before other stakeholders have become enthralled with a concept that may not be practical. It should identify the benefits that the participants and the community at large gain and make sure that each one understands the actions that must be taken and who has the responsibility for each to make the vision into reality.

Another aspect of reality is that, in today's global economy, metropolitan regions—not individual jurisdictions—are the units of economic competition. Thus, competition for jobs or businesses between local jurisdictions weakens the region's ability to compete in the global economy. All the jurisdictions in the region are interdependent, and the metropolitan region functions as a whole economically. Regional collaboration makes the region more efficient, competitive, and attractive and can improve the economic well-being and quality of life for everyone.

### **A Vision Is Focused on Implementation**

New technologies allow communities to visualize development before it occurs. For example, tabletop simulation exercises can help citizens visualize the potential impact of growth and give them ideas for how growth can be accommodated. Giving citizens the experience of allocating projected growth with chips on a tabletop or through the generation of growth scenario maps moves them to consider development options other than “more of the same.” They may quickly learn how higher density can preserve open space and how transportation systems can help shape the future.

Part of successful implementation is the identification of champions who can speak persuasively on behalf of the effort and use their influence to advance the vision. The vision may require adjustments that reflect sensitivity to market dynamics and adapt to the realities of transitions in landownership. A realistic and practical vision is imperative, as frustration and cynicism will emerge if the vision fails.

### **Sticking to the Vision Shapes the Future**

A vision is of no use if it cannot be adhered to with specific policies, actions, and practices. Government policies and actions must consistently act to implement the vision over decades, requiring discipline from those in office, the staffs and directors of planning departments, and continuity from one administration to the next. In Montgomery County, Maryland, for example, a 90,000-acre agricultural preserve established and protected from its inception in a 1960s vision for the county is still in place today.

Temptations will emerge that run counter to the vision in the form of appealing short-term economic development opportunities. If a way cannot be found to make the proposal enhance the vision, it should be rejected. Courage, patience, good planning, commitment, and money are required to stick to the vision, but long-term certainty for the community, the environment, and the economy surely make it worthwhile.

# 2 Identify and Sustain Green Infrastructure



EDWARD T. MCMAHON

The first step in accommodating growth in the right place is to identify those places that must be protected from development. Communities that have a blueprint for conservation usually do a better job of accommodating growth in appropriate areas. One of the key issues for development is the concept of certainty: developers want to be certain that their design and planning approvals will go smoothly, and citizens want to know that open space or cultural resources they love will be there forever. It is this notion of certainty that should bring both groups together; by identifying where development should go and what resources should be protected, both sides can be more certain of the process. On the other hand, when citizens think all land is up for grabs, they often oppose development everywhere.

## What Green Infrastructure Is

Green infrastructure is a community's natural life-support system—a strategically planned and managed network of habitat, parks, greenways, conservation easements, and working lands with conservation value that support native species, maintain natural ecological processes, sustain air and water resources, and contribute to the health and quality of the community's life.

Green infrastructure networks encompass a wide range of landscape elements, including natural areas such as wetlands, woodlands, waterways, and habitat; public and private conservation lands such as nature preserves, wildlife corridors, greenways, and parks; and public and private working lands of conservation value such as forests, farms, and ranches. It also incorporates outdoor recreation and trail networks as well as cultural and historic resources that provide the community its character.

When we use the word infrastructure, we usually think of built infrastructure such as roads, electric power lines, and water systems and social infrastructure such as schools, hospitals, and libraries. The concept of green infrastructure, however, elevates air, land, and water to an equal footing with built infrastructure and transforms open space from "nice to have" to "must have." At the same time, green infrastructure helps provide a framework for growth by identifying the places that should not be built on, putting a stop to the project-by-project battles that developers face over open space and the environment.

What gives the term green infrastructure its staying power is its evoking images of planned networks of green spaces that benefit wildlife and people, link urban

settings to rural ones, and, like other infrastructure, form an integral part of government budgets and programs.

## Why We Need Green Infrastructure

We need green infrastructure because land is being developed faster than ever. The accelerated consumption and fragmentation of open land is suburban America's biggest conservation challenge. For example, according to the December 2000 update of the Natural Resource Conservation Service's National Resources Inventory, the total acreage of developed land in the United States increased by 34 percent (25 million acres) during the 15-year period from 1982 to 1997. From 1982 to 1992, land was converted at 1.4 million acres per year, but from 1992 to 1997, land was converted at 2.2 million acres a year. That rate is more than 1.5 times the previous ten-year rate.

Land is also being consumed at a rate that far exceeds population growth. According to a July 2001 report by the Metropolitan Policy Program at the Brookings Institution, "between 1982 and 1997, the amount of urbanized land in the United States increased by 47 percent. . . . During this same period, the nation's population grew by only 17 percent" (see Figure 1).

Some argue that land in America is still plentiful, but the fact that vast tracts of land might be available thousands of miles away matters little to the dwellers of today's growing metropolises. With the concentration in coastal areas—53 percent of the population on 17 percent of our nation's land area—the real challenge is finding open space reasonably close to jobs and housing.

Los Angeles is a good example. Projected to grow by 7 million people in the next 25 years, it has hit its natural boundaries, the mountains and the ocean. Lots of land in the desert beyond does not offer relief. And given that a majority of the growth demand is for relatively affordable housing, the answer is infill, redevelopment, and smart growth on the fringe.

RALPH DANIEL/COURTESY OF THE ST. JOE COMPANY



**FIGURE 1**  
**Changes in Population Compared to Changes in Urbanized Land, 1982 to 1997**

U.S. Region	Change in Population	Change in Urbanized Land
Midwest	7.06%	32.23%
Northeast	6.91%	39.10%
South	22.23%	59.61%
West	32.21%	48.94%
U.S.	17.02%	47.14%

Source: Metropolitan Policy Program, Brookings Institution.

# Metro Greenways



## How a Community Creates Green Infrastructure

Currently, most efforts to protect open space on the fringe are reactive, site specific, narrowly focused, and not well integrated with land use planning or other public policies. The conservation of green infrastructure, however, represents a dramatic shift in the way local and state governments think about green space. Green infrastructure planning is proactive, systematic, large scale, and well integrated with growth management, transportation planning, and other public policies.

Green infrastructure is being created at all scales: state, regional, metropolitan area, and local community. Green infrastructure networks can be divided into three separate but interrelated components: ecological networks, working landscapes, and outdoor recreation and trail networks. For example, Florida's statewide

greenways plan uses an integrated landscape approach to identify an ecological network of natural hubs, linkages, river corridors, and coastlines—as well as a recreational/trail system connecting parks, urban areas, and cultural sites.

## PLANNING FOR AGRICULTURE ON THE URBAN FRINGE

As growth spreads on the fringe, it may encounter productive agricultural land. Farmland appears to be ubiquitous and pretty much the same everywhere, so it is difficult to protect. Development opponents like to use the preservation of farmland, regardless of its quality, extent, or location, as an argument against development.

The fundamental problem is that planning has ignored agriculture. We plan for hous-

ing, commerce, infrastructure, recreation, and the environment. But farmland on the urban edge is often thought of as vacant land awaiting a higher and better use, not a resource that accounts for over half the nation's food production, including well over three-quarters of its fruits and vegetables. So is it any wonder that farmland remains up for grabs and the main point of contention between developers and those who want to stop growth?

A number of forward-looking communities are now planning for agriculture. They begin by identifying the most productive farmland, setting aside large enough areas

with farms of sufficient size and productivity to be sustainable, and directing and expediting development elsewhere. But it is important to plan for agriculture's other needs such as zoning codes that give farmers freedom to do those things a farmer must do to be successful and the economic support and infrastructure to sustain agricultural viability. Without them, farmland will not remain farmland, even if it is off limits to development.

For some of the best examples of planning for agriculture, see the American Farmland Trust's Web site, [www.farmland.org](http://www.farmland.org).

At the local level, different communities have taken different approaches to protect green space. The town of Pittsford, New York, for example, has implemented a green infrastructure plan that grew out of concern about the loss of its agricultural and green space resources. Pittsford's "Greenprint" began with a community visioning process that identified the working agricultural and natural landscapes that were an essential part of the town's character. Pittsford then commissioned a fiscal analysis of the revenues and expenses associated with existing and potential land uses. The analysis demonstrated that it would be less expensive to implement a new land use plan than continue the current zoning policy.

Pittsford's plan targeted 2,000 acres of land for permanent protection while also creating several enhanced economic development sites for commercial and light industrial development. The community supported the plan, recognizing that protection of open space, including purchase of development rights, would cost taxpayers less per year than full buildout of the town. Landowners supported the plan because they were fairly compensated for the loss of their development rights.

## **The Benefits of Green Infrastructure**

When planned as part of a system of green infrastructure, open space can meet a community's need for parkland and outdoor recreation space while also helping to shape urban form and buffer incompatible uses. Green infrastructure can even reduce public costs for stormwater management, flood control, and other forms of built infrastructure.

Bellevue, Washington, for example, has reclaimed its natural systems through the coordinated design of a citywide park system and a stormwater management program. In the early 1970s, the local government decided to change its stormwater system from underground pipes to a less expensive surface drainage system. Today, two city agencies, the Storm and Surface Water Utility and the Parks and Recreation Department, use the same land to accomplish multiple objectives. The utility bears responsibility for water resources and has a budget for land acquisition. The parks department manages much of the utility's land for parks, ball fields, playgrounds, interpretive areas, and trails. Many of these open space assets are also elements of the stormwater system. As a result of this partnership, both agencies have reduced their costs while achieving their diverse objectives.

## **THE CEDAR FRAMEWORK: HOW A COMMUNITY CAN DEFINE ITS OPEN SPACE**

**T**he CEDAR framework is a means of comprehensively describing open spaces in terms of their values. The framework identifies five categories of open space: Cultural, Ecological, Developmental, Agricultural, and Recreational.

**CEDAR provides a way to create a green infrastructure that is comprehensive, based on local knowledge, and suited to regional needs. In planning to meet the needs of a community or region, each of the CEDAR elements should be valued.**

**For more information about CEDAR and CEDAR workshops, contact the Center for Green Space Design, 311 South 900 East, Suite 201, Salt Lake City, UT 84102. Phone: 801-483-2100. Web site: [www.greenspacedesign.org](http://www.greenspacedesign.org).**

# 3 Remember that the Right Design in the Wrong Place Is Not Smart Growth

Once a region decides what land it wants to conserve (its green infrastructure), it becomes easier to facilitate development in the right place. Conservation and development are two sides of the same coin. Once the land to be conserved is determined, the next step is to decide where in this area of potential suitability the actual development should go.



EDWARD T. MCMAHON

Decisions about location must be considered and balanced in a comprehensive visioning process (see Principle 1). The visioning process begins with a clear understanding of a community's assets, its infrastructure needs, its circulation systems, and its environmental context. If smart growth is to truly reduce dependency on automobiles, preserve critical lands, and reduce the public cost of infrastructure, then location is a critical factor.

Mixing uses so that there is more choice in mobility; clustering development around centers that allow people to work, live, shop, and play in locations

that are near each other; preserving land needed for future transportation corridors; capitalizing on mass transit; and promoting infill are all aspects of smart growth. Design, density, and mix are indeed important, but if development on the fringe is to work, it must be in the "right" location in the region or jurisdiction.

Three primary factors play a role in determining the "right" location: how infrastructure investments are optimized, the proximity of jobs and services to housing, and the potential for transportation options, both existing and long term.



The integration of these regional factors with an understanding of their relationship to green infrastructure leads to the identification of appropriate areas for new development.

A major factor in the placement of smart growth at the fringe is what opportunities are available for expanding transportation choices. The automobile is the mainstay of our suburban transportation system and must be accommodated in any development on the fringe. But the decision about where to locate a master-planned community or other large development must consider how it will be served by existing, planned, and potential transit systems such as buses, bicycles, light rail, express buses and rapid transit, heavy rail, and commuter rail. The best locations have opportunities for transit connections.

Clearly, leapfrog development and areas dominated by very-low-density housing are expensive in terms of public works and other services. The compact nature and strategic location of smart growth can lead to considerable savings in capital costs and long-term operations. These issues in turn affect local fiscal impacts and the affordability of housing.

The general proximity of housing to job centers is an important issue. Smart growth does not advocate that everyone live and work in the same community, but a reasonable balance between jobs and the type of housing affordable to those at different salary levels is critical in reducing average commute lengths and peak-hour congestion. Even walkable neighborhoods with integrated services fall short if they are isolated from major commercial centers.

Within identified prime development areas, intensive mixed-use centers must be interconnected in strategic locations. In fact, the undeveloped quality of land on the fringe presents an opportunity to marry the right location with appropriate types of development. Town and villages centers must be strategically located to allow efficient access to retail, services, and local jobs.



RALPH NUÑEZ

## **PRESERVING THE PAST, SECURING THE FUTURE: Transferable Development Credits in Livermore, California**

**L**ivermore voters in the San Francisco Bay Area approved the North Livermore Urban Growth Boundary Initiative in 2002, which preserves agricultural land where the city's North Livermore Specific Plan had been earlier approved. To compensate landowners for lost value, development credits will be granted.

Under the program, the city designated receiving zones where development cred-

its could be applied to achieve densities higher than the earlier assumed maximum allowable. Applicants wishing to take advantage of this increase in density must comply with the city's ordinance by purchasing development credits or by paying an in-lieu fee. Allowable density increases range from 3.5 to 30 dwelling units per acre, depending on current zoning categories in the identified receiving areas. Total development in any area cannot exceed the maximum density allowed under the general plan designation.

Under this program, Livermore is able to combat urban sprawl by refocusing development activity in targeted receiving areas toward the center of the city.

Without disciplined public policy, sprawl will continue to threaten the landscape. It is important that codes, plans, and policies support these development nodes. Public and private investments in infrastructure should be used to give definition to and support of the areas designated for smart growth.

Many people think of traditional neighborhood design as smart growth, as it preserves the neighborhood feel, back alleys, front porches, and spaces where kids can play and neighbors can congregate. Although there is no question that design is a critical component of smart growth, it is not the only component. Other factors must be integrated into smart growth as well:

- Economically viable development that preserves open space and natural resources (green infrastructure);
- Comprehensive, integrated, and regional land use planning;
- Collaboration among citizens and the public, private, and nonprofit sectors on growth and development issues to achieve mutually beneficial outcomes;
- Certainty and predictability in the development process;
- Infrastructure to serve existing and new residents;
- The integration of compact suburban development into existing commercial areas, new town centers, and/or existing or planned transportation facilities.

Development on the urban fringe integrates a mix of land uses, preserves open space, is fiscally responsible, and provides transportation choices. All these factors have locational as well as design dimensions. Poorly designed development in the right location does not signal smart growth, just as a great design disconnected from jobs, transportation alternatives, and existing infrastructure cannot be called “smart.”

Smart growth—no matter where it occurs—is based on the characteristics defined above. It is not just a design principle but a development principle that lasts the life of the community.

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*"I question your choice of locations."*

# 4 Protect Environmental Systems and Conserve Resources

**C**ommunities on the fringe are typically in a better position to protect and conserve natural systems that perform important functions like water filtration and storage, flood control, and maintenance of clean air than more urbanized areas. Often uplands, wetlands, rivers, lakes, and streams in fringe areas are typically in their natural state and not affected by development. Communities that still have these assets can create wealth (agriculture, forestry, ecotourism) and sustain health (clean water, clean air, recreational activity) through the conservation of natural resources. Unfortunately, fringe communities undergoing rapid development are often understaffed or ill equipped to deal with the consequences of rapid growth. Consequently, they frequently make numerous, poorly informed decisions on a site-by-site basis that end up degrading natural systems in the process of land development. Growth on the fringe offers communities the

challenge and the opportunity to develop with sensitivity to functioning natural systems.

Although growth is often the result of a series of incremental land decisions, growth on the fringe provides an opportunity to connect the increments into a meaningful whole. The following procedures and guidelines all stem from the idea that keeping a whole-systems view and holistic approach to changing resources is critical. Water consumption and systems, terrain management, open space, and wildlife corridors cannot be addressed in isolation.



TED WASHINGTON/THE WOODLANDS OPERATING CO., L.P.

## Minimize Disturbance

Be sensitive to natural systems by paying attention to site resources—hydrology, terrain, geology, site ecology, wildlife, and vegetation. Minimal disturbance makes it easier to use natural drainage for stormwater management and native vegetation for landscaping, and to incorporate existing habitat into the community. Less disturbance means less grading and possibly lower infrastructure costs.

## Factor Local Climate into the Design

Use climate as a design determinant. Climate is an important part of what makes a place unique. Vernacular building designs often reflect local climatic conditions.

Take advantage of building orientation, prevailing winds, and tree cover for cooling. Manage the effect of the sun's rays for enhancing or limiting heating.

### **Plan for Water Conservation and Recycling**

A variety of practices can be designed into a project to help conserve water. Water-conserving appliances, plumbing fixtures, and faucets are some of the more obvious ones. The practices of using graywater and rooftop rainwater harvesting systems to recycle water and natural drainage systems and pervious paving to recharge aquifers are becoming more common. Landscaping with native plants and drought-tolerant plants adapted to local climate and moisture conditions reduces the need for excessive irrigation.

### **Optimize the Efficiency of Systems**

Energy efficiency should be built into a project to minimize or eliminate the use of nonrenewable energy sources. The inclusion of passive solar principles and natural cooling enhances energy efficiency. High-efficiency heating, ventilating, and air-conditioning, lighting, appliance, and plumbing systems reduce energy consumption, diminish waste, and avoid pollution from the use of fossil fuels; the efficient use of lumber creates a tighter building envelope. The thoughtful integration of design, materials, and systems makes a project more comfortable, healthy, and, in the long run, less expensive.

Other techniques can be used to prevent environmental impacts: designing to reduce dependence on the automobile, using resource-efficient materials, reducing the quantity of materials used, designing for durability and adaptability, protecting local ecosystems, conserving water, ensuring the health of indoor environments, and avoiding construction waste.



### **RETHINKING STORMWATER MANAGEMENT**

**T**he term “nonpipe solution” refers to the design of stormwater management systems in a manner that does not rely on underground pipes and catchment systems that discharge stormwater directly into surface waters. Ranging from traditional techniques such as vegetation-lined swales to innovations such as level spreaders (perforated pipe that allows collected stormwater to self-meter its

release into absorption or infiltration fields), nonpipe designs can reduce capital costs, improve the quality of water released into the environment, and often afford a significant benefit to the community. For example, Prairie Crossing, a 660-acre conservation development in Grayslake, Illinois, used a nonpipe solution to handle on-site stormwater management. Through a combination of front-yard swales and streets without curbs, stormwater is collected and fed by gravity to a community focal point, a 22-acre pond. The swales are heavily planted with native plants that support the commu-

nity's prairie aesthetic. The plants' root systems capture toxins, grease, and heavy metals, naturally filtering the stormwater as it makes its way to the community pond. The quality of the water entering the pond is so high that the pond is used for swimming in the summer. The results of this system are very-high-quality stormwater runoff entering the lake's ecosystem, visual support of the community's image from the street, a no-cost community amenity (swimming in the summer and skating in the winter), and savings to the developer of \$1.2 million in initial capital costs.

# 5 Provide Diverse Housing Types and Opportunities

**S**uburban development has been described as the American dream: a big house on a nice large lot and a two-car garage. Developers building for that segment, however, are serving an ever-diminishing market as family size continues to decrease. If growth on the fringe is going to be “smart,” it will be necessary to provide more housing choices to appeal to various market segments and demographic groups in the population. Of critical importance to the success of smart growth on the fringe is a mix of housing types, price points, and uses offering a more vital and diverse community.

The need to direct growth to walkable mixed-use neighborhoods rather than to conventional subdivisions offers the opportunity for more diverse housing types. Rental and ownership single-family houses with yards, townhouses, and multi-family apartment buildings are all needed to meet the varied lifestyles of people living in the suburbs. A young couple may not want a three-bedroom house with a yard but an apartment with a pool and fitness center. If that type of housing is not available or affordable near their office, they will seek it in other places, increasing the possibility of longer commuting distances. Families, on the other hand, may want a more traditional suburban single-family house with a yard and a neighborhood playground.



Diverse housing also allows for a mix of incomes and further increases the ability of people to live near their jobs. For example, young teachers or service workers should have an opportunity to live in an affordable residence near where they work and not have to commute far to get to work, as is frequently the case in suburban communities.

Higher-density residential areas with many amenities are most appropriate for activity and employment centers and transportation hubs. Such residential areas help generate the traffic necessary to keep retail centers vital and put the center in town center. They also provide an opportunity for shared parking; that is, commercial establishments can use parking facilities during the day, residents in the evening and on weekends.

If a suburban fringe is to be dynamic, lively, and, most of all, sustainable, it must have housing opportunities for a demographically diverse population. People in such a mix do not all have the same needs or desires for housing; therefore, a mix of housing opportunities helps to create a sustainable community, not just a one-generation subdivision.



# 6 Build Centers of Concentrated Mixed Uses



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**B**uilding appealing communities means ensuring a convenient mix of the things that meet people’s daily needs—homes, schools, stores, services, amenities. Traditional neighborhoods historically have offered a place to live and work for people of all ages, incomes, and stages of life. A concentration of mixed uses on the fringe provides a critical mass and a sense of place that gives communities a strong identity and a heart. Mixed-use projects create a destination that involves more than housing; they also include employment, retail, and public services. Successful communities include a full range of uses and activities—office, retail, entertainment, hotels, housing, and civic institutions.

Rapidly urbanizing suburbs attract retailers and small businesses more interested in building projects cheaply to meet a current “affordable” market than in con-



FEDERAL REALTY INVESTMENT TRUST



ELKUS/MANFREDI ARCHITECTS LTD.

tributing to a community's long-term quality. This "free market" development, especially for jobs, promotes residential dispersal, because working in a distant suburb makes even more distant suburbs potential home locations. Retail development threatens the viability of existing historic village centers by creating overwhelming competition. It offers easy development options for retailers who might otherwise expand in underserved corridors, often those of largely minority residents. Rapid growth overwhelms public facilities like schools and civic institutions such as churches, synagogues, and mosques. The lack of integrated planning among commercial centers on the fringe often results in a scattering of uses such as office, entertainment, and higher-density residential development near each other but too far apart to make walking possible. Moreover, such uncontrolled commercial development carries the seeds of decline for a new community, because future malls and edgeless office parks farther out can undermine the values of communities under construction.

## SOUTHLAKE TOWN CENTER Southlake, Texas

Southlake Town Square, developed by Cooper & Stebbins, LP, represents the heart of what is projected to be a 2.5 million-square-foot development. Built on land that was formerly occupied by an egg farm and horse farm surrounded by \$500,000 homes on large suburban lots, the development is located in Tarrant County on 130 acres northwest of Dallas/Fort Worth Airport. The project includes a town hall, a post office, a library, and a town square and city park. Plans call for a hotel, townhouses, and residential lofts. It combines an equal amount of ground-floor retail and second-floor office space. The retail component currently includes 62 shops and services, including restaurants and cafés. The office space includes a variety of business and professional services.

The objective of the project was to create a heart for the city of Southlake, which, although a successful residential community, suffered from some of the problems typical of rapidly growing communities—transient population, an automobile-dependent transportation system, local residents' suburban mind-set, and large-scale retail and civic uses that are difficult to incorporate into town centers and main streets. The solution: a traditional town center grid focused on a courthouse square.

The developers designed the center with a hierarchy of streets in a bent-grid pattern that emphasizes the intersections between streets. The streets in Southlake Town Center are all public and had to meet the standards set for public streets. On-street parking is available.

Source: Charles C. Bohl, *Place Making: Developing Town Centers, Main Streets, and Urban Villages* (Washington, D.C.: ULI—the Urban Land Institute, 2002).



STEVE HALL/HEDRICH-BLESSING



STEVE HALL/HEDRICH-BLESSING



Establishing a mix of uses within walking distance of each other balances development and is self-reinforcing. Its achievement at the fringe will create the center of character and activity that contrasts with the monotonous sameness of the conventional fringe. How to achieve this balance?

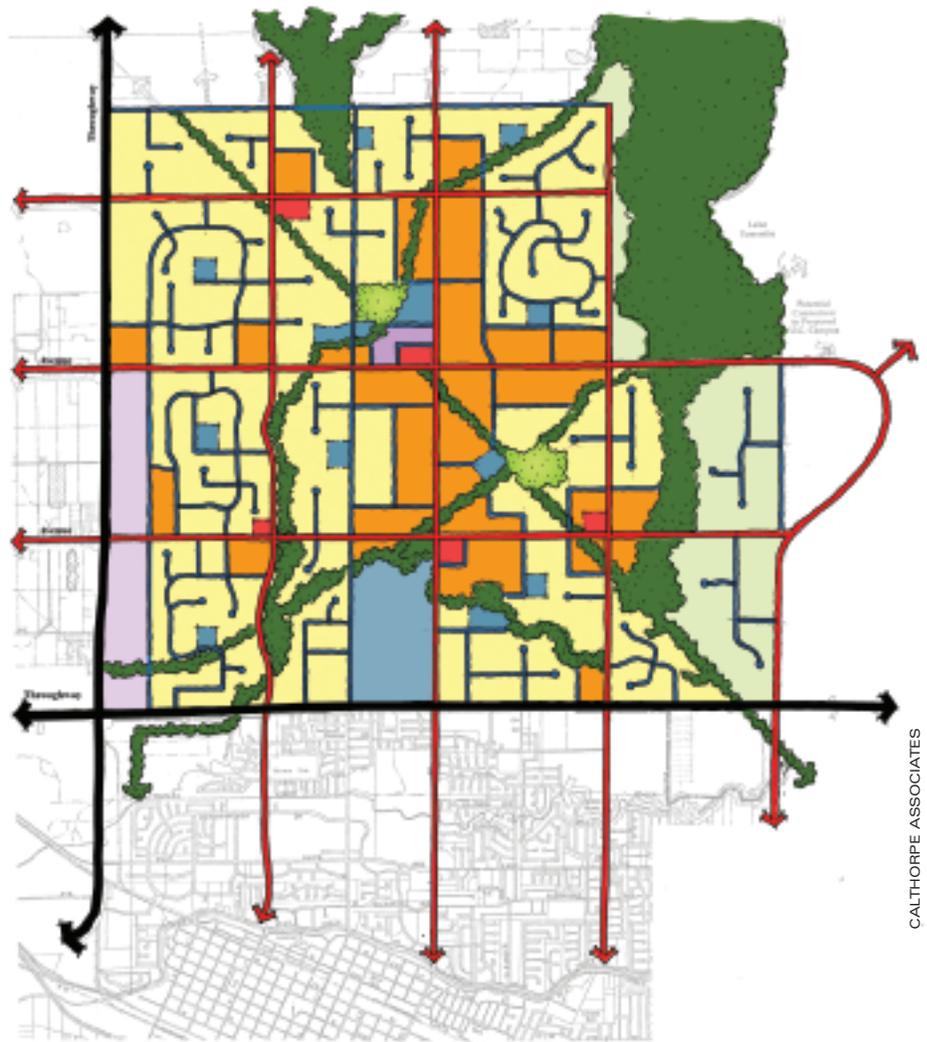
- Develop a vision and a plan for the commercial center.
- Stress outcomes over regulations. Use flexible zoning such as that for planned unit developments, specific planning, traditional neighborhood districts, and overlay zones.
- Encourage a full range of uses, including multifamily, retail, office, and entertainment.
- Plan for a strong residential base in neighborhoods, districts, and corridors to support a mixed-use center.
- Optimize connectivity by avoiding the use of superblocks.
- Provide the infrastructure, especially streets, parking, and public spaces, to enable mixed-use centers.
- Create a pedestrian-friendly place that encourages interaction.
- Share and manage parking.
- Use public/private partnerships to make things happen.
- Think city building with a fringe twist.
- Recognize that not every development project will have a center of concentrated use. That is, one development may be the residential component, another the primary employment center, and still another the retail center. The key is to shape individual developments to support one another.



# Use Multiple Connections to Enhance Mobility and Circulation

**W**hy is congestion so bad in the suburbs? One reason is that road networks are laid out to benefit each development project. Clusters of residential subdivisions with only one entry and one exit concentrate the traffic onto and off arterial roads, which quickly become congested because of the lack of connectivity and alternative routes. To avoid becoming a placeless collection of disaggregated subdivisions, a network made up of vehicular, pedestrian, cycling, park, and open-space connections must be planned for development on the fringe.

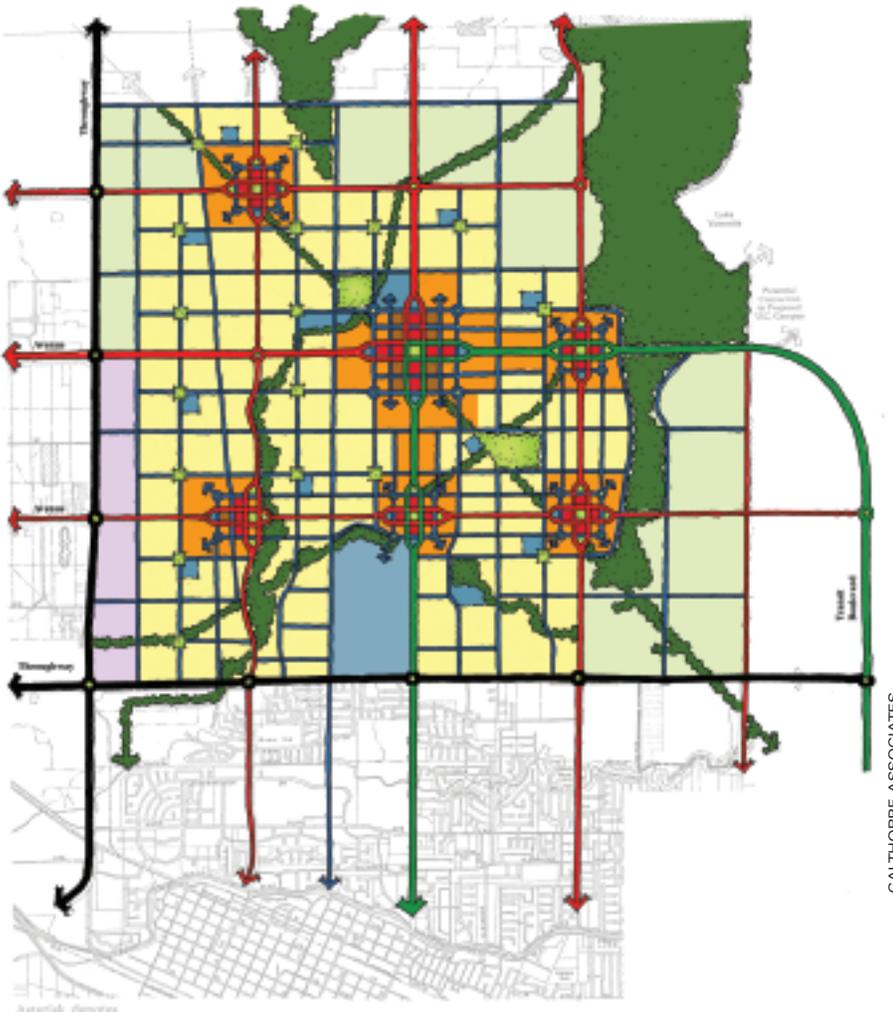
As communities begin to plan for their growth, they must think 20 to 30 years into the future to identify and designate an interconnected network of roads, walkways, bicycle paths and lanes, parks, and open spaces. Communities should create a template for a street grid with a hierarchy of connected streets to guide development and promote connectivity. Planning regulations should encourage residential subdivisions and commercial centers to connect to the existing and future road networks. As communities grow and develop within the grid, centers, districts, and corridors begin to create easily accessible mixed-use destinations.



CALTHORPE ASSOCIATES

The hierarchy of connected roads also helps to spread traffic over a number of different streets by providing drivers, cyclists, and pedestrians with a number of choices to reach their destination. A network of interconnected roads also improves access for emergency vehicles, allowing alternate routes in the case of a blockage or congestion. By having a variety of routes, the network allows for reduced travel time and congestion because traffic is not all on one arterial road. As vehicular traffic is spread across the network, drivers, cyclists, and pedestrians become safer.

The concept of interconnectivity should go beyond traffic planning. Communities should also consider creating a well-connected system of recreational trails, parks, and open spaces to provide activities for residents and to meet the needs of their increasing populations. These recreational opportunities help to provide residents with much-needed amenities that improve their quality of life, something many suburban communities lack. As the fringe matures, its identity and sense of place depend on the connectivity of residential neighborhoods, schools, churches, commercial centers, parks, and open spaces.



A network rich in connections, such as that depicted in the right-hand map, offers many alternative routes to reduce auto congestion on arterials, as well as to facilitate pedestrian use throughout the community. The map at left shows a connection-poor network.

# 8 Deliver Sustainable Transportation Choices

**W**ould you rather live in a community where you have to drive everywhere for everything, or in a community where you can walk, ride a bike, take a bus, or drive to where you want to go? Smart growth communities provide a range of transportation choices. To be sustainable, these alternatives must be built in rather than added later to a car-based culture. Creating transportation options begins with a good location, one that is convenient to jobs and services for residents and accessible to a range of workers and housing for businesses. Proximity to major roads and transit routes can help shape efficient travel patterns from the beginning rather than having to remedy dysfunctional patterns in the future. Staged development of real estate and transportation facilities ensures that a range of options will be available to travelers—walking, cycling, transit, carpooling, telecommuting, and driving—and that each will be ade-



DALLAS AREA RAPID TRANSIT

quately supported. Communities should begin by assessing their growth patterns and identifying and designating a system of interconnected bicycle and pedestrian paths, main roads and transit, commercial corridors, and residential areas with advanced communication infrastructure so growth can develop around them.

Walking is cheap, nonpolluting, and healthy, making it an ideal means of getting around. What does it take to make walking a viable option? A compact community, attractive destinations nearby, and a convenient, direct route. Well-connected neighborhoods avoid the extensive walking to destinations and transit stops required in communities of large lots, superblocks, and disconnected streets. Street designs that keep traffic speeds down make the walk safer.

Creating the development patterns that offer convenient walking options is a harder challenge. Neighborhoods need to be compact, because walking trips tend to be short. Walking trips account for 7 percent of daily travel in communities with moderate densities of 2,000 to 5,000 persons per square mile, while at more than 50,000 persons per square mile, almost half the trips are on foot. On the other hand, residential density alone is not enough. There must be places to walk to, which requires diverse uses within walking distance. Given these conditions, people will walk. In Oakland and Berkeley, California, one-third of residents within one-half mile of six traditional shopping centers walked to work, and 20 percent still walked within one-half to one mile. Other good prospects for walking are commercial centers with a mix of retail, business, and other attractions. Even those who drive there can “park once,” taking advantage of multiple attractions while enjoying a stroll and leaving the car parked.

Viable transit choices in new suburban communities are much more difficult than promoting walking, although creating a pedestrian-friendly environment is a good start for a successful transit village where people can walk to the bus or train. Residents may have neither experience nor interest in using transit, and there are often no established routes. Strictly from the perspective of transit ridership, it is better to build a marginally smart growth community in a great transit location than a great smart growth community in a marginal transit loca-





tion. To do so is rarely possible, however, because of the lack of any transit in the outer suburbs. Identifying and designating future transit corridors and rights-of-way can assure new residents that transit options will be available. Making these communities transit ready by establishing higher-density zones will create a built-in market that will make future transit viable. The last requirement to ensure a successful transit community is to make certain that the transit agency's plans clearly specify the timing of service and financing. Agreements developed in advance make all participants—the locality, the transit agency, and possibly developers—part of the deal.

### **Smart Roads Accommodate Smart Growth**

Although opportunities to walk, cycle, and use transit give residents more travel options, most will continue to drive, at least in the near term. Those who do should receive the same consideration as transit riders and pedestrians—plans for facilities to provide sustainable congestion levels that avoid traffic gridlock so endemic in the suburbs. A choice of travel routes should be available, rather than one way out of the community. Connections between neighborhoods should be available to serve schools, community centers, and neighborhood retail with-

out forcing people onto the main road. The potential for high-occupancy lanes and/or toll lanes should be considered in planning new communities so that such choices are given proper consideration. Funding of needed road improvements should be secured in advance, just as for transit plans.

### **Parking Management Enhances the Community**

Although free parking is considered a birthright of the suburbs, it can also be one of its greatest plagues, with oceans of parking that offend the eye, impede walking, and pollute waterways. Rather than require all properties to provide sufficient parking on site, often in excessive amounts, a more sensitive treatment of parking can meet the same demands without the negative impacts. In areas of mixed uses, shared parking can allow one space to do the work of two. In higher-density areas, structured parking can reduce the footprint of required parking and, if priced correctly, reduce parking demand. Parking can be treated as a community resource rather than a property requirement and developed by a locality or parking district to serve multiple users. Such an approach makes it possible to take advantage of economies of scale in reducing the amount of parking required, enhancing the design and location, and pricing it properly.

### **Fair Pricing Makes for Smart Choices**

Critics often knock suburbanites for making bad choices and creating their own problems by moving to distant suburbs and then getting stuck in the resulting traffic. Given the choices available currently, these choices are often rational economic ones between the cost of driving and the cost of housing. Creating affordable housing in accessible locations would greatly improve this state of affairs, as no one willingly drives farther than necessary. Increasing the marginal cost of suburban travel would have the same impact. It could be accomplished by pricing new suburban highways to reflect the full cost of required facilities or by targeting highway investments to those places where growth is desired, allowing other locations to suffer the full brunt of growing congestion.

Advance planning for the transportation needs of smart communities on the fringe can promise that a choice of modes will be available for travelers, unlike the exclusive use of autos in conventional suburbs. It can guarantee that the most common alternatives to driving, especially walking, cycling, and public transit, become sustainable elements of community access and circulation and put the car in its place, parked or in motion. And for those who choose to stay in their cars, it can reassure them that they will be provided multiple travel paths and other driving options and will not be doomed to the same gridlock that haunts other suburban commuters.

# 9 Preserve the Community's Character

**C**lean air, clean water, and healthy natural systems are all important to the health and well-being of American communities, but as Mark Twain once said, “We take stock of a city like we take stock of a man. The clothes or appearance are the externals by which we judge.” Although the community’s character is also important, its appearance creates the first impression, and much development on the fringe is unattractive and bears little relationship to a community’s history, culture, or geography. Just look around: billboards, cluttered commercial strips, and look-alike subdivisions are all too common across America.

The relationship between a community’s character and its economic well-being is immense but too often ignored. Attractive, well-planned communities always attract more visitors and high-quality investment than ugly ones. Unfortunately, current zoning standards and regulations do little to address visual quality, community character, or urban design. As a result, many communities are slowly losing their sense of place.

## **Avoid Placelessness**

No two towns are exactly alike. Each has a particular street layout and arrangement of buildings, shaped over time in a particular geography, by a particular



DEVELOPMENT DESIGN GROUP

population. The dynamic forces of place, time, and culture work to create endless variations on the themes of city, town, village, or rural area.

At least they used to. In another era, local culture and geography played a larger role in shaping new development: houses were constructed of local materials, regional architectural styles predominated, businesses were locally owned, and building technology was limited. Development in St. Michael's, Maryland, looked somewhat similar to nearby Chestertown but not quite like Annapolis and a whole lot different from Taos, New Mexico, or Stillwater, Minnesota. Regional style predominated, and local variation provided distinction.

Today, however, the subtle differences between places are fading, and the larger regional distinctions hardly exist. Now, if you were dropped along a road outside almost any American city, you would not have the slightest idea where you are because it all looks exactly the same. Is it Albany or Allentown, Providence or Pittsburgh, Baltimore or Birmingham? Who can tell?



EDWARD T. MCMAHON



COOPER, ROBERTSON, AND PARTNERS



## **Promote Vernacular Architecture**

According to Jim Constantine, a market specialist who does “curb appeal” surveys for developers, “Consumers are turned off by cookie-cutter subdivisions and the homogenous look of houses.” Increasingly, buyers are attracted to vernacular and historical house styles that characterize their immediate area or region. A vernacular house design, despite a variety of opinions, is generally defined as “a type of construction native to an area or region that is shaped by environmental and cultural considerations as well as by locally available building materials.” One way to begin vernacular home design is with a photo survey of home types in the region of a proposed new development.

## **The Importance of Good Design**

Commercial development has perhaps an even bigger impact on community character and sense of place. Technological innovation and the global economy make it easy for building plans drawn up at a corporate headquarters in New Jersey to be applied over and over again in Illinois, California, or Florida. Over the last 40 years, America’s commercial landscape has progressed from the unique to the uniform, from the stylized to the standardized. And a big reason is the proliferation of chain stores and franchises.

Do franchises and chain stores all have to look alike whether they are in New England or New Mexico? No, of course not. National franchises and chain stores can and do change their standard building designs to fit the local character of the surrounding community. But they usually do so only in communities savvy enough to insist on something other than off-the-shelf, look-alike architecture.

Experience shows that if you accept standard look-alike corporate design, that is what you will get. On the other hand, communities that insist on a customized, site-specific design usually get it. Chain stores and franchises want access to profitable trade areas. They evaluate locations based on their economic potential. If they are asked to address local historic preservation, site planning, or architectural concerns, they usually do so.

Take Sedona, Arizona, for example. McDonald’s arches are not golden in Sedona. They are turquoise and beige to complement the high desert setting of this southwestern community. Since 1993, Sedona has used comprehensive design review standards to “preserve and enhance Sedona’s unique sense of place, one

project at a time.” To ensure that new development respects and enhances Sedona’s distinctive cultural and environmental ambience, the city’s design review manual contains several imperatives for new development:

- Architectural transplants from other locales are neither appropriate nor desirable.
- The natural environment deserves authenticity and integrity in the built environment.
- Commercial public facilities and multifamily residential development can be designed with architectural character that accommodates the structures in harmony with their natural surroundings.
- Franchise/monocultural (corporate signature) buildings and shallow or artificial imitations of “western” architectural styles are not desirable.
- Natural structural rhythms, proportions, and color schemes can enhance environmental surroundings.
- Careful site planning is the essential basis for designing and building structures on sensitive, often difficult terrain.

The design guidelines were created to provide good design that is responsive to its contextual setting. As a result of the guidelines, the national chains that have located in Sedona have departed from their off-the-shelf designs to construct buildings compatible with Sedona’s distinctive character and sense of place.



STEVE HINDS



# 10

## Make It Easy to Do the Right Thing



**O**ne major barrier to better development on the fringe is local regulation. Most local zoning and subdivision regulations make it easier and faster to build conventional low-density auto-dependent developments than undertake smart growth on the suburban fringe. Developers build sprawling projects because they are easier and cheaper to construct. Local officials should make local regulations more flexible to encourage mixed uses, narrower streets, compact development, and other smart practices.

Local regulations that promote sprawl plus lending institutions that are reluctant to finance projects that look unfamiliar plus developers who are comfortable with business as usual create something like the DNA of the landscape. When land is developed, it inexorably follows this pattern of public and private policies and produces sprawl. To break this pattern, a new DNA for the landscape must be created. Changing the zoning code to support higher densities and mixed uses is one step in the process. Subdivision regulations, engineering codes, building codes, road ordinances, and environmental rules all must be examined to determine how they will influence the community's vision. Hard-edged engineering solutions for stormwater management and other environmental concerns should be reexamined. Street designs that focus only on getting cars speedily from one place to another instead of improving pedestrians' safety and comfort must be amended. Guidelines must be prepared that address the context of streets in the community and how they might contribute to improving quality of life.

The new landscape DNA should be aligned with the community's vision so that as land develops, the vision is implemented and strengthened. Building the vision into the land use plan, the comprehensive plan, and the zoning map accomplishes this goal. Correspondingly, conventional development of single-use, low-density projects is subject to variances, increased regulatory scrutiny, and increased fees. The importance of stakeholders' full involvement at the beginning of the vision process is manifested here, because all sectors of the community must support the changes necessary to implement the vision.

It has been notoriously difficult for developers and local officials to get community support for projects or plans that differ from the established pattern of development for the area. Even well-planned and -designed smart growth projects are susceptible to antagonism from the community because of their higher density, mixed uses, or affordable housing component. The root of the hostility is a community sense of disconnection from the process that brings these projects to the neighborhood. It is the need to involve the community in establishing the vision for its neighborhood, city or county, and region that ties this principle to the first one:

### CHANGING REGS

**O**ne local government that has changed its regulations to facilitate better development is Calvert County, Maryland. In Calvert County's growth zones, developers can build conservation or cluster subdivisions by right. If a developer wants to build a conventional large-lot subdivision, a special-use permit and other time-consuming authorizations are required. Calvert County makes it easier to do the right thing.

create a shared vision for the future . . . and stick to it. If the projects and plans deliver what the community envisioned, residents and officials will support them.

The long-term integrity of the vision and its implementation must be sustained through political changes over time. If the community is truly invested in the vision, the continuity will be there. But continuity is not enough. To encourage the right kind of development, the community and developers must clearly understand the standards, and a good project must be supported and receive approval without equivocation. When good developers and builders see that policies and implementation are consistent, that the rules apply to everyone, and that if they stick to the vision, approvals will be timely, they will deliver the projects to implement the vision.

Consistency and discipline in public policy are also necessary. Having the patience to wait for the right projects and usher them smartly through the process when they come will facilitate the proposal of similar projects. Stick to the plan, be disciplined, anticipate the need to be flexible, and bend—but don't break.



**The Development Resource Center is the home of the Chattanooga and Hamilton County development-related departments. The facility provides citizens, contractors, and developers with a one-stop shop for all city and county permitting functions, including traffic engineering, zoning, and planning, among others. This makes it easy for developers to work through the approval process and ensures that all city and county agencies are available to work together to solve problems.**

# Ten Principles for Smart Growth on the Suburban Fringe

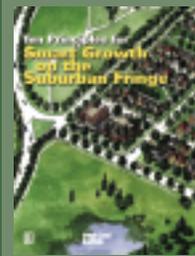
ULI—the Urban Land Institute

Foreword by Lawrence A. Selzer, *The Conservation Fund*

How can you counter the negative effects of sprawl, yet accommodate the rapid increase in population growth expected over the next 20 years? Infill development is part of the answer, but the demand for new, relatively affordable housing will continue to drive development on the fringe of suburbia. Based on contributions from experts in the real estate industry as well as conservationists, this booklet takes a fresh, realistic approach to suburban development, providing guidelines to make new development more attractive, accessible, efficient, environmentally sensitive, livable, and profitable.

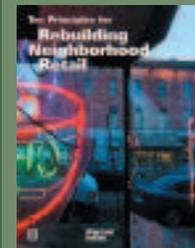
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- Creating a common vision shared by landowners, developers, elected officials, environmental and citizen activist groups, and local business leaders;
- Defusing antigrowth sentiment by identifying areas to be developed and those to be protected from development;
- Determining the right locations to develop and the right places to conserve;
- Protecting environmental systems and conserving resources;
- Offering diverse housing types to meet the needs of changing demographics;
- Building appealing, pedestrian-friendly, mixed-use projects that create destinations for employment, retail, public services, and community activities;
- Reducing traffic by planning a network of connected roads to offer a variety of routes for cars, pedestrians, bicyclists, and emergency vehicles;
- Creating a range of transportation options from the start;
- Preserving the character of the community; and
- Changing regulations and zoning to encourage better development.

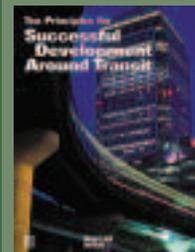


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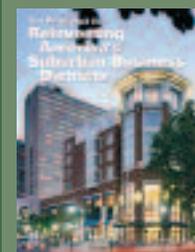
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ISBN 0-87420-943-9