

# Urban Containment in the United States:

History, Models, and Techniques for Regional  
and Metropolitan Growth Management



**Arthur C. Nelson and Casey J. Dawkins**

With a Foreword by Douglas R. Porter



American Planning Association



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Arthur C. Nelson, FAICP, has been at the forefront of urban containment policy-making and research for more than 30 years. He is presently director of graduate studies in urban affairs and planning at Virginia Tech's Alexandria Center and associate director of the Metropolitan Institute at Virginia Tech. In 2000-01 he was special assistant to HUD's assistant secretary for policy development and research under the Clinton and Bush administrations on smart growth and growth management. Among his more than 150 publications related to growth management are such books as *The Regulated Landscape* (with Gerrit J. Knaap), *Growth Management Principles and Practices* (with James B. Duncan), and *Planner's Estimating Guide: Projecting Land Use and Facility Needs*.

Casey Dawkins is an assistant professor in the urban affairs and planning department of the School of Public and International Affairs at Virginia Tech, where he teaches courses in quantitative research methods, urban growth management, and contemporary urban issues. His current research focuses on the causes and consequences of residential segregation by race and the implications of residential segregation for the design of regional governance structures.

This PAS Report has been many years in the making. Thanks to some initial support arranged by Rosalind Greenstein from the Lincoln Institute of Land Policy and by Robert Lang from the Fannie Mae Foundation, we began collecting growth management plans with urban containment frameworks in 1999 and presented our findings to a gathering of growth management scholars at the Institute in Cambridge, Massachusetts, in early 2000. We owe a great debt to those scholars because they helped us shape more rigorous analysis that followed. Those scholars included Jim Brown (Lincoln Institute of Land Policy), Karl Case (Wellesley College), Betty Deakin (University of California at Berkeley), Ken Dueker (Portland State University), Bill Fischel (Dartmouth College), Roz Greenstein (Lincoln Institute of Land Policy), John Landis (University of California at Berkeley), Robert Lang (formerly of the Fannie Mae Foundation, now at Virginia Tech), Jim Nicholas (Uni-

versity of Florida), Doug Porter (President of the Growth Management Institute), Tom Sanchez (formerly of Portland State University now at Virginia Tech), and Susan Wachter (then Assistant Secretary for Policy Development and Research now at the University of Pennsylvania's Wharton School). Along the way, important insights were offered by Ray Burby (University of North Carolina at Chapel Hill), Tony Downs (Brookings Institution), Rick Peiser (Harvard University), and Robert Patterson (University of Texas).

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We could not have succeeded without support from other sources. While one of us (Nelson) was at HUD, Susan Wachter, then assistant secretary, provided access to HUD resources to gain additional insights into growth management, smart growth, and urban containment. Steve French and his successor, Cheryl Contant, as directors of the Graduate City and Regional Planning Program at Georgia Tech, allocated scarce discretionary resources to facilitate our progress. This same courtesy was extended by John Randolph at Virginia Tech. Robert Patterson and his colleagues and students at Texas provided us with their survey of growth management techniques, which we acknowledge in Appendix D.

Numerous students were involved in the plan coding process, done principally by one of us (Dawkins). We give special acknowledgement to Eric Dumbaugh in this respect.

Last but certainly not least our thanks to Jeann Greenway at Georgia Tech for helping us to bring this project to conclusion.

*Cover design by Lisa Barton*

Cover photo: The Portland, Oregon, skyline with Mount Hood in the distance. Portland is probably the most well-known case of urban containment. In the categories established in this report, Portland's plan is identified as a strong-accommodating type. See page 63.

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APA's publications office is at 122 S. Michigan Ave., Suite 1600, Chicago, IL 60603.

E-mail: [pasreports@planning.org](mailto:pasreports@planning.org)

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ARTHUR C. NELSON, FAICP, AND CASEY J. DAWKINS

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## Foreword

In the rush to latch onto smart growth, sustainable development, and other nostrums for ordering patterns of community growth, planners and citizens alike have tended to ignore the practical side of getting it done. Planners must remind themselves—and their constituencies—to reach beyond the hot topics of the moment so as to understand, long-range, how to manage community growth and change. That requires the hard work of crafting a package of growth management tools to create comprehensive plans capable of making a difference. To do it right, there must be an overarching framework that guides the plan-making and implementation processes.

This Planning Advisory Service Report explores urban containment as one such framework that regions and communities can use for managing growth. Urban containment itself is a core strategy for pursuing smart growth. Smart growth is well-known as a series of planning principles that guide the form, substance, and process of community development. In turn, smart growth principles respond to the overarching significance of sustainable development, an all-encompassing approach to integrating physical development with environmental, economic, and social concerns. Ideally, smart growth serves to operationalize the broad objectives of sustainable development.

Successful operationalization requires that planners translate smart growth principles, based on regional and community needs and conditions, into specific planning goals and policies, such as those articulated in comprehensive, sector, and neighborhood plans. Growth management techniques can then be orchestrated to shape development toward desired ends. Viewed within the context of sustainability and smart growth, urban containment provides a valuable framework for a cluster of growth management techniques responsive to smart growth principles.

Growth management techniques can be time-related (such as phasing development through infrastructure management), place-related (such as defining the qualities of specific areas), and function-related (such as relating uses and ensuring housing affordability). When urban containment is the framework underlying growth management, it provides growth management with a rationale for phased development, steers the direction and form of development, and identifies central places within the urban fabric.

As conventionally practiced, growth management tends to adopt an “accommodationist” view, emphasizing short-term needs to serve demands for development but often lacking an explicit vision of the ultimate form of the region or community. Jurisdictions pursuing this approach typically focus on infrastructure availability and on attracting fiscally positive development, but they pay less attention to defining and fulfilling long-term planning goals. Public officials in these jurisdictions tend to “cherry-pick” among smart growth principles and growth management techniques to obtain immediate satisfaction.

By comparison, growth management programs based on an urban containment framework shape the urban landscape in ways that, over the short and long term, can satisfy the entire array of smart growth principles. Conceptually, urban containment is most simply expressed as a line on a map separating urban and rural uses. The line may be locally identified as an urban growth boundary, urban service limit, or priority growth area. But the significance of the line resides in the supporting battery of implementing mechanisms to make containment work, from innovative zoning to programs for infill and redevelopment, open space conservation, and infrastructure phasing.

As shown in this PAS Report, urban containment plans can be divided into four basic types that represent a combination of either strong or weak boundaries and either restricted or accommodated development. For example, Metropolitan Portland, Oregon, and Montgomery County, Maryland, exemplify strong containment of accommodated growth; the Twin Cities in Minnesota and Sioux Falls, South Dakota, offer weak containment while accommodating growth; Ventura County and Petaluma, California, impose strong containment and restrictive growth accommodation; and Martin County, Florida, and Baltimore County, Maryland, provide for weak containment while restricting growth.

This PAS Report reviews the history and central characteristics of urban containment, discusses the authors’ evaluation of more than 100 urban

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containment plans, and presents their four-framework typology. It also offers case studies of each of the four frameworks and summarizes some of the implications for planners. Among the appendices is a compilation of principal techniques for growth management generally and the elements of urban containment frameworks in particular.

*Douglas R. Porter, FAICP  
Director, Growth Management Institute  
Chevy Chase, Maryland  
April 2004*



## Introduction

**R**apid suburbanization since World War II in America has created many of the challenges planners face today. Roads intended to relieve congestion are congested. Cookie-cutter subdivisions have replaced scenic landscapes. Once-vital downtown stores have been abandoned as shoppers transferred their allegiance to suburban malls. The spread of low-density residential development has made public transit impractical, resulting in the automobile becoming virtually the only choice for transportation. Automobile dependence has degraded the air, in some places to alarming levels. As a result of sharp growth in the number of people, automobiles, and shopping centers, many once-tranquil communities have lost their unique character.

But the problem affecting these communities is not growth per se. Instead, the problem is how these communities can manage growth in ways that minimize costs and maximize benefits to both individuals and the public at large.

Growth management is an attempt to confront the reasonable development needs of a community, region, or state, and to accommodate those needs in a manner that preserves public goods, minimizes adverse interactions between land uses while maximizing positive ones, improves the equitable distribution of the benefits of growth, minimizes fiscal burdens, and enhances quality of life. Urban containment is the framework within which growth management choreographs public infrastructure investment, land-use and development regulation, and incentives and disincentives. Urban containment, therefore, is used to influence the rate, timing, intensity, and mix of development so as to focus growth within a long-term boundary while preserving land outside the boundary for nonurban uses.

The idea of containing urban development is not new. From ancient times through the nineteenth century, containing a population within walls was considered a means of defending cities and preserving farmland to feed residents. Technological improvements—chiefly the automobile and telephone—combined with farm mechanization, public health concerns about overcrowding, national defense strategies favoring deconcentration, cultural preference for space, and burgeoning population growth broke down these walls and sent people spreading—some say sprawling—outward. This population shift has had benefits, but it has also created new problems, such as loss of open space, increasing air pollution, worsening social segregation, increasing automobile dependency, and declining economies of agglomeration that lead to reduced economic performance, all of which have arguably reduced quality of life for citizens.

In response to concerns about contemporary development patterns, some American states and metropolitan areas have attempted to contain the outward expansion of urban development. While the idea of urban containment in America can be traced back to the seventeenth century—when



several New England townships forbade homes from being built in the nearby farmland—its modern form arose only in the late 1950s. The city of Lexington and Fayette County, Kentucky, are credited with implementing the nation’s first effort to contain urban sprawl, chiefly by limiting development within an urban service line and preventing urban-scale residential development beyond that line. Today, one can fly over north-central Kentucky and see the results of this policy: open space surrounds development clustered in Lexington, at the center of Fayette County, but urban sprawl dominates in the surrounding counties.

From this modest beginning came the first comprehensive statewide urban containment effort, launched in Hawaii soon after its admission to the Union in 1959. Although the state’s containment program is not considered a mainstream example—Hawaii’s isolation, topography, and limited land area available for development limit sprawl in ways not possible elsewhere in the United States—it remains an important milestone in the history of containment policy.

During the 1970s, urban containment emerged in a few more metropolitan areas, chiefly Miami-Dade County, Florida; Minneapolis-St. Paul; Boulder, Colorado; Sarasota, Florida; and Sacramento, California. This period also witnessed numerous local governments begin to pursue containment, primarily in coastal metropolitan California. The 1970s also brought significant containment efforts by Oregon. Florida’s growth management legislation in the mid-1980s enabled local governments to adopt various forms of urban containment strategies. The state of Washington adopted Oregon-style containment laws in the early 1990s and applied them to its most urbanized counties.

It was less than half a century ago that there was only one clear example of urban containment in the United States. Today, our research has revealed that perhaps 100 or more metropolitan areas have some form of containment policy, whether metropolitanwide or implemented by some local governments. Examples are not limited to the West Coast or to areas of burgeoning population growth, like the Sun Belt: Sioux Falls, South Dakota, has one of the nation’s oldest programs.

With urban containment now gaining momentum, it is time that we ask: What are its institutional elements, and How do they differ? This PAS Report attempts to answer these questions.

In the first chapter, we review the historical underpinnings of urban containment abroad and in the United States and discuss our findings of the varying ways in which American urban areas attempt to contain urban expansion. We also describe the primary institutional mechanisms employed to implement urban containment programs, and we also present a general framework that characterizes their principal institutional features. In the second chapter we present the results of our analysis of urban containment plans collected from across the nation. It is here that we establish a statistical foundation for our finding that there are four urban containment frameworks that guide growth management. We base our identification of these four framework types on whether they exhibit weak or strong open space preservation outside boundaries, and restriction or accommodation of growth within boundaries. The next four chapters profile examples of each of the four frameworks. The last chapter summarizes our principal findings and offers the implications of them for planners.

Five appendices follow, which include references to literature cited, a summary of the extent to which urban containment characteristics are found in each of the 131 growth management plans we reviewed for this PAS Report, the frequencies that each of the urban containment characteristics were observed in these plans, an extensive listing of growth management techniques and key urban containment characteristics and excerpts from APA’s policy guide on smart growth.

*With urban containment now gaining momentum, it is time that we ask: What are its institutional elements, and How do they differ?*



CHAPTER 1  
**The Objectives of  
Urban Containment**

*The Lord said to Moses . . . Command the people of Israel, that they give to the Levites . . . cities to dwell in; and pasture lands round about the cities . . . The pasture lands of the cities . . . shall reach from the wall of the city outward a thousand cubits all around.*

—NUMBERS 35: 1–4

*Burn down your cities and leave our farms . . . and your cities will spring up again as if by magic; but destroy our farms and the grass will grow in the streets of every city in the country.*

—WILLIAM JENNINGS BRYAN

**U**rban containment is gaining momentum in the United States. By the beginning of 2004, significant examples of urban containment could be found in as many as 100 metropolitan areas or their subregions, such as counties or larger cities. About a dozen states have enacted growth management programs that arguably include formal or informal urban containment mandates. And although federal support of urban containment has been episodic, reduction of travel and related air pollution is a goal of the most recent federal transportation legislation, which mandates that metropolitan planning bring about closer coordination of land-use and transportation policy, thereby implying a preference for containment over outward urban expansion.

In his foreword to this report, Douglas R. Porter presents the lexicon within which urban containment exists. At a very general level, one could argue that planning is all about achieving what Porter identifies as “sustainable development.” Smart growth, in turn, offers general principles that can guide actions toward sustainable development. Anthony Downs (2002) and one of us (Nelson 2002) have attempted to specify in greater detail those principles. At minimum they include:

- preserving public goods;
- minimizing taxpayer exposure;
- maximizing positive land-use interactions and, with that, economic performance;
- distributing the benefits and burdens of growth and change equitably; and
- maximizing quality of life for all.

*Growth management choreographs techniques to achieve a land-use pattern consistent with smart growth principles.*

Growth management choreographs techniques to achieve a land-use pattern consistent with smart growth principles. Urban containment is a framework for guiding the preparation and implementation of growth management with the specific objective of creating a reasonably clear separation between urban and rural land uses. Not all growth management plans include urban containment, but many do.

This PAS Report seeks to inform planners and others about the many approaches taken to contain urban development and how they relate to growth management. In this opening chapter, we review the principal purposes of urban containment in the United States and abroad, review its historical underpinnings, and explore the context and some of the institutional characteristics of different urban containment frameworks. As will be seen throughout this report, no single urban containment framework fits any given circumstance.

## **OBJECTIVES**

Urban containment has two fundamental purposes: (1) to promote compact and contiguous development patterns that can be efficiently served by public services and (2) to preserve open space, agricultural land, and environmentally sensitive areas that are not currently suitable for urban development (Nelson and Duncan 1995). In its most basic form, urban containment involves drawing a line around an urban area. Urban development is steered to the area inside the line and discouraged (if not prevented) outside it. Urban containment lines are generally designed to accommodate projected growth over a specified future time period, typically 10 to 20 years.

Urban containment boundaries typically are complemented by urban service area plans, so that cost-effective delivery of public services can be accomplished by controlling the timing of utility extensions and infrastructure improvements. Land within the urban growth boundary may be subdivided into different categories for the phasing of services, depending on development suitability, proximity to existing public facilities, contiguity with existing development, and other factors. Enough land must be included within the boundary and urban service areas to provide sufficient land to accommodate projected market demand within the prescribed planning period, with additional land to provide for choice. If too little land of sufficient density and intensity is included, exorbitant increases in the cost of land and housing, legal challenges, and political pressure to prema-

turely extend the urban growth boundaries may result. On the other hand, designation of too large an area or of areas with insufficient density or intensity opportunities defeats the purpose of encouraging compact and/or contiguous development, and usually results in excessive and premature capital outlays for public services.

Within urban containment boundaries, development is generally encouraged, often with density bonuses and, occasionally, with minimum density requirements. Land within an urban containment boundary but outside the city limits is often subject to contractual city/county agreements governing development standards and timing of annexation and utility extension.

Land outside urban containment boundaries is typically restricted to resource uses and to very-low-density residential development ranging from one unit per 10 acres to one unit per 160 acres or more in prescribed areas. The extension of utilities, especially wastewater service, is often prohibited outside the boundary.

The specific objectives of urban containment include the preservation of prime farm and forest land; the efficient provision of public facilities; the reduction of air, water, and land pollution; and the creation of a distinctly urban ambience. In their model of urban containment, Knaap and Nelson (1992) and Nelson and Duncan (1995) also suggest that local governments must fulfill another crucial objective: they need to include sufficient land within contained areas to meet the requirements for housing, industry and commerce, recreation, open space, and all other urban land uses. Moreover, all land outside contained areas needs to be designated for nonurban uses to the end of a planning horizon, which is usually about 20 years.

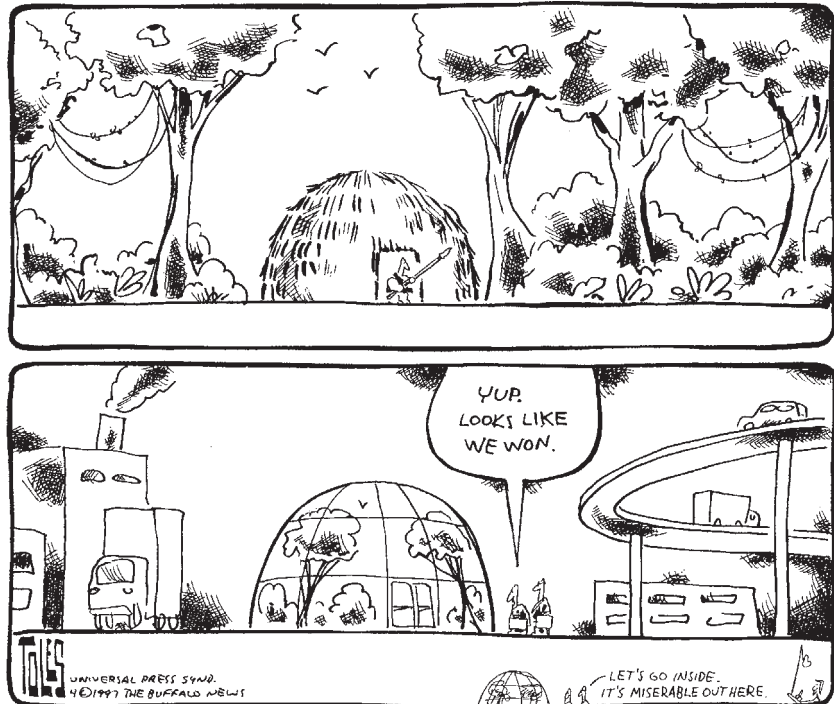
Drawing on policies applied in Florida, Hawaii, Oregon, and Washington as well as the Knaap-Nelson-Duncan model, we therefore recommend that urban containment programs be based on the following seven objectives. A containment program should:

1. accommodate long-range urban population growth requirements consistent with state and local goals and policies;
2. fulfill local needs for housing, employment opportunities, and livability;
3. provide public facilities and services in an orderly and economic manner;
4. maximize efficiency for land uses in or at the fringe of existing urban areas;
5. consider all environmental, energy, economic, and social consequences;
6. preserve farm, forest, and other resource land; and
7. ensure the compatibility of proposed urban uses with nearby resource activities.

## EFFECTS

Urban containment planning aims to influence the regional market for urban land in several ways. First, because land outside the containment boundary is restricted to resource uses or very-low-density residential development, the regional demand for urban development is shifted to the area inside the boundary. This shift should decrease the value of land outside the boundary and increase the value of land inside the boundary. If a gap in land values on both sides of the boundary does not emerge, either the boundary is too large in the near term or there is too much development potential remaining in rural areas regardless of any land-use restrictions.

*Urban containment planning aims to influence the regional market for urban land in several ways.*



Second, higher urban land values may reveal more efficient land development patterns. Basic economic principles hold that if efficiencies are realized in the development of land, those efficiencies will be capitalized as higher land prices even when the price of a finished product, such as a home, remains unchanged. Such efficiencies can include (1) improved access to employment, shopping, and other services; (2) efficient delivery of facilities and services; and (3) preservation of the rural landscape for all urban residents to enjoy in a variety of ways.

Higher prices (especially for housing) could occur if planning fails to increase the supply of buildable land within the boundary. Peiser (1989) observes that urban containment boundaries are prudent land-use policies but only when accompanied by policies that increase urban development density and intensity. In the Portland, Oregon, metropolitan area, for example, local governments are required to increase residential development densities within the regional urban growth boundary. Thus, although land prices could rise, the finished house price would remain unchanged and, conceivably, the finished price could fall. Recent analyses by Phillips and Goodstein (2000) and Downs (2002) support this view. Even if housing prices were to rise despite increasing densities, the increase itself might reflect savings and benefits realized by households because of urban containment (Nelson et al. 2002). Research does not yet support this view, however.

*The development community is naturally concerned about the potential supply-restricting effects of a containment program.*

The development community is naturally concerned about the potential supply-restricting effects of a containment program. From an efficiency perspective, however, urban containment boundaries provide information to developers about future development patterns that, if accurate, could improve the dynamic efficiency of the land market. If it is known that urban development will soon take place on agricultural land inside the containment area, improvements in agricultural production are unlikely. Dynamic efficiency is therefore enhanced as information about future development is capitalized into land values and market participants can react accordingly (Knaap and Nelson 1992).

## THE EUROPEAN ROOTS OF URBAN CONTAINMENT

The idea of urban containment can be dated to ancient times. But it became a political rallying point in the United States beginning at the end of the twentieth century.

Here we review briefly the urban containment approaches pursued in Great Britain and the rest of Western Europe. England has a longer history of urban containment than perhaps any other western nation. In 1580, Queen Elizabeth I issued a proclamation forbidding any building within three miles of the London city gates, perhaps the first policy decree effecting development limits (Easley 1992). Her aim was to provide a buffer against the spread of the plague and to preserve an adequate supply of farmland near the city. In doing so, she created England's first greenbelt.

Twentieth-century thinking about urban containment began with Ebenezer Howard (1898) and his ideas for creating "garden cities." Howard argued that the solution to the concentrated, congested, and unhealthy urban conditions at the turn of the century was decentralization into compact new towns of 30,000 people on 1,000-acre sites, each confined by an agricultural greenbelt of 5,000 acres. Howard's ideas eventually led to the development of two new towns in Great Britain prior to World War II. But Howard's insistence on compact development had little impact on the problem of urban sprawl that began to emerge in the twentieth century: his ideas did not result in any concerted efforts to constrain sprawl (Osborne 1965; Richert and Lapping 1998).

The first modern attempt in Britain to manage sprawl was initiated in 1938 with the Green Belt Act and extended through the ideas espoused in the Greater London Plan of 1944, which proposed a contiguous greenbelt of up to 10 miles surrounding the city (see Abercombie 1944). Greenbelt plans became possible throughout England with the passage of the Town and Country Planning Act of 1947. This law introduced noncompensable land-use regulations as the principal means of controlling urban growth. Reilly (1973, 175) points out,

What is remarkable about the London greenbelt is that it came into being without extensive public acquisition or compensation in a region that was experiencing rapid population growth. Similar, if less spectacular successes have been achieved in the other English cities to which the greenbelt concept has been applied.

In 1965, following amalgamation of local governing authorities in the London region into the Greater London Council, the council embraced the concept of containing cities within their current boundaries. It used greenbelts drawn tightly around existing settlements to accomplish this goal, along with resettlement of urban populations to existing towns and new communities beyond the London greenbelt, as proposed in the 1944 Greater London Plan. Urban containment through greenbelts thus became an accepted part of not only the ideology but also the practice of British regional planning.

In *Planning Control in Western Europe*, H.W.E. Davies (1989) describes urban containment efforts in Denmark, France, the former West Germany, and the Netherlands. Several themes are common to each country's approach. Each draws explicit boundaries of urban expansion on maps demarcating urban and rural areas. Each limits the intrusion of urban activities into agricultural areas, with many countries allowing local farming communities to decide who is able to buy farmland. Each uses investment in public transportation and in walking and bicycle paths to link land uses and reduce (although not eliminate) the use of automobiles. Moreover, each

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has evolved an elaborate administrative structure that, by raising development costs, slows the pace of outward expansion and forces more intensive use of land and buildings in urbanized areas.

As in Britain and other European countries, in the United States the idea of containing urban expansion originated in the early years of the twentieth century. In contrast to the strong support for urban containment among national governments in Europe, prior to 1970 urban containment programs in the United States were rare. But, as mentioned above, this hands-off stance has begun to change at all levels of government.

#### **LOCAL, REGIONAL, AND STATE INITIATIVES IN THE UNITED STATES**

Beginning in the 1920s, Lewis Mumford advanced Ebenezer Howard's ideas by incorporating the garden city concept and urban containment into his agenda for regional planning. Tom Daniels (1999) notes that Mumford's conceptions included an urban growth boundary that would prevent expanding urban populations from overwhelming the countryside and its natural features. With the onset of the Great Depression, however, no state or local government took steps to adopt policies to limit outward urban expansion.

The first formal urban growth boundary in the United States was not adopted until 1958, when the city of Lexington and Fayette County, Kentucky, put in place policies to limit urban development to a core area of 67 square miles, which it expanded to 75 square miles over the following four decades. Outside of the boundary, residential density was limited to one dwelling unit per 10 acres. In 1961, the state of Hawaii created the Hawaii State Land Use Commission to zone all land in the state into three classifications: urban, agricultural, and conservation (see Healy 1976). The state's primary goals were to curb urban sprawl and protect land for agricultural (principally sugar cane and pineapple) production.

During the 1970s, several state governments made efforts to implement urban containment programs. The first was Oregon's 1973 Land Conservation and Development Act. This law required incorporated cities and urban areas of counties to draw urban growth boundaries and restrict the use of land outside the boundaries to rural activities. Among Oregon cities subject to this law, Portland is pointed to most frequently for creating a model of urban containment. The Oregon State Legislature directed the regional Metropolitan Services District in Portland to design and manage an urban growth boundary encompassing 24 cities and portions of three counties. In 1978 voters approved a new charter that gave what is now called simply "Metro" formal powers for regional planning. This referendum made Metro the only directly elected regional government in the United States, consisting initially of a 12-member (now a seven-member) board and an elected executive officer. Oregon went on to accept Metro's urban growth boundary, which contained 364 square miles, and Portland thus became the one American metropolis that could be described, in James Kunstler's words, as "Lewis Mumford's dream come true" (Kunstler 1993, 205).

Other jurisdictions followed Oregon's lead. Dade County, Florida, implemented a containment program by creating a growth boundary in 1975. That same year, Sarasota County, Florida, adopted a boundary plan with three tiers for development: urban, semirural, and rural. The 1978 comprehensive plan for Boulder, Colorado, also implemented a three-tier, phased development system. After passing enabling legislation in 1976, Minneapolis-St. Paul established a regional urban service boundary in 1980. Since then a number of other states and local governments have implemented urban containment programs, notably the states of Florida,

New Jersey, Vermont, and Washington, and metropolitan regions in California, Colorado, Kentucky, Minnesota, New Mexico, South Dakota, and Tennessee, among others.

### THE FEDERAL ROLE

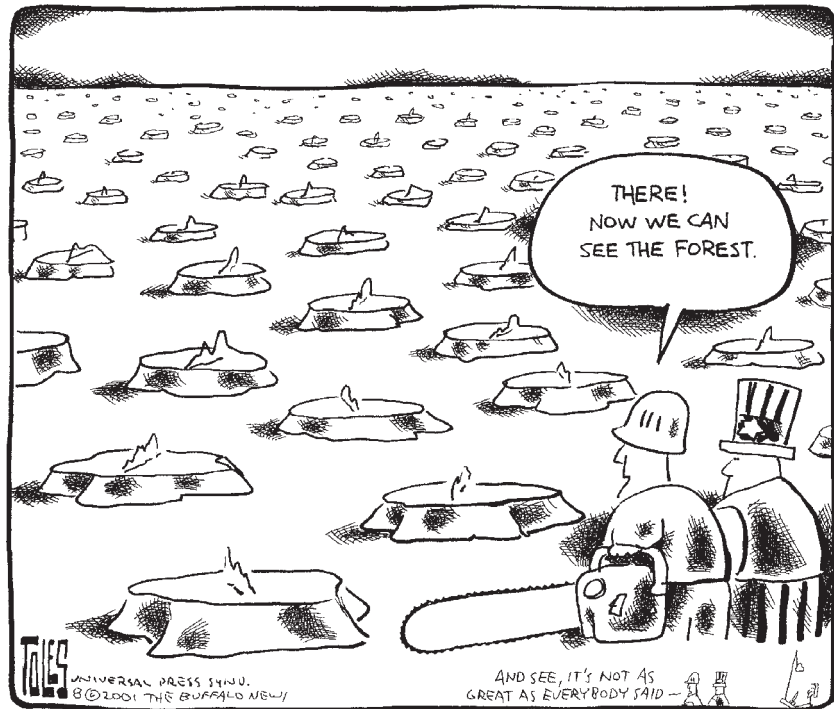
In addition to the urban containment movement at the state and local level, federal policies have encouraged compact development, albeit within the constraints of other policies emphasizing low-density home ownership and low-cost vehicular travel, both of which have contributed to urban sprawl. Raymond J. Burby at the University of North Carolina, Chapel Hill, has traced extensively the federal interest in compact urban development. The analysis presented in this section is based on insights he has provided to us for this report. He notes that federal support for containment has evolved in two directions: one builds on British tradition and uses new towns as a mechanism for shaping urban growth while the other emphasizes savings in energy and reduction in travel that can be achieved through compact development. To date, however, neither has produced policies and programs with sufficiently strong incentives to have any substantial effect on state and local government land-use policy.

Federal support of new town development began in 1933, when Congress appropriated \$25 million to begin planning 100 new communities, essentially suburban garden cities, to house both inner-city dwellers and homeless farm families. The head of the New Deal Resettlement Administration, Rexford G. Tugwell, developed working plans for 25 new towns. The deepening depression and the mood of the Republican Congress against such “communist farms,” however, limited actual construction to three communities: Greenbelt, Maryland, near Washington, D.C.; Greenhills, Ohio, near Cincinnati; and Greendale, Wisconsin, near Milwaukee.

The next federal attempt to foster new town development came with Title IV of the 1968 Housing and Urban Development Act, which was strengthened by the Urban Growth and New Community Development Act of 1970 (see Clapp 1971; Miels 1973; Burby and Weiss 1975). This legislation, modeled on Howard’s new towns program in Great Britain, sought to “encourage rational, orderly, efficient, and economic growth, development, and redevelopment” (*Federal Urban Growth* 1970). The U.S. Department of Housing and Urban Development was authorized to guarantee loans to private development corporations for land acquisition costs as well as the development of infrastructure and industrial uses. Principal and interest payments on certain aspects of the loans could be deferred for up to 15 years. The federal goal was to initiate 10 new communities per year, and by 1972 a total of 20 projects had completed the application process. State governments quickly followed the federal lead. New York State established the New York Urban Development Corporation, which subsequently initiated three state-sponsored new towns, and Ohio and Tennessee passed legislation to encourage new community development. In the end, however, only 13 new communities received federal loan guarantees, and all but one (Woodlands, near Houston) was bankrupt by 1980, when Congress closed the program.

Compact urban development as a tool for conserving energy and reducing travel has had more enduring federal support. In the mid-1970s, in response to the national energy crisis triggered by the OPEC-contrived oil shortage, the Carter Administration promoted compact development as a way to conserve energy. The rationale behind this policy was that energy requirements for transportation are lower in compact cities than in cities

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characterized by urban sprawl because employment and shopping areas are located close to residential areas, thereby reducing travel requirements. When the energy crisis subsided, however, the Energy Department turned its attention to other modes of energy conservation.

Nevertheless, compact development, understood as a means to reduce travel needs, has continued to receive federal support. The latest manifestation of this support is the Intermodal Surface Transportation Efficiency Act (ISTEA), which was enacted in 1991 and extended in 1998 as TEA-21 (Transportation Efficiency Act for the 21<sup>st</sup> Century). This legislation emphasizes maintenance of existing transportation systems, efficient operation of transportation networks, and improved integration of transportation modes. Metropolitan planning organizations are required to draft long-range transportation improvement plans with land-use and air-quality issues and impacts in mind. We surmise that although federal support of containment has been episodic, it is not insignificant.

### DIFFERENT SCALES OF URBAN CONTAINMENT

In this section we will characterize generally how urban containment styles differ by geographic scale. We find there are three scales of urban containment effected by policy and one by natural features and/or public ownership patterns.

#### Submetropolitan

Submetropolitan containment is the earliest and probably most prevalent form of urban containment. It occurs where one local government, usually in a rapidly growing region, wishes to shape development that is moving toward it so that it takes on a different form. A notable example is Petaluma, California, which launched its urban containment effort in the early 1970s. Then at the edge of the San Francisco metropolitan area, Petaluma sought to control the timing and form of development that it would accommodate. The problem facing Petaluma was its inability to work within a

metropolitanwide framework to guide development, because at the time its plan was first adopted, there was no such framework in the region. Petaluma estimated that its regional fair share of new residential development averaged about 500 units annually and worked to guide how that development would occur. The city then established an urban growth boundary, within which new development is today still limited. Only those development proposals scoring highest in several criteria (such as mixed-use and mixed-income housing) are permitted. Even though the city is now well inside the San Francisco metropolitan area, no development is allowed in the open spaces surrounding Petaluma because of the county's large-lot zoning and septic system regulations. The administrative complexity of Petaluma's approach rivals that of Great Britain albeit at a much smaller scale.

Even more complex and much broader in scope is the containment program of Montgomery County, Maryland, north of and adjacent to Washington, D.C. This countywide effort directs development into clearly definable urban centers (most with direct access to the Washington Metro rail system), requires residential development to include mixed-income units, creates strong incentives for mixed-use development, and prevents development on countryside lots smaller than 25 acres. It also includes a transfer-of-development rights program wherein farmers in "sending" areas can sell one such right for every five acres they own to a developer who can then increase residential density in "receiving" areas by one unit.

Many more examples of this style of containment exist, including the pioneering effort by Lexington-Fayette County, Kentucky, as well as programs in Boulder, Colorado; Sioux Falls, South Dakota; most urban centers in the San Francisco Bay Area; and, recently, Ventura County, California.

### **Regional Unbounded Metropolitan**

Beginning in the 1970s, several metropolitan areas initiated metropolitan-wide containment efforts. The earliest and best known is that of the Twin Cities Metropolitan Council in Minneapolis-St. Paul. Through the Metro Council, water and wastewater service is restricted to areas within an urban service boundary (USB) beyond which urban-scale development is not allowed. The USB is designed to have a 10-year supply of urbanizable land, and about every five years it is extended outward to accommodate projected development for the next 10 years. Outside the USB, however, homesites on one- to five-acre parcels of land are not only allowed but proliferate. The Minneapolis-St. Paul containment program therefore merely regulates development connected to public water and wastewater systems but not other forms of low-density urban development. In fact, among major metropolitan areas (those of more than 2 million residents in 2000), only Atlanta has lower urbanized land density than the Twin Cities (based on 1990 census figures). Other notable examples of unbounded metropolitan urban containment include Denver and Orlando.

### **Regional Bounded Metropolitan**

The nation's oldest and best-known example of bounded urban containment was launched by metropolitan Portland, Oregon, in the late 1970s. It is administered by the regionally elected body Metro. There, urban development is contained with an urban growth boundary (UGB) originally designed to accommodate growth for about 20 years, after which the UGB was to be expanded to meet the next 20 years demand for growth. For the

most part, the UGB has changed very little in total land area since then, and much of the next 20 years of development is intended to be accommodated within mixed-use, urban infill, redevelopment, and brownfield development sites. In recent years, however, Metro has begun a process to expand the boundary substantially, initially by about 10,000 acres and eventually by perhaps several tens of thousands or more acres.

Outside Portland's UGB, very-large-lot zoning and restrictions on nonfarm and nonforest dwellings are used to prevent urban-scale development (aside from areas already built and committed to nonrural uses).

Other leading examples of bounded metropolitan containment are Miami-Dade County (the nation's oldest containment program among major metropolitan areas), Broward County, and West Palm Beach County, all in Florida; Sacramento, California; and Seattle.

### **Natural Containment**

The foregoing are examples of policy-driven containment. There are situations where containment occurs because of natural limitations or limitations associated with the location of publicly owned land. Los Angeles is perhaps the best-known example. That metropolitan area is hemmed in by an ocean, mountains, deserts, and vast public ownership of land. To some extent, Las Vegas and Phoenix are similarly contained, although in those cases federal and state ownerships combined with water constraints are significant factors leading to containment. Honolulu, having essentially nowhere else to go, may be the quintessential example of natural containment (although even on the island of Oahu the state contains Honolulu and its suburbs tightly through policy measures to preserve what little agricultural land is available).

This kind of "accidental" containment can lead to interesting comparisons in outcomes between policy-driven and natural containment. For example, largely because of natural containment, the Los Angeles metropolitan area is the nation's most densely settled. Indeed, it is erroneous to call Los Angeles "sprawled" because it is not. To some, Las Vegas and Phoenix are sprawling areas, but they are actually more compact than Boston, Washington D.C., or even Portland. In this PAS Report, we focus on urban containment that is driven by policy rather than by natural constraints. Although we come up with a typology of four urban containment frameworks, natural containment also exists.

### **DIFFERENT INSTITUTIONAL STRUCTURES OF URBAN CONTAINMENT**

Beyond scale, we find that the institutional differences between urban containment styles are based on hierarchy, treatment of exurban and rural land for development, land supply orientation, and degree of housing inclusion. In this section we summarize these characteristics. We will later use them to create a typology of urban containment programs.

#### **Hierarchy of Oversight**

Oversight responsibility can range widely, from state to local control. Urban containment in Oregon, for example, is accomplished through a top-down structure of state-local involvement (DeGrove 1983; Nelson and Duncan 1995). The state establishes planning goals and "guidelines" (criteria for implementing the goals), and then reviews local efforts to achieve those goals. Although plans were supposed to have been completed and approved by 1976, very few plans were even submitted by then. Indeed, from the 1975 deadline through the early 1980s almost all plans were sent back to local governments for improvement after

review by the state's Department of Land Conservation and Development (Knaap and Nelson 1992). It was not until 1985 that the last plans were "acknowledged" for compliance with state planning goals. In a few cases, sanctions—in the form of building permit moratoria—were imposed on local governments for their failure to properly contain urban growth and protect rural lands (Nelson 2000a). Programs in Washington and Florida show less rigorous state-level oversight and give much more latitude to local governments preparing growth management plans (Weitz 1999). The Growth Management Act in Washington requires urban growth boundaries while Florida requires only a clear separation between urban and rural land uses. Hawaii falls between the two oversight approaches: the state participates in the preparation of local plans but exerts little oversight once plans are adopted and implemented.

### Exurban and Rural Land Treatment

The manner in which land outside an urban containment boundary is treated can significantly impact the efficacy of a containment policy. Because it allows low-density development outside its boundary, for example, metropolitan Minneapolis-St. Paul is among the most sprawled for metropolitan areas larger than 2 million residents (Nelson 2000a). In contrast, Boulder, Colorado, has purchased land beyond its containment boundary, and thousands of square miles of land outside the metropolitan Portland boundary are restricted to farming, forestry, and other open-space uses on parcels often exceeding 40 acres.

### Supply-side Orientation

It is one thing to limit urban development within boundaries but quite another to absorb the development that would have occurred in its absence. Montgomery County attempts to absorb its projected growth within urban areas contained by growth boundaries (Nelson 2000b), as does metropolitan Portland (Knaap and Nelson 1992). In contrast, cities such as Petaluma and Boulder, and some counties such as Loudoun in Virginia and Ventura in California, do not attempt to absorb large shares of the region's projected growth. For example, Petaluma has an annual residential permitting quota while Loudoun County uses infrastructure limitations and other factors to justify its unwillingness to accommodate its projected 2025 population. Because of their sensitivity to meeting regional or subregional housing needs, it may be no accident that housing prices rose less quickly in Portland and Montgomery County in the 1990s than in Petaluma, Boulder, or the counties of Ventura and Loudoun.

### Inclusionary or Exclusionary Orientation

Urban containment changes markets. Portland, for example, has explicit policies to create suburban communities that have a mix of housing opportunities. While a direct cause-and-effect relationship needs to be established in future research, this may be one reason why Portland's African-American population desegregated about three times faster than the national rate (see Nelson, Dawkins, and Sanchez 2004). In contrast, Ventura County's pace of African-American desegregation lagged behind the national rate. Perhaps one reason is the county's and its constituent cities' inability to facilitate production of low- and moderate-income housing commensurate with demand.

What emerges from these differences is a matrix of American styles of urban containment, illustrated in Table 1. The columns list overall containment approaches while the rows list general policy sets used to implement

*It is one thing to limit urban development within boundaries but quite another to absorb the development that would have occurred in its absence.*

containment. “Closed regions” are those where urban containment boundaries are drawn and open spaces preserved outside those boundaries in a manner that directs most if not all regional growth inside the boundary. “Open regions” also use boundaries, but development of rural land outside the boundaries is allowed at low urban densities. “Inclusion” or “exclusion” describes the extent to which policies explicitly require inclusionary housing measures such as minimum density and attached housing targets (see Knaap and Nelson 1992). “Isolated” containment means that containment is done locally and not across an entire metropolitan area. The general policy orientations address such broad areas as metropolitan or submetropolitan containment, development of rural land outside boundaries, housing supply sensitivity, infill development, and permitting. We draw on this matrix in the next chapter to guide the statistical analysis that undergirds our typology of urban containment frameworks.

### NO SINGLE URBAN CONTAINMENT FRAMEWORK FOR ALL

As these types of policy-driven containment show, there is not one framework for urban containment. Oregon seeks the preservation of open spaces, efficient provision of public facilities and services, and fulfillment of regional demand for development within boundaries (Knaap and Nelson 1992). The goals of the Twin Cities Metropolitan Council are the efficient provision of infrastructure, distribution of development so that all jurisdictions within the boundary benefit, and redistribution of fiscal burdens (Orfield 1997). Lexington, Kentucky, aims to preserve the open spaces

**TABLE 1**  
**INSTITUTIONAL FEATURES OF URBAN CONTAINMENT FRAMEWORKS**

Policy Feature	Closed-Region Inclusionary Containment	Closed-Region Exclusionary Containment	Open-Region Inclusionary Containment	Open-Region Exclusionary Containment	Isolated Inclusionary Containment	Isolated Exclusionary Containment
Containment boundary around metro region	x	x	x	x		
Containment boundary around submetro region					x	x
Open space preserved	x	x			x	x
Low urban density outside boundary			x	x		
Housing supply sensitive	x					
Housing supply insensitive		x		x		x
Rigorous urban infill, redevelopment	x		x		x	
Nonrigorous urban infill, redevelopment		x		x		x
Expedited permitting	x					
Deliberate permitting		x	x	x	x	x
Example	Metro Portland, Ore.	Metro San Jose, Calif.	Metro Twin Cities, Minn.	Sarasota, Fla.	Montgomery County, Md.	Boulder, Colo.

within only the area it can control, Fayette County (Porter 1997). In Sarasota County, Florida, containment is based on tiers with the city taking in the largest share of regional development, followed by the urban fringe, composed of low-density mixed-use communities, and the rural countryside (Freilich 2000). Ventura County, California, has perhaps the most straightforward goal: it simply wants to preserve open spaces while not necessarily absorbing more than a small share of the region's development within its cities and urban areas. Each of these containment programs has its own purposes and institutional structures to guide plan making and implementation. The successes these programs have achieved are the result of planners having carefully tailored containment policy to local needs and conditions.



CHAPTER 2

## **Urban Containment Framework Analysis**

In this chapter we explain how we identified growth management plans with urban containment frameworks for analysis, and we summarize their characteristics. We then describe the analysis we used to classify these plans.

*There are disagreements about what urban containment is and how it differs from planning in general.*

## **IDENTIFYING GROWTH MANAGEMENT PLANS FOR URBAN CONTAINMENT FRAMEWORK ANALYSIS**

There are disagreements about what urban containment is and how it differs from planning in general. In a sense, all conventional land-use planning “contains” urban development. Kaiser, Godschalk, and Chapin (1995), for example, characterize urban land-use planning as an exercise in projecting future development needs and directing development to where urban facilities exist or will exist. This is urban containment, broadly speaking.

In our view, however, urban containment—understood as a framework guiding the preparation and implementation of growth management plans—is much more than projecting needs and accommodating them. It involves clearly separating urban and rural land uses, directing the regional demand for urban development to specific areas, and choreographing infrastructure investments to make this happen. Containment therefore requires a regional perspective in which some meaningful effort is made to direct development to specific areas and away from others where development would proceed in the absence of intervention.

Because so many different approaches to urban containment exist, we believe that some attempt should be made to classify them. The classification scheme could then be used by planners to compare different models of containment and by researchers to study different outcomes. Ideally, we would identify, collect, and review all urban containment plans currently in use to develop a classification scheme. But, as one may imagine, despite generous support from the National Association of Realtors and the Brookings Institution, we simply could not identify and evaluate every legitimate growth management plan that may appear to have an urban containment framework. For example, in Oregon, urban growth boundaries are required of all cities and urban areas. This means that Lonerock, population 23, has a UGB, and its host county, Gilliam, preserves land outside the UGB through exclusive farm- and forest-use zoning. The Lonerock UGB is certainly a legitimate urban containment framework, but it has probably not been influential in shaping development patterns in larger urban settings. Our analysis is thus limited to metropolitan areas, counties, and occasionally large cities (with populations exceeding about 20,000). Lonerock, therefore, is out. Sioux Falls, South Dakota, is in.

We also considered the scale of urban containment as we selected plans for analysis. For example, the metropolitan Portland, Oregon, growth management program encompasses parts of three counties and 24 cities. Arguably, each jurisdiction engages in urban containment, but for our purposes, since all containment planning is coordinated through the metropolitan government, Portland has only four urban containment examples (one for each of the three principal urban counties plus Metro itself), not 27. In cases of submetropolitan growth management guided by an urban containment framework—usually one county within a metropolitan area, such as Montgomery County, Maryland—we consider only the county-level program and not those of its cities. On the other hand, we consider the growth management plan with its urban containment framework of the city of Boulder, Colorado, to be separate and distinct from planning done in Boulder County because, until recently, the county had no such program.

A final word of caution. Although we have identified 131 examples of growth management plans with an urban containment framework that meet our selection criteria (see Table 6 on page 28), we cannot say that we have identified all such plans now in place in the United States. In fact, we are certain we have not. Nonetheless, we believe that to a reasonable extent all growth management plans with an urban containment framework will fit within our classification scheme.

## ELEMENTS OF GROWTH MANAGEMENT PLANS WITH AN URBAN CONTAINMENT FRAMEWORK

The first chapter of this report suggested that growth management plans with an urban containment framework can be clustered around goal and policy differences and may exhibit significantly different patterns of inter-governmental coordination. We will now outline a more formal empirical strategy for identifying framework clusters and classifying them based on growth management plan characteristics. In this section, we discuss our data collection method and present some preliminary results from a plan-coding exercise.

We evaluated each of the growth management plans with an urban containment framework that met our criteria by using a plan coding scheme similar to that used by Nelson and French (2002), which adapted techniques pioneered by Raymond J. Burby (see Burby et al. 1993, Burby and Dalton 1994). Our scheme was built on the assumption that the basic elements of any growth management plan are its goals, objectives, policies, and fact basis (Kaiser, Godschalk, and Chapin 1995). Each of these will be examined in turn.

A plan's *goals* are its broad statements of intent. For growth management plans, these are value statements that express a community's preferences for future urban development patterns favoring containment. In our analysis, we first identified three general goals related to urban containment: physical containment of urban development, open space preservation, and urban development accommodation. We then gave each plan a score based on its primary emphasis on each goal. No plan received more than one score for each goal. The scores for each goal were designed to be ordered, mutually exclusive rankings that measure the local government's level of commitment to a particular goal.

*Objectives* are quantifiable measures that can be used to assess a community's progress towards the attainment of a specific goal. For each objective related to each goal, we gave the plan a score based on whether the objective related to urban containment was merely present or was present and quantifiable.

*Policies* are the regulatory, fiscal, and administrative actions taken by the local government to implement goals and objectives. As part of a preliminary analysis, we surveyed the urban planning literature to determine which policies were most often mentioned as examples of urban containment. We then examined several growth management plans with an urban containment framework and identified four general policy categories: regulatory and planning policies, fiscal policies, public participation policies, and administrative policies. For each policy in our final analysis, we gave the plan a score based on whether the policy was mentioned in little detail but not required, mentioned in substantial detail but not required, or required.

A plan's *fact basis* includes the initial data analysis supporting the plan's goals, objectives, and policies. For each fact basis item, we gave the plan a score based on whether the item was not mentioned, mentioned in little detail, or mentioned in substantial detail.

Expanding beyond French, Nelson, Muthukumar, and Holland (1996), we also added another consideration: *intergovernmental coordination*. We examined three forms of intergovernmental coordination:

1. *Internal coordination* refers to coordination between a county or multicounty agency and the municipal governments that lie within the county or regional boundaries.
2. *Horizontal coordination* refers to coordination with adjacent units of local government.
3. *Vertical coordination* refers to coordination with the state government.

For each of these three forms, we examined whether the plan addressed coordination for each of the following issues: annexation, urban containment boundary adjustments, public facility siting, plan modifications or amendments, and development review. For each issue and each form of coordination, we entered a score for the plan based on the specific coordination instrument used.

Tables 2 through 5 summarize the results of this data collection. Reported are the total frequencies for each scored item. As Table 2 indicates, most growth management plans with a containment framework use a formal urban growth boundary to contain urban expansion. There is, however, considerably more variation in the open-space policies employed to limit development outside the boundary. Although approximately three-quarters of all local governments rely on zoning to control development outside the urban area, the largest percentage

**TABLE 2.**  
**GOAL FREQUENCIES**

Goal Category	Goals / Objectives	Goal / Objective Score	Frequency
Physical Containment	Goals	Not mentioned	1
		Limitations on development	3
		Timing and phasing of dev	14
	Objectives	Urban service boundary	24
		Urban growth boundary	58
		Not mentioned	14
		One non-measurable objective	56
Open Space	Goals	One measurable objective	30
		Not mentioned	6
		Small lot zoning	31
		Large lot zoning	13
		Open space zoning	29
	Objectives	Development right acquisition	12
		Land acquisition	9
Development Accommodation	Goals	Not mentioned	19
		One non-measurable objective	59
		One measurable objective	22
		Not mentioned	16
	Objectives	Limitation on growth accommodated	22
		Accommodate share of projected growth	3
		Accommodate all projected growth	59
Development Accommodation	Objectives	Not mentioned	34
		One non-measurable objective	26
		One measurable objective	40

of these local governments employ small-lot zoning of fewer than five units per acre to protect open space. Finally, most local governments (63 percent) cite a goal of accommodating all projected growth during the planning horizon. These findings suggest that growth management plans with an urban containment framework need not necessarily be viewed as restricting growth. In fact, the majority examined in our study are more appropriately viewed as a framework to manage land supply in the face of rapid growth.

Table 3 displays total frequencies for each policy. Among those in place or required to be in place, the five most common policy instruments addressing urban containment are: (1) capital improvement plans, (2) required public hearings, (3) coordination between land-use and public facility investments, (4) limitations on water/sewer extension outside the urban containment boundary, and (5) mixed-use zoning. These findings suggest that most growth management plans with an urban containment framework place high priority on development management within the urban containment boundary.

Our analysis suggests that few growth management plans with an urban containment framework include a formal analysis of the projected land or housing value impacts of their proposed urban containment policies. Of the plans examined for statistical analysis (127 of 131) and described in Table 4, only three included a detailed examination of the land value impact of the urban containment boundary, and only 12 included a detailed analysis of housing price effects. The most common fact basis items, in order of relative frequency, are (1) population and employment projections, (2) inventories of existing housing units, (3) an inventory of existing public facilities, (4) an inventory of existing land suitable for development, and (5) a housing need assessment. We should point out that we did not include in our study any preliminary data analyses and reports that were not formally included as part of a comprehensive plan. Data appendices of plans were examined only if they were listed as part of the plan itself. To the extent that planners omit these analyses from the plan, our numbers may understate the level of analysis that went into plan preparation.

The most common issues that plans address in their intergovernmental coordination elements are those related to plan modifications or amendments and public facility siting. Among all issues, the most common vehicle for coordination is the intergovernmental agreement and various information-sharing mechanisms. Apart from these overall trends, as Table 5 indicates, there is substantial variation in the issues addressed through intergovernmental coordination and the vehicles through which coordination is implemented.

## A TYPOLOGY OF AMERICAN URBAN CONTAINMENT FRAMEWORKS

Unlike urban containment in Europe, Asia, and elsewhere, urban containment in the United States is based not on national policy but rather on state and local policy. With 50 states and more than 10,000 local governments holding land-use planning authority, the potential variety of containment is considerable to say the least. Despite the enormity of potential differences, however, statistical analysis can be used to identify general types of containment. Our statistical methods and their outcomes are reviewed here. We review cluster analysis and discriminant analysis, and then discuss implications.

### Cluster Analysis: What Is Adopted?

Using the data collected from the plan coding forms, we conducted a cluster analysis to identify distinct urban containment frameworks. This method

*Our analysis suggests that few growth management plans with an urban containment framework include a formal analysis of the projected land or housing value impacts of their proposed urban containment policies.*

**TABLE 3.  
POLICY FREQUENCIES**

<b>Policy</b>	<b>Policy Score</b>	<b>Frequency</b>
W/S Limitation	Not Mentioned	8
	Mentioned, No Detail Given	7
	Mentioned in Detail, Not Required	17
	In Place or Required to be in Place	68
Small Lot Zoning	Not Mentioned	39
	Mentioned, No Detail Given	3
	Mentioned in Detail, Not Required	2
	In Place or Required to be in Place	56
Large Lot Zoning	Not Mentioned	45
	Mentioned, No Detail Given	4
	Mentioned in Detail, Not Required	1
	In Place or Required to be in Place	50
Open Space Zoning	Not Mentioned	36
	Mentioned, No Detail Given	3
	Mentioned in Detail, Not Required	8
	In Place or Required to be in Place	53
Transfer of Development Rights (TDR)	Not Mentioned	39
	Mentioned, No Detail Given	15
	Mentioned in Detail, Not Required	14
	In Place or Required to be in Place	32
Inclusionary Zoning	Not Mentioned	59
	Mentioned, No Detail Given	8
	Mentioned in Detail, Not Required	8
	In Place or Required to be in Place	25
Accessory Housing Unit Regulations	Not Mentioned	52
	Mentioned, No Detail Given	9
	Mentioned in Detail, Not Required	3
	In Place or Required to be in Place	36
Mixed-Use Zoning	Not Mentioned	9
	Mentioned, No Detail Given	14
	Mentioned in Detail, Not Required	12
	In Place or Required to be in Place	65
Min Density Zoning	Not Mentioned	65
	Mentioned, No Detail Given	1
	Mentioned in Detail, Not Required	10
	In Place or Required to be in Place	24
Transit-Oriented Dev	Not Mentioned	40
	Mentioned, No Detail Given	12
	Mentioned in Detail, Not Required	13
	In Place or Required to be in Place	35
Density Bonus for Aff Housing	Not Mentioned	47
	Mentioned, No Detail Given	11
	Mentioned in Detail, Not Required	7
	In Place or Required to be in Place	35
APFO	Not Mentioned	34
	Mentioned, No Detail Given	4
	Mentioned in Detail, Not Required	11
	In Place or Required to be in Place	51

**TABLE 3.  
POLICY FREQUENCIES (CONTINUED)**

<b>Policy</b>	<b>Policy Score</b>	<b>Frequency</b>
Capital Improvements Plan	Not Mentioned	10
	Mentioned, No Detail Given	5
	Mentioned in Detail, Not Required	4
	In Place or Required to be in Place	81
Development Caps	Not Mentioned	81
	Mentioned, No Detail Given	2
	Mentioned in Detail, Not Required	1
	In Place or Required to be in Place	16
Jobs/Housing Balance	Not Mentioned	61
	Mentioned, No Detail Given	10
	Mentioned in Detail, Not Required	10
	In Place or Required to be in Place	19
Reserve Areas	Not Mentioned	50
	Mentioned, No Detail Given	0
	Mentioned in Detail, Not Required	4
	In Place or Required to be in Place	46
Intermediate Boundaries	Not Mentioned	79
	Mentioned, No Detail Given	0
	Mentioned in Detail, Not Required	2
	In Place or Required to be in Place	19
Public Inv. / L. Use Coord	Not Mentioned	10
	Mentioned, No Detail Given	8
	Mentioned in Detail, Not Required	13
	In Place or Required to be in Place	69
Market Factor Used in Land Allocation	Not Mentioned	84
	Mentioned, No Detail Given	3
	Mentioned in Detail, Not Required	1
	In Place or Required to be in Place	12
Tiered LOS	Not Mentioned	66
	Mentioned, No Detail Given	3
	Mentioned in Detail, Not Required	3
	In Place or Required to be in Place	28
Jurisdiction Aff Housing Target	Not Mentioned	66
	Mentioned, No Detail Given	2
	Mentioned in Detail, Not Required	4
	In Place or Required to be in Place	28
Cons Land Acquisition	Not Mentioned	26
	Mentioned, No Detail Given	21
	Mentioned in Detail, Not Required	9
	In Place or Required to be in Place	44
Redev Land Acquisition	Not Mentioned	89
	Mentioned, No Detail Given	6
	Mentioned in Detail, Not Required	3
	In Place or Required to be in Place	2
Aff Housing Land Acquisition	Not Mentioned	75
	Mentioned, No Detail Given	8
	Mentioned in Detail, Not Required	10
	In Place or Required to be in Place	7

**TABLE 3.**  
**POLICY FREQUENCIES (CONTINUED)**

<b>Policy</b>	<b>Policy Score</b>	<b>Frequency</b>
Prop Tax Incentives for Cons	Not Mentioned	42
	Mentioned, No Detail Given	19
	Mentioned in Detail, Not Required	7
	In Place or Required to be in Place	32
Impact Fees	Not Mentioned	26
	Mentioned, No Detail Given	10
	Mentioned in Detail, Not Required	13
	In Place or Required to be in Place	51
Linkage Fees	Not Mentioned	79
	Mentioned, No Detail Given	9
	Mentioned in Detail, Not Required	3
	In Place or Required to be in Place	9
Housing Trust Fund	Not Mentioned	71
	Mentioned, No Detail Given	7
	Mentioned in Detail, Not Required	2
	In Place or Required to be in Place	20
PDR	Not Mentioned	63
	Mentioned, No Detail Given	13
	Mentioned in Detail, Not Required	8
	In Place or Required to be in Place	16
Low/Mod Housing Assistance	Not Mentioned	33
	Mentioned, No Detail Given	14
	Mentioned in Detail, Not Required	9
	In Place or Required to be in Place	44
Public Education on Planning Issues	Not Mentioned	35
	Mentioned, No Detail Given	9
	Mentioned in Detail, Not Required	7
	In Place or Required to be in Place	49
Implementation Advisory Council	Not Mentioned	42
	Mentioned, No Detail Given	4
	Mentioned in Detail, Not Required	6
	In Place or Required to be in Place	48
Public Hearings	Not Mentioned	16
	Mentioned, No Detail Given	8
	Mentioned in Detail, Not Required	3
	In Place or Required to be in Place	73
Neighborhood Plans	Not Mentioned	50
	Mentioned, No Detail Given	3
	Mentioned in Detail, Not Required	9
	In Place or Required to be in Place	38
Community Visioning	Not Mentioned	67
	Mentioned, No Detail Given	2
	Mentioned in Detail, Not Required	5
	In Place or Required to be in Place	26
Online Plan	Not Mentioned	14
	Mentioned, No Detail Given	80
	Mentioned in Detail, Not Required	1
	In Place or Required to be in Place	5

**TABLE 3.  
POLICY FREQUENCIES (CONTINUED)**

Policy	Policy Score	Frequency
Flexible Design Review	Not Mentioned	47
	Mentioned, No Detail Given	11
	Mentioned in Detail, Not Required	7
	In Place or Required to be in Place	35
Performance Standards	Not Mentioned	37
	Mentioned, No Detail Given	12
	Mentioned in Detail, Not Required	8
	In Place or Required to be in Place	43
Limitations on Permit Processing Time	Not Mentioned	60
	Mentioned, No Detail Given	17
	Mentioned in Detail, Not Required	9
	In Place or Required to be in Place	14
Required Preapplication Meeting	Not Mentioned	89
	Mentioned, No Detail Given	4
	Mentioned in Detail, Not Required	1
	In Place or Required to be in Place	6
One-Stop Permitting	Not Mentioned	84
	Mentioned, No Detail Given	5
	Mentioned in Detail, Not Required	2
	In Place or Required to be in Place	9
Preferential Permitting for Aff Housing	Not Mentioned	56
	Mentioned, No Detail Given	14
	Mentioned in Detail, Not Required	6
	In Place or Required to be in Place	24
Streamlined Judicial Review	Not Mentioned	91
	Mentioned, No Detail Given	1
	Mentioned in Detail, Not Required	3
	In Place or Required to be in Place	5
Zoning / Permitting Consistency	Not Mentioned	17
	Mentioned, No Detail Given	11
	Mentioned in Detail, Not Required	11
	In Place or Required to be in Place	61

of analysis uses a family of algorithms designed to identify clusters of cases by examining patterns in case characteristics. Although a wide variety of algorithms can be used, most identify clusters using some procedure that minimizes variation within and maximizes variation across clusters.

We first identified two sets of clusters. Goal clusters were formed using the information from the plans' goals and objectives. Policy clusters were formed using the information from the plans' adopted policies. To facilitate this type of analysis, and to ensure a clear interpretation of cluster categories, we then decided to combine the goal and policy clusters into a single categorization scheme that captures all of the dimensions of the original cluster analysis while also providing a single categorical variable that can be used to describe urban containment plans. We therefore found that containment plans differ primarily along the following two dimensions:

**TABLE 4.**  
**FACT BASIS FREQUENCIES**

Fact Basis Item	Fact Basis Score	Frequency
Community Urban Dev Preferences	Not Mentioned	72
	Mentioned, No Detail	6
	Mentioned in Detail	22
Existing Housing Units by Type / Aff Range	Not Mentioned	31
	Mentioned, No Detail	11
	Mentioned in Detail	58
Existing Public Facilities	Not Mentioned	38
	Mentioned, No Detail	13
	Mentioned in Detail	49
Existing Land Suitable for Dev	Not Mentioned	38
	Mentioned, No Detail	10
	Mentioned in Detail	52
Pop and Emp Projections	Not Mentioned	20
	Mentioned, No Detail	24
	Mentioned in Detail	56
Alternative Dev Pattern Scenarios	Not Mentioned	76
	Mentioned, No Detail	3
	Mentioned in Detail	21
Future Redev / Infill	Not Mentioned	87
	Mentioned, No Detail	4
	Mentioned in Detail	9
Containment Boundary Effects on Land Values	Not Mentioned	98
	Mentioned, No Detail	1
	Mentioned in Detail	1
Containment Boundary Effects on Housing Prices	Not Mentioned	94
	Mentioned, No Detail	3
	Mentioned in Detail	3
Land Supply Under Proposed Zoning	Not Mentioned	73
	Mentioned, No Detail	7
	Mentioned in Detail	20
Proj Housing Needs by Type / Aff Range	Not Mentioned	36
	Mentioned, No Detail	24
	Mentioned in Detail	40
Public Service Needs	Not Mentioned	44
	Mentioned, No Detail	18
	Mentioned in Detail	38
Total Land Supply Needs	Not Mentioned	63
	Mentioned, No Detail	9
	Mentioned in Detail	28

1. **Emphasis on development accommodation.** The analysis for the goal clusters suggested that urban containment frameworks were most clearly distinguished by the presence or absence of an aggressive program to accommodate projected urban growth. These frameworks ranged from restrictive growth management plans, which seek to cap

**TABLE 5.  
INTERGOVERNMENTAL COORDINATION FREQUENCIES**

Type of Coordination	Coordination Issue	Coordination Score	Frequency
Internal Coordination	Annexation	Not Mentioned	46
		Mentioned, No Strategy	7
		Information-Sharing	3
		Intergovernmental Agreement	33
		Coordination Required by State	1
		Multijurisdictional Planning Agency	8
		Consolidated city-county govt	2
		Extraterritorial jurisdiction	0
	Containment Boundary Adjustments	Not Mentioned	49
		Mentioned, No Strategy	6
		Information-Sharing	2
		Intergovernmental Agreement	31
		Coordination Required by State	2
		Multijurisdictional Planning Agency	8
		Consolidated city-county govt	2
		Extraterritorial jurisdiction	0
	Public Facility Siting	Not Mentioned	38
		Mentioned, No Strategy	17
		Information-Sharing	1
		Intergovernmental Agreement	39
		Coordination Required by State	0
		Multijurisdictional Planning Agency	3
		Consolidated city-county govt	2
		Extraterritorial jurisdiction	0
	Plan Modifications	Not Mentioned	40
		Mentioned, No Strategy	16
		Information-Sharing	9
		Intergovernmental Agreement	31
Coordination Required by State		1	
Multijurisdictional Planning Agency		1	
Consolidated city-county govt		2	
Extraterritorial jurisdiction		0	
Development Review	Not Mentioned	40	
	Mentioned, No Strategy	12	
	Information-Sharing	11	
	Intergovernmental Agreement	34	
	Coordination Required by State	0	
	Multijurisdictional Planning Agency	1	
	Consolidated city-county govt	2	
	Extraterritorial jurisdiction	0	
Horizontal Coordination	Annexation	Not Mentioned	80
		Mentioned, No Strategy	6
		Information-Sharing	0
		Intergovernmental Agreement	5
		Coordination Required by State	0
		Multijurisdictional Planning Agency	8
		Consolidated city-county govt	0
		Extraterritorial jurisdiction	1

**TABLE 5.**  
**INTERGOVERNMENTAL COORDINATION FREQUENCIES (CONTINUED)**

Type of Coordination	Coordination Issue	Coordination Score	Frequency
Containment Boundary Adjustments	Mentioned, No Strategy		5
	Information-Sharing		1
	Intergovernmental Agreement		10
	Coordination Required by State		0
	Multijurisdictional Planning Agency		6
	Consolidated city-county govt		0
	Extraterritorial jurisdiction		1
	Not Mentioned		77
Public Facility Siting	Mentioned, No Strategy		27
	Information-Sharing		10
	Intergovernmental Agreement		12
	Coordination Required by State		1
	Multijurisdictional Planning Agency		3
	Consolidated city-county govt		0
	Extraterritorial jurisdiction		1
	Not Mentioned		46
Plan Modifications	Mentioned, No Strategy		24
	Information-Sharing		11
	Intergovernmental Agreement		12
	Coordination Required by State		2
	Multijurisdictional Planning Agency		1
	Consolidated city-county govt		0
	Extraterritorial jurisdiction		1
	Not Mentioned		49
Development Review	Mentioned, No Strategy		11
	Information-Sharing		9
	Intergovernmental Agreement		17
	Coordination Required by State		4
	Multijurisdictional Planning Agency		0
	Consolidated city-county govt		0
	Extraterritorial jurisdiction		1
	Not Mentioned		58

future population growth, to accommodating plans, which project regional growth and implement measures to accommodate all projected growth. We determined that the plans in our sample could be categorized along a continuum from restrictive to accommodating, depending on the presence of population and other projections and of policies aimed at accommodating them.

2. *Strength of the urban containment program.* A strong urban containment framework includes policies that (1) ensure adequate land supply, (2) facilitate the provision of affordable housing, (3) facilitate the provision of adequate infrastructure, and (4) promote land conservation in areas outside the urbanizing area. The growth management plans with urban containment frameworks we evaluated can be placed along a continuum from strong to weak, depending on the number of adopted policies supporting these four containment objectives.

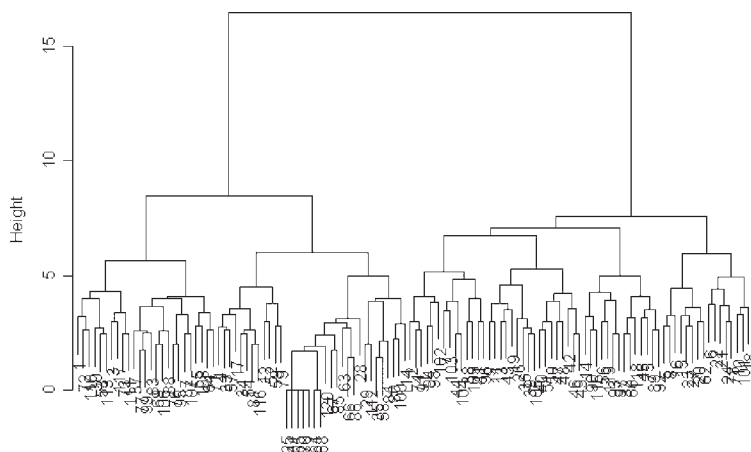
The strength of a plan's urban containment framework is indicated by the number and types of adopted policies supporting urban containment. To identify a plan's containment strength, we performed a cluster analysis using only the adopted policies for each plan. We began by examining the dendrogram developed from statistical analysis. A dendrogram displays the distance at which cases are grouped into clusters, where distance is interpreted to be a measure of the degree of similarity or dissimilarity with respect to the characteristics of cases. Similar cases are combined until all cases are in a single group. The distance at which two clusters are combined is an indication of the degree of dissimilarity between the two clusters. As the dendrogram in Figure 1 illustrates, two clusters clearly emerge when we consider each plan's adopted urban containment policies.

### Four Types

An examination of the policy means across clusters suggests that these two clusters clearly separate plans into a strong type, with several adopted containment policies, and a weak type, with few containment policies. To create the final set of clusters, we combined each plan's policy score with each plan's development accommodation goal score. This procedure produced four clusters that differ along the dimensions discussed above. These clusters include a weak-accommodating (WA) cluster (weak open space preservation outside the boundary, with market accommodation), a strong-accommodating (SA) cluster (strong open space preservation outside the boundary, with market accommodation), a weak-restrictive (WR) cluster (weak open space preservation outside the boundary with no clear or restrictive market accommodation), and a strong-restrictive (SR) cluster (strong open space preservation outside the boundary with no clear or restrictive market accommodation). These types are more fully explored in later chapters. Table 6 displays the resulting categories for all plans included in our sample.

We found that policies clearly differ across our final combined cluster categories, with the differences being statistically significant for most of the policy variables. As expected, strong plans tend to have more adopted policies than weak plans. The fact that this finding holds across so many different policy variables suggests that a plan's strength on one dimension of containment tends to be related to the plan's strength on another dimension. In other words, as our earlier analysis suggested, plans that have strong policies of restricting growth outside of an urban containment boundary also tend to have strong programs designed to accommodate housing and infrastructure within the boundary. Thus, a strong program of containing

**Figure 1. Dendrogram Illustrating Urban Containment Policies**



**TABLE 6.  
PLAN CLUSTERS**

Weak-Restrictive Plans		Strong-Restrictive Plans		Weak-Accommodating Plans		Strong-Accommodating Plans	
<i>Local Government</i>	<i>State</i>	<i>Local Government</i>	<i>State</i>	<i>Local Government</i>	<i>State</i>	<i>Local Government</i>	<i>State</i>
Morgan Hill	California	Chico	California	Anchorage	Alaska	Flagstaff	Arizona
San Diego	California	Contra Costa County	California	Tucson	Arizona	El Dorado County	California
Tulare County	California	Davis	California	Pima County	Arizona	San Diego County	California
Aspen	Colorado	Humboldt County	California	Denver Region	Colorado	San Bernardino	California
Boulder County	Colorado	Los Gatos	California	Kent County	Delaware	Santa Clara County	California
Denver	Colorado	Merced County	California	Kane County	Illinois	Sutter County	California
Larimer County	Colorado	Nevada County	California	Iowa City	Iowa	Sacramento	California
Greely	Colorado	Novato	California	Wichita	Kansas	Sacramento County	California
Brevard County	Florida	Rohnert Park	California	Lexington-Fayette County	Kentucky	Fort Collins	Colorado
Honolulu	Hawaii	SanMateo County	California	Dorchester County	Maryland	Alachua County	Florida
Bloomington	Indiana	San Luis Opispo	California	Olmsted County	Minnesota	Broward County	Florida
Baltimore County	Maryland	Santa Rosa	California	Twin Cities	Minnesota	Collier County	Florida
Carroll County	Maryland	Sonoma County	California	Fayetteville	North Carolina	Jacksonville	Florida
Frederick County	Maryland	Ventura County	California	Wilmington	North Carolina	Lee County	Florida
Pr George County	Maryland	Windsor	California	Lincoln-Lancaster County	Nebraska	Manatee County	Florida
Talbot County	Maryland	Boulder	Colorado	Charlotte Mecklenberg	North Carolina	Marion County	Florida
Wicomico County	Maryland	Martin County	Florida	Bend	Oregon	Miami	Florida
Worcester County	Maryland	Okaloosa County	Florida	Deschutes County	Oregon	Orlando	Florida
Barnstable County	Massachusetts	Calvert County	Maryland	Polk County	Oregon	Palm Beach	Florida
Bozeman	Montana			Salem	Oregon	Seminole County	Florida
Bismarck	North Dakota			Yamhill County	Oregon	Tallahassee	Florida
Pinelands Commission	New Jersey			Jackson County	Oregon	Tampa	Florida
Albuquerque-Bernalillo County	New Mexico			Delaware Valley	Pennsylvania	Sarasota County	Florida
Austin	Texas			Lancaster County	Pennsylvania	St. Lucie County	Florida
Prince William County	Virginia			Bucks County	Pennsylvania	Howard County	Maryland
Eau Claire	Wisconsin			Charleston	South Carolina	Queene Anne County	Maryland
Green Bay	Wisconsin			Sioux Falls	South Dakota	Montgomery County	Maryland
				Clarksville	Tennessee	Clackamas County	Oregon
				Cokeville	Tennessee	Corvallis	Oregon
				Virginia Beach	Virginia	PortlandRegion	Oregon
				Spokane	Washington	Medford	Oregon
				Madison	Wisconsin	Bellingham	Washington
				King County	Washington	Benton County	Washington
						Clark County	Washington
						Kitsap County	Washington
						Pierce County	Washington
						Snohomish County	Washington
						Yakima County	Washington
						Whatcom County	Washington
						Olympia	Washington
						Thurston County	Washington

the spatial extent of growth need not necessarily be viewed as exclusionary toward growth inside the planned urbanizing area. This finding is reinforced by the fact that the largest number of plans are simultaneously strong and accommodating.

We also found, predictably, that restrictive plans are more likely to adopt caps on development. Somewhat surprisingly, however, restrictive plans do not necessarily fail to accommodate affordable housing, as evidenced by the fact that, for many affordable housing policies, strong-restrictive plans have higher scores than strong-accommodating plans. In fact, strong-accommodating plans tend to be more likely to accommodate growth through an increased emphasis on infrastructure management policies.

### Discriminant Analysis: Who Embraces Urban Containment?

Using these clusters as a guide, we can identify the general characteristics of communities that adopt urban containment as the framework for growth management. The technique we use is called discriminant analysis. It enables us to find a weighted linear combination of discriminating variables that best distinguishes between predefined groups or categories.

We relied on 16 initial discriminating variables to predict a plan's type. Two dummy variables (*local plan required by state* and *local containment policy required by state*) were used to denote the presence of a state requirement to prepare a local government comprehensive plan and a state policy of requiring or strongly encouraging the adoption of local urban containment policies. Since there is some debate as to which states should be considered planning mandate states, we have only included those states with:

1. a requirement to plan,
2. statewide planning guidelines, and
3. a vertical consistency requirement, meaning consistency between the local plan and a state plan or statewide planning guidelines

States meeting these three conditions are: Arizona, California, Delaware, Florida, Hawaii, Maryland, Oregon, Tennessee, and Washington.

Research by Burby et al. (1997) finds that state planning mandates have an effect on the content and quality of local plans. Thus, it is reasonable to expect that a state mandate may have an effect on the type of containment plan adopted by local governments. Similarly, if a state requires or strongly encourages local governments to adopt urban containment policies, and these state policies are effective, then the presence of a state urban containment policy requirement should help to discriminate plan types. More specifically, strong local urban containment plans with a large number of required local urban containment policies should be more widespread in states that require or encourage the adoption of local urban containment policies. Burby et al. (1997) and Kaiser, Godschalk, and Chapin (1995) also argue that a strong initial fact-gathering phase is crucial to the adoption of a strong plan. Their work thus suggests that a plan's *fact basis score* should also help to distinguish plan types. If a local government is not aware of the challenges it faces, it may be less likely to adopt a wide range of policies designed to meet those challenges.

Two variables were used to capture the intergovernmental context within which plans are adopted. In fragmented metropolitan areas where local governments compete for businesses and population, local governments may be less likely to adopt regionally beneficial policies such as affordable housing measures (Lewis 1996). *The number of municipal or township governments* in the region may therefore have an effect on the type of plan adopted by local governments. Without constraints on local decision

making, local government competition may also motivate local governments to adopt exclusionary land-use policies that maximize the local property tax base. Intergovernmental agreements may constrain a local government from adopting these “beggar thy neighbor” exclusionary measures, so we also include an *intergovernmental coordination score* from the plan coding form as a second measure of intergovernmental context.

Since we pooled several different plan types from several regions in our analysis, we included several variables to capture the average of all unobserved characteristics associated with plan type or region. For example, municipal-only plans may include few rural land conservation measures and more infill and redevelopment policies. Similarly, each region of the United States has unique socioeconomic and political characteristics that may also affect a plan’s type. To control for these factors, we included several more binary (0,1) variables. These variables indicate the type of plan (*municipal plan* and *regional plan*) and the U.S. Census region for the local government (*Northeast region*, *Midwest region*, *South region*, and *West region*).

Finally, we included several measures of the socioeconomic characteristics of each planning jurisdiction. Factors such as racial composition and per capita income were correlated with political values and should have an effect on the type of containment plans adopted by local governments. Similarly, larger urban governments should face a different range of planning problems than smaller rural governments. Rapidly growing governments may be more likely to adopt measures to restrict growth than governments with slow-growing populations. To control for these factors, we included the following variables: *1990 population*, *1990–2000 growth rate*, *1990 percent black*, *1989 per capita income*, and *1990 population density*.

Through discriminant analysis we found that a state requirement to prepare a local plan is more prevalent among strong containment frameworks, while the state requirement to prepare local urban containment policies is more prevalent among accommodating policies. We also found that, in general, a strong fact basis and strong level of intergovernmental coordination appears to increase the likelihood that a plan will accommodate rather than restrict growth.

As demonstrated statistically, local and regional milieu also affect a plan’s type. Weak plans tend to be more common in the Midwest, while restrictive plans tend to be found in the West. Interestingly, restrictive plans also tend to have much higher population growth rates in the years leading up to plan adoption. These plans also tend to be found in areas with much higher population densities.

## CONCLUSIONS

In this chapter we have described the analytic methods used to identify the four frameworks for policy-driven urban containment found in growth management plans that attempt to contain urban development within a line:

1. Weak-Restrictive Framework
2. Strong-Restrictive Framework
3. Weak-Accommodating Framework
4. Strong-Accommodating Framework

Our analysis provides a new way to understand not only how plans are structured but what it is they aim to do. Two leading typologies of growth management plans focus on state-local relationships. John M. DeGrove’s (1983) typology of state planning processes divided the planning world into top-down (Oregon) or bottom-up (Florida) approaches. In Oregon,

the state essentially wrested local planning control out of the hands of local governments until plans were approved by the state. Although plans were prepared locally, the level of state oversight engaged state interests over local interests to a considerable degree. In Florida, local governments prepared plans based on administrative rules, but the role of the state was limited to verifying that plans had the appropriate planning elements, used the appropriate data, and addressed the appropriate issues.

Gale (1992) built on DeGrove's typology by suggesting the presence of three planning institutional structures: state-dominated (Florida and Oregon), regional-local cooperative (Georgia), and "fusion" (Washington). In Georgia, review of plans for consistency with state criteria is relegated substantially to regional development councils. More rigorous review of local plans can be found in Washington, where regional growth management hearings boards referee land-use disputes in each of the state's major urban counties.

Building on DeGrove and Gale, Burby, May et al. (1997) assessed the conditions under which local plans are prepared and implemented consistent with state or federal interests. But, like previous studies, their work focuses on intergovernmental relationships surrounding local plans, not on what plans aim to accomplish.

Although we consider the structure of intergovernmental interaction in our analysis, our typology focuses more closely on the framework of growth management adopted by regional or subregional governments when urban containment is the objective. That framework can be decidedly weak in preventing development of open space but also restrictive in meeting development demand within containment limits (such as San Diego) or in accommodating development (such as Sioux Falls). Or it can be strong in preserving open spaces but restrictive in meeting development needs (such as Ventura County) or in accommodating development (such as Miami-Dade County). We feel, therefore, that our typology is an improvement over past analyses because it recognizes that any framework is predicated on local attitudes toward managing development in rural areas and shaping development in urban areas. Analyses that focus primarily on intergovernmental interaction insufficiently account for local differences in containment programs.

Our typology of urban containment frameworks may also shed new light on whether (and the extent to which) different frameworks lead to different outcomes. The small but growing literature evaluating growth management takes essentially a binary approach—that is, areas either use growth management or they do not. Recent studies have identified broad-brush differences between growth management and the status quo in land-use patterns, infrastructure demand, environmental impacts, economic development, social well-being, and so forth, but these differences are so general that these studies generate little real knowledge. We therefore hope our urban containment framework typology will improve understanding of not only how such plans differ in their approach to growth management but also what specific outcomes they produce. Armed with knowledge of the fine-grained differences between these outcomes, planners will be better able to develop successful urban containment plans for their own communities.

*Although we consider the structure of intergovernmental interaction in our analysis, our typology focuses more closely on the framework of growth management adopted by regional or subregional governments when urban containment is the objective.*



CHAPTER 3

## **Weak-Restrictive Urban Containment Framework**

**T**he first urban containment framework we identified through cluster analysis was the weak-restrictive framework. We have found 21 examples of this type in the United States, located throughout the country but primarily in the South. Plans within this category are weak in containing the outward spread of development beyond a development limit, but they also tend to impede development by not clearly identifying or meeting development needs through proper planning.

**TABLE 7.**  
**CHARACTERISTICS OF WEAK-RESTRICTIVE PLANS**

**Plan Characteristics**

No goals to accommodate projected regional growth

Infrastructure-based policy emphasis

Weak fact basis

Weak intergovernmental coordination

**Jurisdiction Characteristics**

High growth rate

High percentage of minority population

Common in the South and California

Growth management plans based on the weak-restrictive framework vary by state and local political climate. Some jurisdictions impose a carrying capacity limit that may or may not be related to regional growth needs. Others use building moratoria or limitations on building permits to place caps on the rate or quantity of new development. But these direct approaches are rare among plans with a weak containment framework. The most common approach is simply to avoid projecting or accommodating development needs. A sketch of the distinguishing characteristics of this plan type is shown in Table 7.

As Table 7 demonstrates, the weak-restrictive framework lacks growth accommodation goals but still tends to focus on infrastructure-based policies. Within this containment framework, infrastructure policies are used primarily as a constraint, rather than a supplement, to urban development. Tools such as adequate public facilities ordinances and impact fees are combined with development caps to slow the rate of new development. This containment framework also tends to include relatively fewer policies overall, is typically based on a moderate fact basis, and is rarely supported by strong intergovernmental coordination. Jurisdictions within this category tend to be rapidly growing, which calls into question the effectiveness of the development caps.

The case studies in this chapter were chosen to illustrate the diversity of approaches taken to restrict growth. The first two communities, Baltimore County, Maryland, and Bloomington, Indiana, do not directly cite the goal of limiting growth per se. Instead, the plans in these communities simply fail to adequately project future development needs or cite any specific goals with regard to those needs. These communities direct their attention primarily to limitations on urban service provision and on coordination of planning activities within a multijurisdictional planning framework. The third plan in this chapter, the New Jersey Pinelands Comprehensive Management Plan, is an example of a regional plan that places little emphasis on development accommodation but heavy emphasis on environmental protection. The final two plans cite goals of directly limiting the rate or amount of new growth. Wicomico County, Maryland, has the goal of limiting new growth to a rate of 1 to 1.5 percent per year. Aspen, Colorado, has one of the most stringent growth controls among those with weak-restrictive plans, due in part to citizens' desires to protect the area's valuable mountain resources from further development.

Baltimore County, Maryland, established its "urban-rural demarcation line" (URDL) in 1967, five years before its first comprehensive plan was

## BALTIMORE COUNTY, MARYLAND

**Plan Summary:**

Plan Type	County
Plan Cluster	Weak-Restrictive
Goal Emphasis	Open Space

**Policies:**

Housing	○
Land Supply	■
Open Space	■
Infrastructure	■

Fact Basis ○

Intergovernmental ■

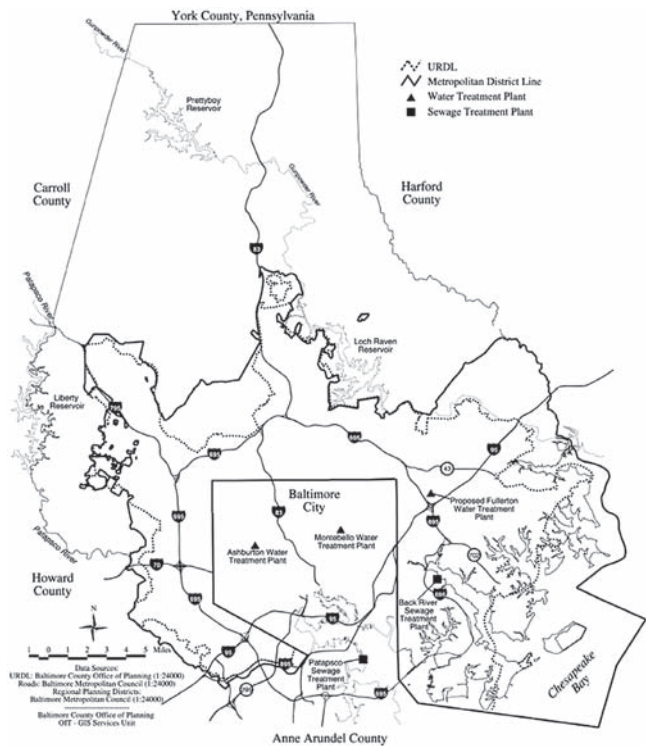
Coordination ○

**Jurisdiction Characteristics:**

1990 Population	692,134
1990–2000 Growth Rate	9%
1990 Percentage Black	12%
1989 Per Capita Income (\$s)	18,658
1990 Persons Per Square Mile	1,155

**Legend:**

● Strong   ■ Moderate   ○ Weak



adopted. The purpose of the URDL has been to separate the county's urban and rural areas, with the primary aim of protecting the latter from encroachment by the former. Initially, this line was established as a traditional urban service line that demarcated the spatial extent of future water and sewer service provision. While the URDL still serves this primary purpose, it has since been supplemented with other measures intended to further restrict growth in rural areas, such as the designation of urban and rural zoning districts and the creation of a rural land management program. Tools used to protect rural land from urbanization include agricultural districts, a land trust established under the state's Rural Legacy program, clustering provisions, property tax incentives for land conservation, and conservation easements. A transfer of development rights program is also currently being discussed.

Seven major local governments comprise the Baltimore County metropolitan region, including those of the city of Baltimore and several surrounding counties. Coordination among these entities is achieved primarily by coordinating growth policy objectives and priority funding areas, although no formal intergovernmental agreements or joint plans exist to provide structure or formal authority to these relationships. An exception is the Baltimore region's watershed management agreement, which provides a coordinated framework for addressing issues related to water quality.

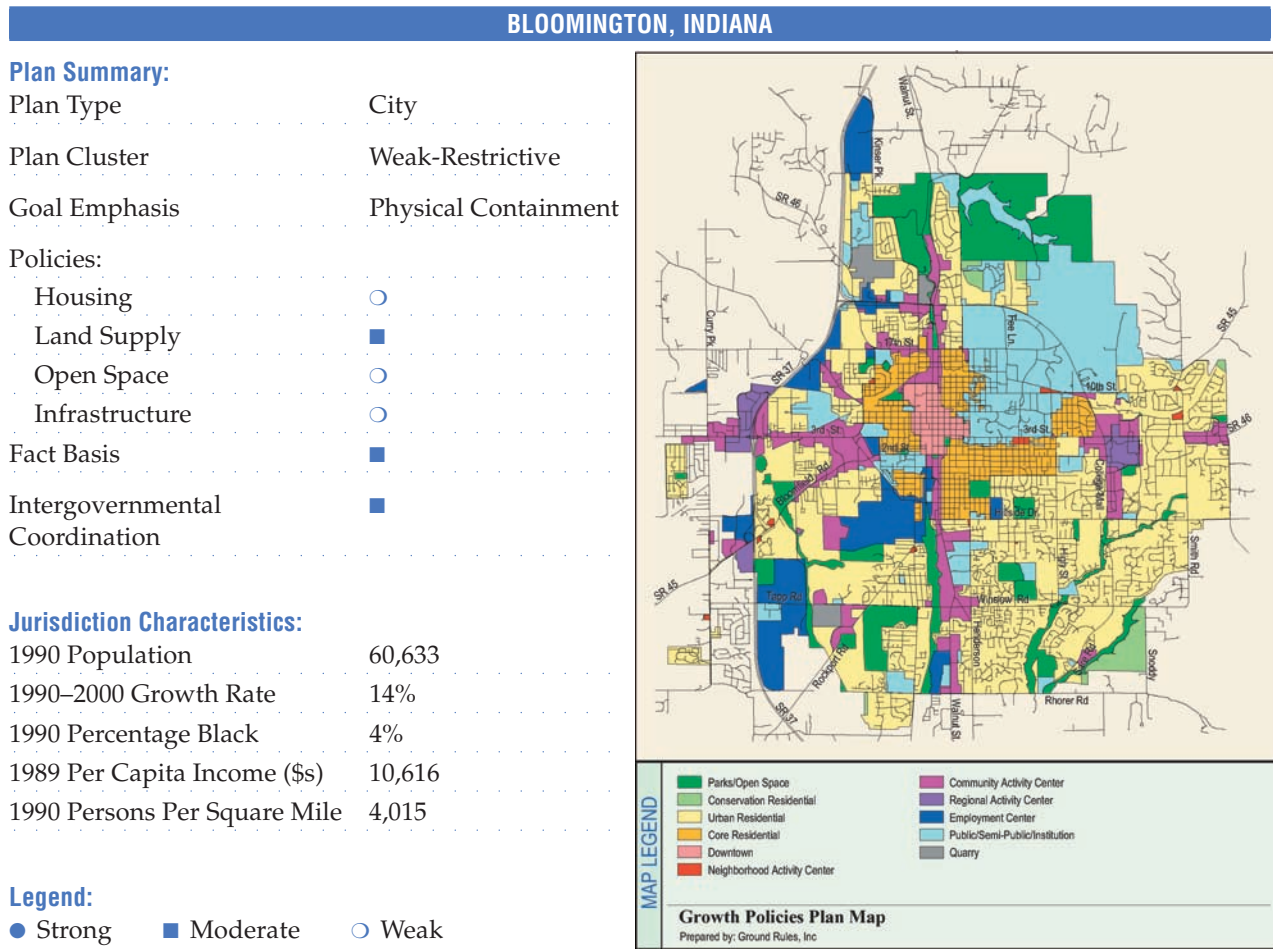
Coordinating land-use planning and urban service provision has been a challenge in Baltimore County. Since public sewer service is provided by the Metropolitan District of Baltimore County, the boundary of this special district is the effective boundary for urban development that relies on the public sewer system. The county does not finance public water or sewer

services outside this district boundary. Currently, the county is working to remove the discrepancies that exist between the URDL and the boundaries of the Metropolitan District. The map of the county (above) illustrates the current discrepancies between these two boundaries.

Low-density residential subdivisions are allowed outside the URDL, and there appears to be little conscientious effort to accommodate development needs within the boundary. The county's current Master Plan 2010 places little emphasis on housing policies or land supply measures other than traditional zoning-based tools.

The 2002 Growth Policies Plan of Bloomington, Indiana, states, in rather vague terms, the overall aim of creating a "compact urban form." Its policy goals seek to "increase residential densities in the urbanized area" (p. 6), "limit the spatial extent of community growth" (p. 5), and "link public facility impacts to the development process" (p. 13), all of which are consistent with containment objectives. However, the means of achieving these stated objectives are not clearly identified. Although the city has adopted a policy of restricting the extension of public facilities outside the existing planning area, zoning outside that area allows residential development at rather high densities. Also absent is a proactive stance on growth accommodation.

Bloomington has, however, begun to make some strides in the area of intergovernmental coordination. Outside the city's jurisdiction, growth is managed via an Interlocal Cooperation Agreement with surrounding



Monroe County, which allows the city to retain zoning control over sections of the fringe area that extends two miles from its boundaries. All building permits originate at the county courthouse, which facilitates the sharing of planning information between the city and county. But the city's plan states a need for further cooperation between city and county planning processes. It appears that the two-mile fringe provision has only served to extend the city's zoning powers rather than initiate any substantive cooperative planning effort. Also absent is any formal statewide planning process. Local planning is not mandated in Indiana, nor is intergovernmental cooperation on land-use issues.

One of the most successful transfer of development rights (TDR) approaches to urban containment has been the New Jersey Pinelands Commission's Pineland Development Credit program. These credits are allocated to landowners within environmentally sensitive portions of the Pinelands. Landowners may sell the credits to developers who own land within the designated regional growth area. Once the credits are sold, landowners within the preservation areas agree to nonresidential uses only, enforceable by property deed restriction. Developers who purchase the credits may apply them toward the construction of four additional housing units within the regional growth area. A separate Pinelands Development Credit Bank has also been established to provide loan guarantees using the credits as collateral and to monitor the ownership and exchange of credits. To date, more than 12,000 acres have been permanently protected via deed restriction under this program.

Despite the strong conservation incentives provided by the Pinelands Development Credit program, residential subdivisions at low urban den-

## PINELANDS, NEW JERSEY

### Plan Summary:

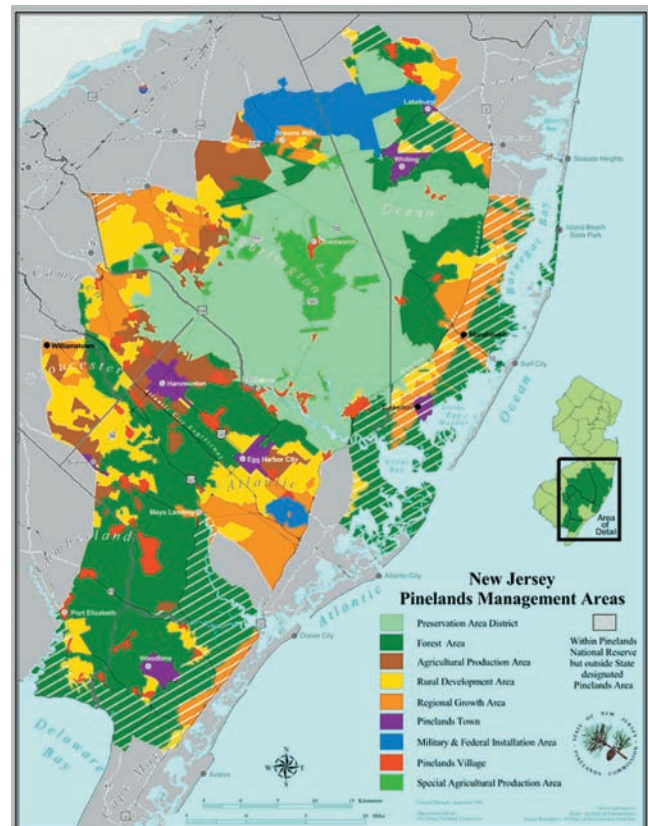
Plan Type	Regional
Plan Cluster	Weak-Restrictive
Goal Emphasis	Open Space
Policies:	
Housing	<input type="radio"/>
Land Supply	<input type="radio"/>
Open Space	<input checked="" type="radio"/>
Infrastructure	<input type="radio"/>
Fact Basis	<input type="radio"/>
Intergovernmental Coordination	<input type="radio"/>

### Jurisdiction Characteristics:

1990 Population	2,018,644
1990–2000 Growth Rate	9%
1990 Percentage Black	12%
1989 Per Capita Income (\$)	15,846
1990 Persons Per Square Mile	613

### Legend:

● Strong    ■ Moderate    ○ Weak

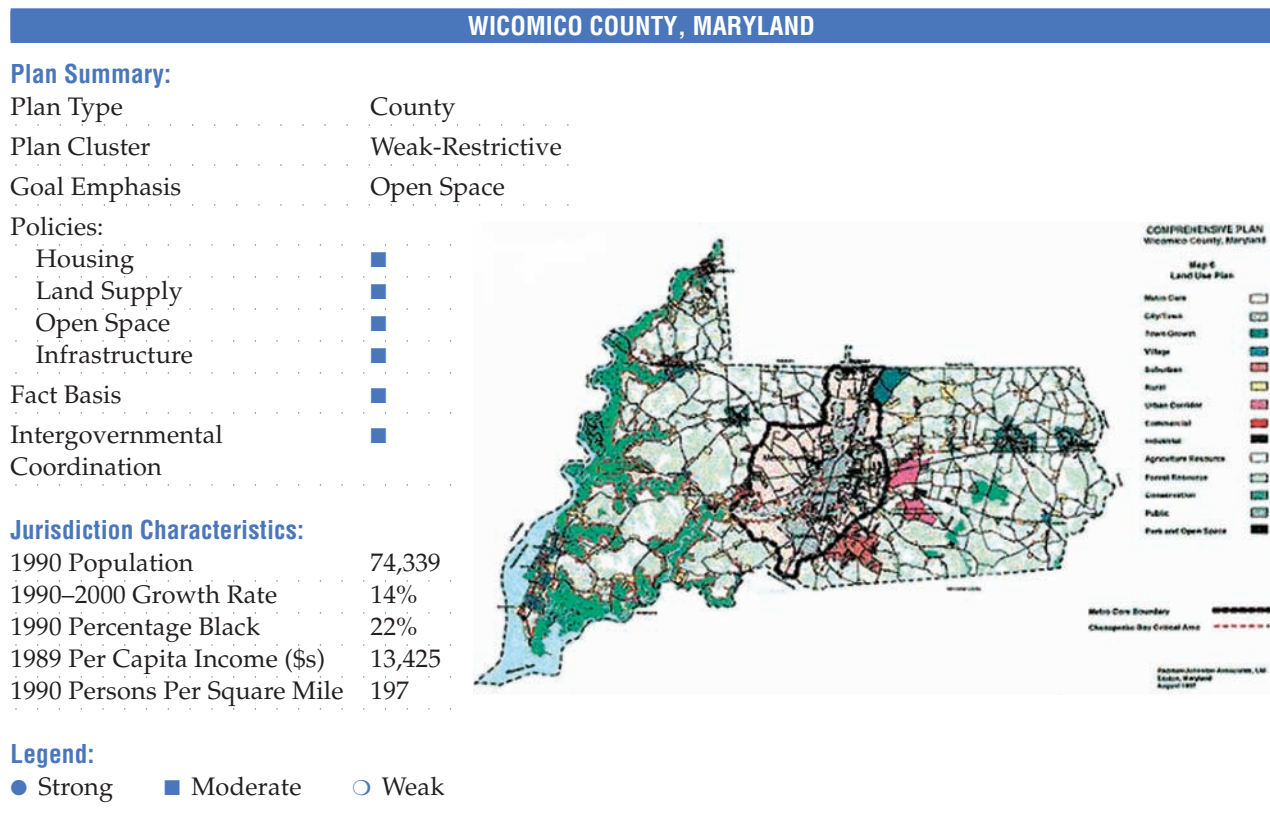


sities can and do occur throughout the area, and urban areas that are receiving areas for transferred rights do not appear to be meeting projected development needs. The New Jersey Pinelands Comprehensive Management Plan includes few provisions to accommodate housing, infrastructure, or land supply needs. Furthermore, coordination among the many different local governments is largely top-down, as mandated by the state, with the plans of the local governments within the region rarely surfacing within the regional plan. Although one could argue that this special purpose plan was not designed to be a truly comprehensive containment plan, the regional planning structure created by this plan, supplemented by strong state growth management legislation, provides a perfect framework for integrating regional conservation planning with local development planning.

Wicomico County lies at the center of Maryland's Delmarva Peninsula, the eastern boundary of the Chesapeake Bay. The county has the largest population concentration on the peninsula and is one of the most rapidly growing communities on Maryland's eastern shore. Threats to the county's environmental resources have contributed to the development of a plan designed to slow the pace of population growth. The first land-use principle stated in the county's comprehensive plan is to "maintain a moderate growth rate in order to develop in a timely, orderly fashion" (Wicomico County 1998, ch. 2). The plan goes on to say:

Managed growth is more economically and socially beneficial to the County than haphazard, unplanned development. Based upon historical growth trends, this rate should average 1–1.5 percent per year.

Urban containment is achieved through the establishment of designated growth areas and nongrowth areas. Within the designated growth areas,



development is allocated among five different districts, depending on the intensity of development and infrastructure needs. Nongrowth areas are further subdivided into rural, agricultural, and conservation areas, depending on the environmental characteristics of the land to be preserved.

Within the nongrowth areas, the county relies primarily on conservation and agricultural districting to achieve desired objectives. Two of these districts—Agricultural/Resource and Conservation—include restrictions on urban infrastructure extensions and permitted urban land uses. The Agricultural/Resource area designates agriculture and forestry as the primary allowable use and relies on “right to farm” legislation to encourage the continuance of agricultural practices in the region. The Conservation area is designated for sensitive or rare ecological habitats and includes resource-specific development regulations to minimize environmental hazards. Much of the land within the Conservation area is also protected by the state’s Chesapeake Bay Critical Area District, a state-designated zone to protect all land and water within 1,000 feet of the mean-high-tide water line.

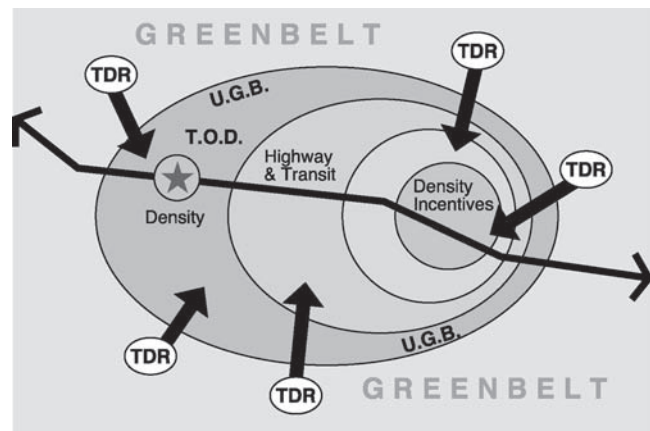
Based on historical growth rates during the previous 60 years, Wicomico County estimates that population has increased at an average of 2.3 percent per year (Wicomico County 1998, Introduction). This rate has lately increased due to the recent urbanization of Maryland’s Eastern Shore. Given these trends, the plan’s stated goal of maintaining an annual growth rate of 1 to 1.5 percent in years to come will likely discourage new development, especially if more restrictive policies are adopted. Currently, the plan mentions no specific policies designed to implement slow-growth goals.

The 2000 Aspen Area Community Plan is, in many ways, an outlier among plans in our sample. It is the only regional plan that is not located in a major metropolitan area, and it is the smallest jurisdiction we reviewed. We included it because it is an instructional city and county effort. Developed and

## ASPEN, COLORADO

### Plan Summary:

Plan Type	City-County
Plan Cluster	Weak-Restrictive
Goal Emphasis	Physical Containment
Policies:	
Housing	■
Land Supply	○
Open Space	○
Infrastructure	○
Fact Basis	○
Intergovernmental Coordination	○



### Jurisdiction Characteristics:

1990 Population	5,049
1990–2000 Growth Rate	17%
1990 Percentage Black	0.3%
1989 Per Capita Income (\$s)	30,027
1990 Persons Per Square Mile	2,536

### Legend:

● Strong	■ Moderate	○ Weak
----------	------------	--------

adopted by the city of Aspen and Pitkin County, the plan represents a joint effort to manage growth within the city and an area of county land that lies immediately outside the city. Thus, because it does not encompass all of Pitkin County, it is not a countywide plan, unlike most city-county containment plans. Furthermore, its stance toward new development is among the most restrictive of any plans examined.

This restrictive stance is largely the result of the area's natural amenities. Aspen is a well-known destination for skiers and others who seek to experience the area's scenic mountain resources. These features, combined with the area's small year-round residence population, place Aspen in a unique category among growth-managing communities.

Aspen's commitment to growth management dates to the 1970s. The city adopted its Growth Management Policy Plan in 1976, but this plan did not have the teeth to manage growth until the adoption of the 1993 Growth Management Quota System, which placed caps on both the total population residing within Aspen and the rate of new growth. According to Aspen planners, the quota system reduced the rate of new growth from 3.47 percent to 2 percent.

After several years of restrictive growth policies, the Aspen community began to experience the unintended effects that shaped the direction of the 2000 planning effort. The percentage of the population working and living within the community dropped from 45 percent in 1993 to 35 percent in 1997. The rising cost of housing, combined with the restrictions on new development, virtually eliminated the city's stock of affordable housing. Reduced diversity in residents' socioeconomic characteristics has also prompted community leaders to reverse the trends towards segregation and instead to foster diversity, a goal recognized by planners as key to the city's vitality and unique character.

In response to these demands, the 2000 plan makes some strides towards relaxing the restrictions imposed on new development: it includes new provisions for affordable housing and measures designed to increase land supply within the Aspen area through higher-density mixed-use zoning and transit-oriented development provisions. Despite these changes, however, Aspen's 2000 plan still maintains a restrictive stance towards new growth. Goals to "limit the ultimate population in the Aspen area" and provide for "a 'critical mass' of permanent local residents by providing a limited number of new affordable housing units" (p. 18) are supported by strict quotas on new development permits.

Another difference between the 1993 and 2000 plans is the addition of an Aspen Area Community Growth Boundary that serves as a future annexation agreement between the city and county and a basis for development approvals within the area that lies immediately outside the city boundaries. Furthermore, the city of Aspen agrees to supplement these containment efforts by increasing densities within the growth boundary, while the county agrees to limit the provision of new infrastructure and new development outside the boundary. Interestingly, the adoption of the growth boundary in Aspen has forced the city to rethink its stringent development policies within the urban area and relax zoning restrictions to facilitate higher densities within the area designated for new growth.

#### **SUMMARY**

As a group, growth management plans with a weak-restrictive urban containment framework represent the second fewest examples in our sample. These plans range from those which express uncertainty in accommodating growth to those which explicitly state goals of limiting the rate of new growth. Plans within this category are also characterized by their lack of

*As a group, growth management plans with a weak-restrictive urban containment framework represent the fewest examples in our sample.*

aggressive tools to shape the pattern of new growth and their lack of emphasis on affordable housing provision. Among the policies adopted, infrastructure-based policies which focus on the needs of existing urban areas tend to be the most common.

The largest jurisdiction that is representative of this type of urban containment is the city of San Diego. It is in a very large metropolitan area with multiple jurisdictions situated within a complex landscape. Its proximity to another large metropolitan area, Tijuana, makes its situation even more complicated. San Diego is famous for its three-tier growth management strategy (Freilich 2000), but this approach may explain why the city has been unable to establish a clean break between urban and rural land uses. Although it encourages development in an urban core and attempts to guide suburban-scale development into a second, urbanizing ring, it does not prevent development outside these rings. As a result, low-density, sprawling subdivisions extend for many miles outside the city into the county and nearby jurisdictions. Combined with the case studies presented in this chapter, the example of San Diego demonstrates that it is useful to understand the weak-restrictive framework as a form of urban containment that exhibits no clear consensus on the form containment should take, aside perhaps from an emphasis on high-intensity development of the urban core.



CHAPTER 4  
**Strong-Restrictive  
Urban Containment Framework**

**W**e have identified 29 examples of plans in the United States with strong containment and growth restrictions. In contrast to the weak-restrictive framework, the strong-restrictive urban containment framework usually includes the explicit goals of limiting population and/or employment growth and incorporates a variety of planning tools designed to direct growth into designated urban areas. Table 8 describes the primary characteristics of strong-restrictive plans.

**TABLE 8.**  
**Characteristics of Strong-Restrictive Plans**

### Plan Characteristics

- No goals to accommodate projected regional growth
- Infrastructure and open space policy emphasis
- Policies designed to stop or slow new development
- Often combined with strong affordable housing elements
- Moderate fact basis
- Moderate intergovernmental coordination

### Jurisdiction Characteristics

- Rare in states that require containment plans
- Moderate to high growth rate
- High per capita income
- High population density
- Common in California and other Western states

As suggested in Table 8, the strong-restrictive framework can be found primarily in highly urbanized regions of California. These plans also tend to be adopted by high-income communities and are rarely adopted in states that require urban containment plans. As discussed in Chapter 2, our findings suggest that a state framework for urban containment planning may reduce the likelihood that such plans will restrict rather than accommodate new growth. One of our counterintuitive findings, however, is that the strong-restrictive framework also tends to include strong affordable housing elements, perhaps due to the fact that such measures may relieve the perceived negative political impacts of growth controls. This finding is also likely due to the preponderance of these plans in California, which has strong state requirements for local housing planning.

Although the case studies chosen to illustrate the strong-restrictive type are somewhat less diverse than those in the previous chapter, we have chosen those that represent the range of strategies for restricting growth using a strong set of containment tools. Boulder, Colorado, has one of the nation's longest histories of containment planning, dating back to 1959. Like Aspen, discussed in the previous chapter, Boulder is beginning to feel the strain of its growth restrictions. A growing jobs-housing imbalance and an affordable housing crisis have prompted the city to relax its approach somewhat, although it still maintains a strict policy of controlling the rate of population growth. In Massachusetts, Barnstable County, much like the New Jersey Pinelands, has adopted a regional environmental protection plan that contains while it also restricts new growth through carrying capacity limitations imposed by the constraints of the natural environment. Calvert County, Maryland, restricts growth primarily through its adequate public facilities ordinance, which ties development permission to the availability of urban services. The final examples are representative of the majority of strong-restrictive plans. San Luis Obispo and Santa Rosa are located in rapidly growing areas of California. The growth restrictions in these communities are among the most restrictive and are supported by voters who adamantly seek to preserve the quality of life in their commu-

## BOULDER, COLORADO

**Plan Summary:**

Plan Type	City-County
Plan Cluster	Strong-Restrictive
Goal Emphasis	Open Space

**Policies:**

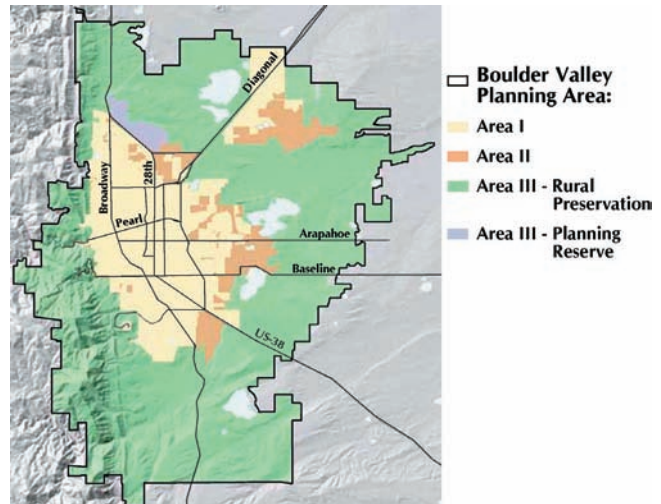
Housing	■
Land Supply	■
Open Space	■
Infrastructure	■

Fact Basis	■
------------	---

Intergovernmental Coordination	●
--------------------------------	---

**Jurisdiction Characteristics:**

1990 Population	83,312
1990–2000 Growth Rate	14%
1990 Percentage Black	1%
1989 Per Capita Income (\$s)	17,268
1990 Persons Per Square Mile	3,622

**Legend:**

● Strong	■ Moderate	○ Weak
----------	------------	--------

nities. We use another California community, Petaluma, in our concluding section to highlight the principal objectives of the strong-restrictive framework.

Boulder, Colorado, has a long history of urban containment. In 1959, voters approved a blue-line ordinance that limited water extensions above an elevation of 5,750 feet. In 1967, the city became the first in the nation to establish an open-space fund financed through a local sales tax. Nine years later, voters approved a Growth Limitation Ordinance that was designed to control the rate of population growth. The ordinance also implemented an adequate public facility program and a capital improvements program designed to coordinate new development with the availability of urban services. Since then, Boulder planners have relied on a formal urban growth boundary to reign in urban sprawl and prevent further development of the Rocky Mountain foothills.

The 2001 Boulder Valley Comprehensive Plan continues the tradition of promoting compact development, placing more emphasis on relieving a growing jobs-housing imbalance. As of 2000, the ratio of jobs to housing in the Boulder Valley was 92 to 1. To reduce this imbalance, the city adopted an inclusionary housing program in 1999 that requires 20 percent of all new residential development to be affordable to persons of low and moderate incomes. The 2001 comprehensive plan supplements this program with policies designed to promote housing development along transit corridors and within commercial centers.

Despite the city's efforts to reduce the jobs-housing imbalance and increase the availability of affordable housing, rising housing demand seems to be outpacing the supply of land provided within the growth boundary. According to city planners, the current service area of the growth boundary has remained virtually unchanged since it was drawn in 1977. Housing demand appears to be displaced to Boulder County's other major city,

Longmont, and into the rural areas around Longmont. Indeed, from 1988 through 1998, Boulder’s share of Boulder County’s new housing fell from 29 percent to 8 percent while Longmont’s share rose from 10 percent to 31 percent.

Much like Aspen’s containment program, the Boulder urban growth boundary is jointly managed by the city and surrounding Boulder County, although the county has its own separate plan governing land use outside the Boulder Valley urban area. The responsibilities of the city and county in land-use planning and urban service provision are spelled out in inter-governmental agreements adopted by the two entities. Yet there seems to be little land-use planning coordination with Longmont, which may further explain the displacement of new development outside the immediate Boulder Valley.

The 2002 Cape Cod Regional Policy Plan was adopted by Barnstable County, Massachusetts, primarily for the purpose of protecting the environmentally sensitive Cape Cod region, an area with over 222,000 permanent residents. The plan is part of a statewide effort to protect the region that also includes state review of developments of regional impact and the delineation of protected critical areas. Given its purpose, the plan sets carrying capacity limits on the rate of growth and the ultimate build-out potential within the region.

The county’s plan includes a wide range of policies in all areas except infrastructure provision. Since towns provide urban services in the Cape Cod region, most of the plan’s infrastructure policies consist only of recommended actions to be taken by local municipalities. A capital improvements plan also provides a framework for local investments in infrastructure. Although the regional plan is primarily designed to protect sensitive open space, it requires that local plans include several affordable

**BARNSTABLE COUNTY, MASSACHUSETTS**

**Plan Summary:**

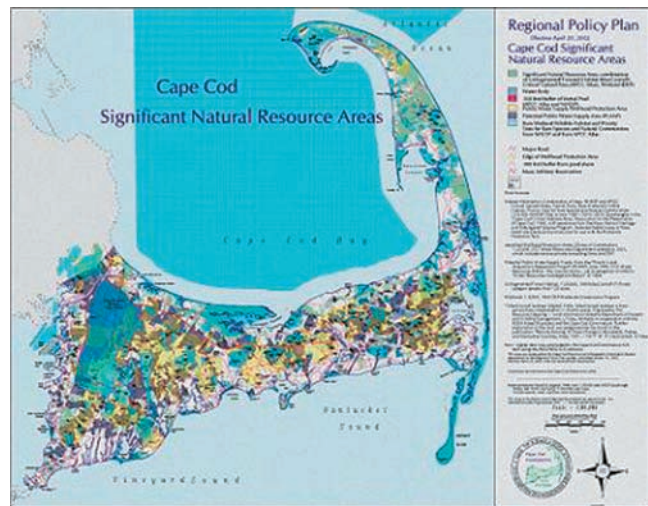
Plan Type	County
Plan Cluster	Strong-Restrictive
Goal Emphasis	Open Space
Policies:	
Housing	▶
Land Supply	▶
Open Space	▶
Infrastructure	○
Fact Basis	▶
Intergovernmental Coordination	○

**Jurisdiction Characteristics:**

1990 Population	186,605
1990–2000 Growth Rate	19%
1990 Percentage Black	2%
1989 Per Capita Income (\$s)	16,402
1990 Persons Per Square Mile	471

**Legend:**

- Strong
- ▶ Moderate
- Weak



housing policies intended to alleviate the increase in housing costs resulting from its carrying capacity limitations. For example, the plan requires that all residential construction projects with at least 10 units or more provide 10 percent of those units at prices affordable to persons of low to moderate incomes. The plan also includes affordable housing targets for municipalities within the region.

One unintended effect of the Cape Cod plan has been the legitimization of antigrowth sentiments within areas where new development should be encouraged. Under the provisions of the regional plan, local governments are allowed to establish "districts of critical planning concern," areas originally envisioned as sensitive environmental resources where new development would be prohibited. The town of Barnstable recently sought to rely on this provision of the plan to establish the entire town as a district of critical concern, which would ultimately give the town the authority to declare a townwide moratorium on new development. As this designation was being debated in the state appeals court, the town turned to traditional building permit caps to limit growth. Since Barnstable is the largest town within the surrounding county, such a policy would clearly displace much new development originally targeted for urban areas within Barnstable (Flint 2003).

**CALVERT COUNTY, MARYLAND**

**Plan Summary:**

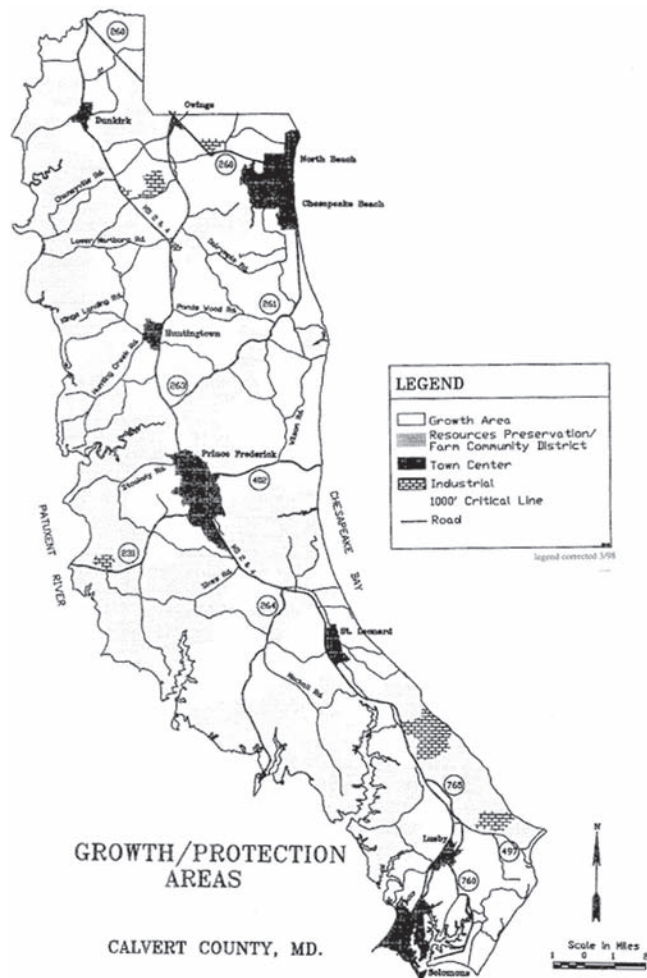
Plan Type	County
Plan Cluster	Strong-Restrictive
Goal Emphasis	Open Space
Policies:	
Housing	■
Land Supply	○
Open Space	■
Infrastructure	■
Fact Basis	■
Intergovernmental Coordination	■

**Jurisdiction Characteristics:**

1990 Population	51,372
1990–2000 Growth Rate	45%
1990 Percentage Black	16%
1989 Per Capita Income (\$)	17,521
1990 Persons Per Square Mile	239

**Legend:**

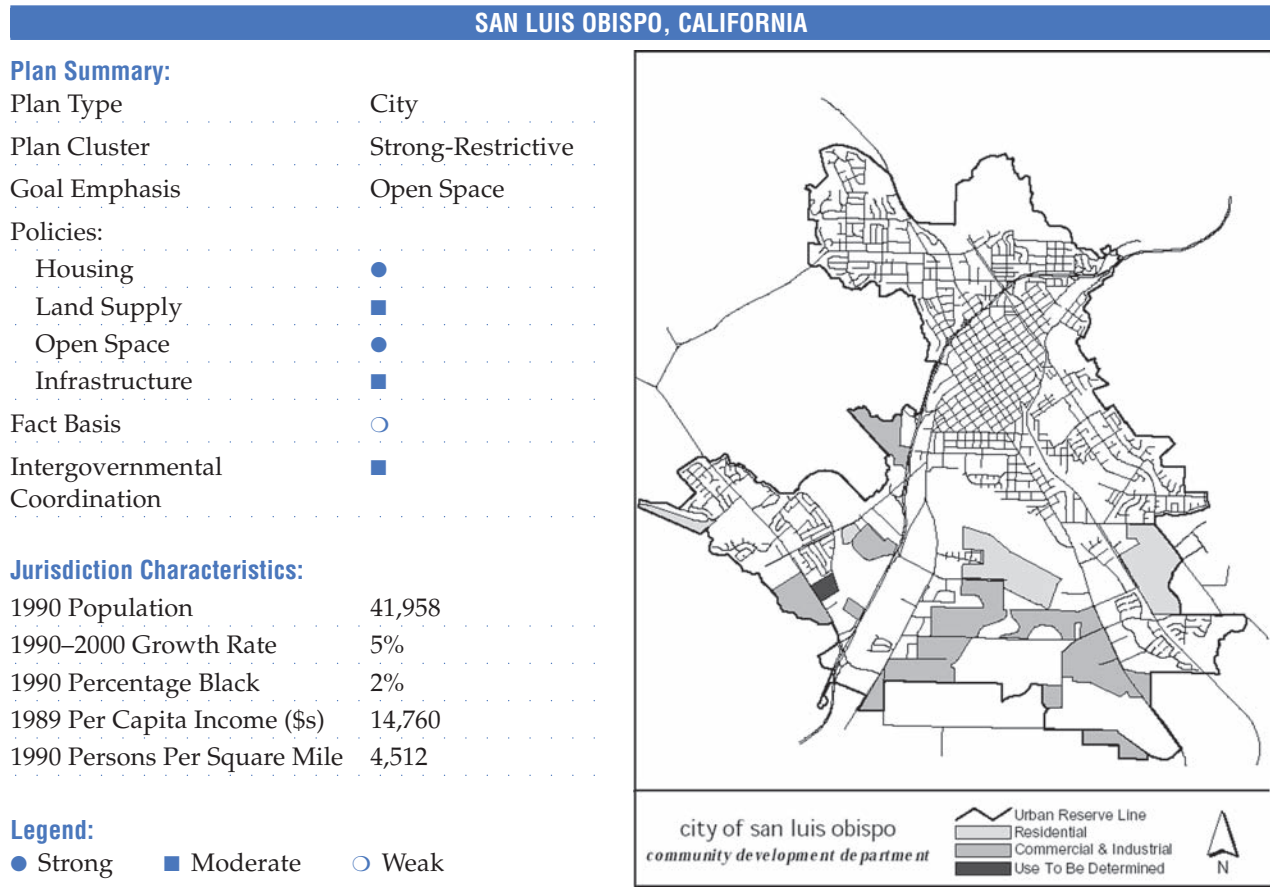
- Strong    ■ Moderate    ○ Weak



The rural amenities in Calvert County, Maryland, serve both as a resource to protect and as a basis for the economic development strategy identified in the county's 1997 Comprehensive Plan. The plan proposes to use undeveloped land within the rural fringe as a resource for farming, forestry, and recreation, rather than as a raw material for new suburban development. The county has chosen a restrictive containment approach, as expressed in the plan through goals aimed at reducing total build-out and lowering the rate of residential growth. To accomplish these goals, the county uses its adequate public facilities ordinance, which ties development permissions to the availability of infrastructure capacity, but the plan includes few policies to offset the effects of these restrictions.

Because Calvert County's plan was adopted in response to Maryland's 1992 Economic Growth, Resource Protection, and Planning Act, the plan contains several aggressive land conservation policies, including a transfer of development rights program and a conservation easement acquisition initiative. According to a study by Resources for the Future (McConnell, Kopits, and Walls 2003), more than 19,600 acres of prime agricultural land had been permanently preserved by July of 2002.

The county's restrictive caps on new growth will likely slow the pace of urbanization in years to come. During the 1990s, Calvert County was the state's fastest-growing county. By establishing an ultimate build-out total of 37,000 households, only 8,400 additional households can currently be accommodated within its boundaries. Based on the number of housing units that are currently under construction, this total dips to 3,100 additional housing units, which are intended to house a population that increased by 45 percent during the 1990s. Clearly, some of this new growth



will be displaced to surrounding counties if Calvert County continues its restrictive stance towards growth. A recent survey of housing prices suggests that an affordable housing shortage may be on the horizon. According to this survey, no recent homes for sale were priced lower than \$350,000 (McCaffrey 2003).

The cities of California have some of the most aggressive growth limitations in the United States. San Luis Obispo is one such example. Impending threats to quality of life caused by rapid growth have shaped the city's decision to pursue a strong-restrictive urban containment approach. When asked in a local poll to cite their major planning concerns, residents' top response was the increasing rate of growth. Residents also indicated that the city's greatest strength was its environmental quality (City of San Luis Obispo 1994, LU-5).

The city's 1994 General Plan includes a policy of establishing an "ultimate population capacity" (p. LU-10) as well as caps on the rate of residential growth. The city establishes a well-defined target residential growth rate of 1 percent per year, averaged over a 36-month period. Affordable housing developments are excluded from these growth rate limitations. The city also cites the goal of limiting the growth of nonresidential development. Caps on this type of growth are established whenever the increase in total floor area in the city exceeds 5 percent over a five-year period. Caps on nonresidential growth are partly in response to a 1989 vote, when 68 percent of voters said that growth management regulations should apply to all development within the city.

San Luis Obispo takes a phasing approach to infrastructure provision, timing the release of newly urbanizable land with the availability of funds to finance the provision of services. An urban reserve line demarcates the boundaries of future urban expansion areas within the urban fringe. Outside the urban reserve, new development is discouraged. Inside the urban reserve, new development is permitted within designated expansion areas that lie adjacent to and beyond the city limits. In these areas, development must conform to city-approved specific plans for phased urban growth. Until new growth occurs, land remains in agricultural or other compatible use. For each expansion area, the city identifies the area's capacity for new urban growth. Expansion areas may be either identified within the plan or proposed by private developers.

San Luis Obispo's antigrowth policies appear to be displacing housing demand to rural areas in surrounding counties. Furthermore, housing prices within San Luis Obispo appear to be rising as a result of these restrictions. Recent decisions by the San Luis Obispo Council of Regional Governments suggest that these trends may continue, as local and regional planners express increasing reluctance to accept the state's recommended affordable housing targets, choosing instead to rely on more conservative estimates of the demand for new housing units (Fulton 2003).

As in San Luis Obispo, the citizens of Santa Rosa, California, embraced a growth management ordinance developed in response to widespread local concern about the rapid pace of development. A survey initiated in 1988 by a grassroots organization known as the Concerned Citizens for Santa Rosa (2003) found that more than 70 percent of voters were dissatisfied with Santa Rosa's growth rate. This finding led to the adoption of a growth management element in 1991 that placed a limit on new residential growth. Affordable housing developments are exempt from the development quotas, as in San Luis Obispo. But unlike San Luis Obispo, nonresidential growth is not covered under Santa Rosa's plan. Santa Rosa's 2020 general plan maintains the city's previous growth restrictions and limits the rate of new development to approximately 800 to 1,000 units per year.

## SANTA ROSA, CALIFORNIA

**Plan Summary:**

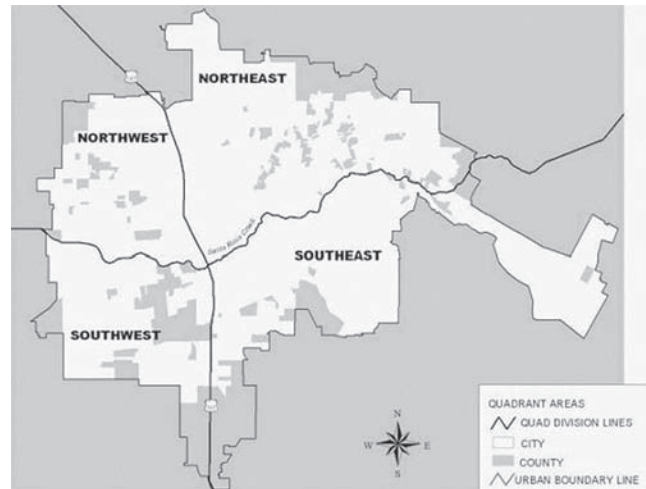
Plan Type	City
Plan Cluster	Strong-Restrictive
Goal Emphasis	Physical Containment

**Policies:**

Housing	●
Land Supply	■
Open Space	■
Infrastructure	■
Fact Basis	■
Intergovernmental Coordination	■

**Jurisdiction Characteristics:**

1990 Population	113,313
1990–2000 Growth Rate	30%
1990 Percentage Black	2%
1989 Per Capita Income (\$s)	17,259
1990 Persons Per Square Mile	3,362

**Legend:**

- Strong   ■ Moderate   ○ Weak

*Strong-restrictive urban containment is typically pursued by local governments attempting to shape their urban form in the absence of regional leadership.*

Santa Rosa's urban containment strategy is supported by a rigid urban boundary that can only be substantially modified during a 20-year general plan update or by a vote of Santa Rosa's citizens. Areas outside the urban boundary designated as open space are developed at low densities ranging from one unit per 20 to 200 acres. Lower densities are permitted for rural residential development in some areas. Coordination of land-use planning in areas outside the urban boundary is achieved through agreements with surrounding Sonoma County.

The rigidity of the urban growth boundary will likely place limitations on the supply of developable land within the next few decades, especially if Santa Rosa continues to see increases in housing demand. The current UGB is among the most rigid in the nation, with 45 square miles of urbanizable land allocated for 20 years of future urbanization. Given that the current urban growth boundary is designed to remain fixed until the year 2016, housing supplies will likely be rationed by the fixed supply of land.

**SUMMARY**

Strong-restrictive urban containment is typically pursued by local governments attempting to shape their urban form in the absence of regional leadership. Growth management based on this framework tends to rely on a wide range of policies designed to shape both the pattern and extent of new development.

Perhaps the best known example of this type of urban containment framework is Petaluma, California. (We chose not to review Petaluma in detail here since it is already covered in existing literature, and we wanted to recognize other interesting examples of a similar framework.) Through coordination with Sonoma County, Petaluma preserves open spaces

outside the urban area but does not necessarily strive to accommodate regional development needs within the urban area. Nor should it need to. Petaluma is a relatively small city in a very large and growing metropolitan area (San Francisco). Because there is no regionally coordinated urban containment effort, Petaluma realized that it had to go it alone if it wanted to improve land-use patterns over those that would result from status quo management. Petaluma has decided to accommodate its share of the region's growth essentially on its own terms, so while it is called "restrictive" in our analysis, it does strive to accommodate its share of regional growth. It also attempts to offset exclusionary housing outcomes to its annual quota policy by giving priority to new inclusionary developments. The lesson here is that strong containment with restrictive accommodation may be an important growth management approach in situations similar to Petaluma's—that is, when a jurisdiction, faced with no regional commitment to urban containment, still wants to institute a containment program while remaining reasonably inclusive.



CHAPTER 5  
**Weak-Accommodating  
Urban Containment**

**P**lans that fall into the weak-accommodating category have growth boundaries or urban service limits but do little to manage development outside these boundaries, thus facilitating the proliferation of low-density suburban and exurban development. Unlike the weak-restrictive framework discussed above, this framework identifies development needs while accommodating those needs with land made buildable through a fiscally sound, market-responsive capital improvement investment program. We have identified 31 growth management plans in the United States with a weak-accommodating framework.

**TABLE 9.**  
**Characteristics of Weak-Accommodating Plans**

### Plan Characteristics

- Large-lot land preservation and infrastructure goal emphasis
- Infrastructure and land supply policy emphasis
- Moderate fact basis
- Moderate intergovernmental coordination

### Jurisdiction Characteristics

- Low per capita income
- Low population density
- Common in states with no local planning mandate
- Common in the Midwest

The weak-accommodating framework is more commonly found in the Midwest and in states that do not require local planning. The goal and policy emphases of these plans are varied, but, in general, they tend to place more emphasis on land supply policies than those discussed above. Communities adopting weak-accommodating plans also tend to be communities with slightly lower per capita income and lower population densities.

Four communities were chosen to illustrate this urban containment framework. Cookeville, Tennessee, adopted its first urban containment strategy in response to a state growth management law that required local urban containment planning. Although an impressive first step, this plan lacks strong policies to support containment objectives. Sioux Falls, South Dakota, not widely acknowledged as an urban containment community, has a well-developed infrastructure phasing and land supply provision program but has only minimal control over development within its fringe. Lincoln, Nebraska, has a well-publicized growth management program that is highly coordinated with the surrounding county. Again, the emphasis of the Lincoln program is on infrastructure timing and land supply. Delaware Valley, Pennsylvania, is a multijurisdictional planning effort that places emphasis on development accommodation. This plan is largely advisory, however, and lacks the formal intergovernmental structure found in other regional plans.

In 2000, Cookeville, Tennessee, adopted its first urban containment plan in response to the state's recently enacted growth management legislation, which requires all cities within Tennessee to delineate urban growth boundaries. The city's Comprehensive Future Land Use Plan is based on a strong fact basis, with land and housing supply projections derived from future estimates of land needed for population and employment growth. A market factor of 25 percent is also applied to the land supply projections to facilitate competition in the land market. As such, Cookeville's plan is an excellent example of a containment strategy designed primarily to accommodate projected growth.

The principal weakness of the plan is its lack of emphasis on specific policies to implement urban containment objectives. Few required policies are in place to facilitate increased densities within the urban growth boundary. Furthermore, the city does not take an active role in limiting the

## COOKEVILLE, TENNESSEE

### Plan Summary:

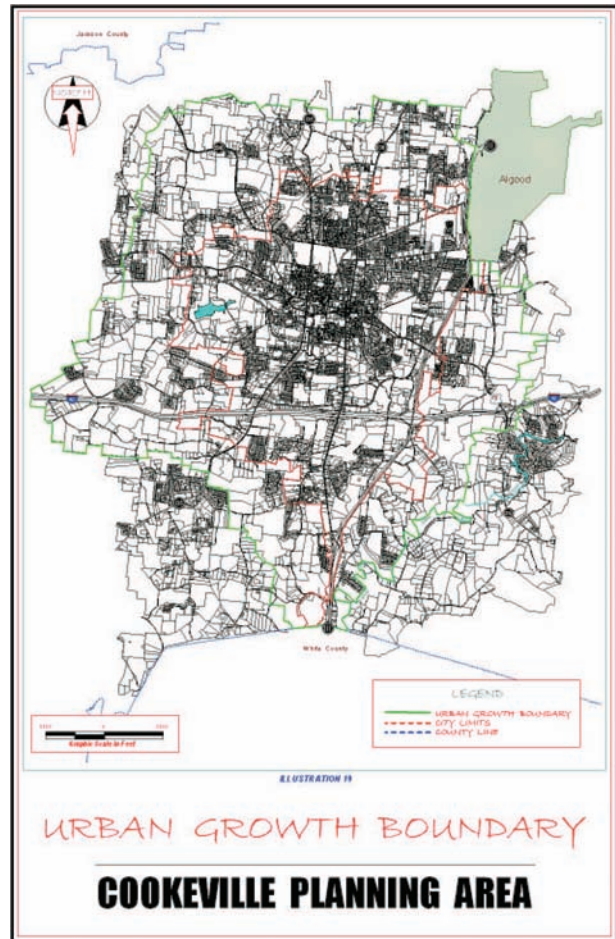
Plan Type	City-County
Plan Cluster	Weak-Accommodating
Goal Emphasis	Development Accommodation
<b>Policies:</b>	
Housing	○
Land Supply	○
Open Space	○
Infrastructure	○
Fact Basis	■
Intergovernmental Coordination	●

### Jurisdiction Characteristics:

1990 Population	21,744
1990–2000 Growth Rate	10%
1990 Percentage Black	3%
1989 Per Capita Income (\$s)	11,852
1990 Persons Per Square Mile	1,061

### Legend:

● Strong	■ Moderate	○ Weak
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density of new development outside the urban growth boundary. Although the city maintains a policy of restricting the provision of sewer service to areas within the corporate limits, other goals and policies with respect to the spatial provision of urban services are stated only in vague terms.

Despite its weak emphasis on urban containment, planning occurs within a strong intergovernmental context. The state-designated Cookeville Regional Planning Commission has jurisdiction over planning within the city and the unincorporated area surrounding the city. This entity has authority to comment on all extraterritorial development applications and has the power to establish extraterritorial zoning. But inconsistencies between the planning responsibilities of the city, the planning commission, and the surrounding county keep this plan from being a truly regional plan. In some areas, the city has already extended its jurisdiction beyond the territory governed by the regional planning commission. Furthermore, planning does not appear to be coordinated with the surrounding county.

Sioux Falls, South Dakota, adopted its first urban containment strategy in 1979, following a series of conflicts over growth and development. Poor planning had resulted in a sewer system that was improperly sized and which was beginning to threaten the Big Sioux River. Septic systems were allowed within the city and residential subdivisions and were permitted without any prior environmental impact assessment. Following a battle over the denial of a large-lot suburban development proposal, the city began to rethink its hands-off stance toward development planning. When

## SIOUX FALLS, SOUTH DAKOTA

### Plan Summary:

Plan Type	City-County
Plan Cluster	Weak-Accommodating
Goal Emphasis	Physical Containment

### Policies:

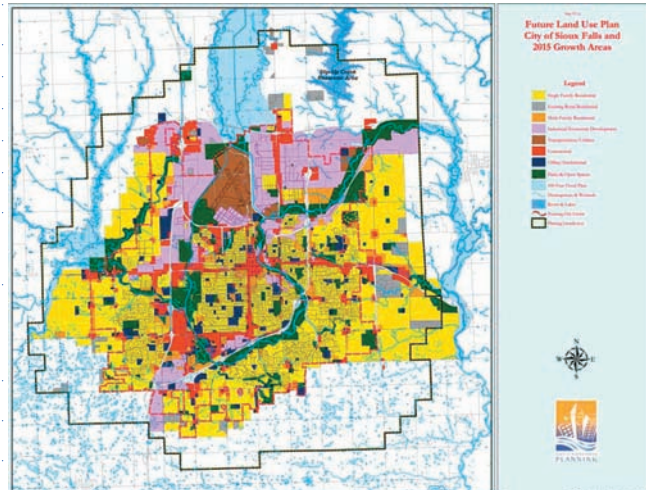
Housing	■
Land Supply	■
Open Space	○
Infrastructure	■

Fact Basis ■

Intergovernmental  
Coordination ■

### Jurisdiction Characteristics:

1990 Population	100,814
1990–2000 Growth Rate	23%
1990 Percentage Black	1%
1989 Per Capita Income (\$s)	13,677
1990 Persons Per Square Miles	2,238



### Legend:

● Strong    ■ Moderate    ○ Weak

a measure designed to allow suburban development within the agricultural fringe was proposed, local homebuilders' organizations, the Chamber of Commerce, and other local community groups came out in opposition to the measure, citing recent reports from the planning literature that pointed to the costs of urban sprawl. When voters soundly defeated the measure, planners got the message and developed the city's first growth management plan (Schmitt 2002).

The city's 2015 Growth Management Plan represents the latest form of urban containment planning in Sioux Falls. The plan identifies seven districts contiguous to and immediately beyond the existing municipal boundaries; the size and location of each district are determined by major drainage basins. Within each district, the city identifies the timing and scope of projected future urban infrastructure extensions. By phasing infrastructure extensions, the city directs the pattern of future growth. To determine the infrastructure provision priorities, the city employs a scoring system that ranks each district based on development suitability.

Outside the urban area, the city employs limited agricultural zoning to minimize rural land conversion. Coordination with the adjacent county is achieved primarily through joint rural area development policies and the city's extraterritorial land-use jurisdiction. South Dakota is an enabler of interlocal agreements between cities and counties rather than a proactive player in statewide planning. The state does not require the preparation of local plans.

A primary function of the Sioux Falls plan has been to lend a degree of predictability to the timing and extent of future infrastructure extensions so that private real estate developers can make informed investment decisions. The plan appears to have been successful in meeting these goals.

## LINCOLN, NEBRASKA

**Plan Summary:**

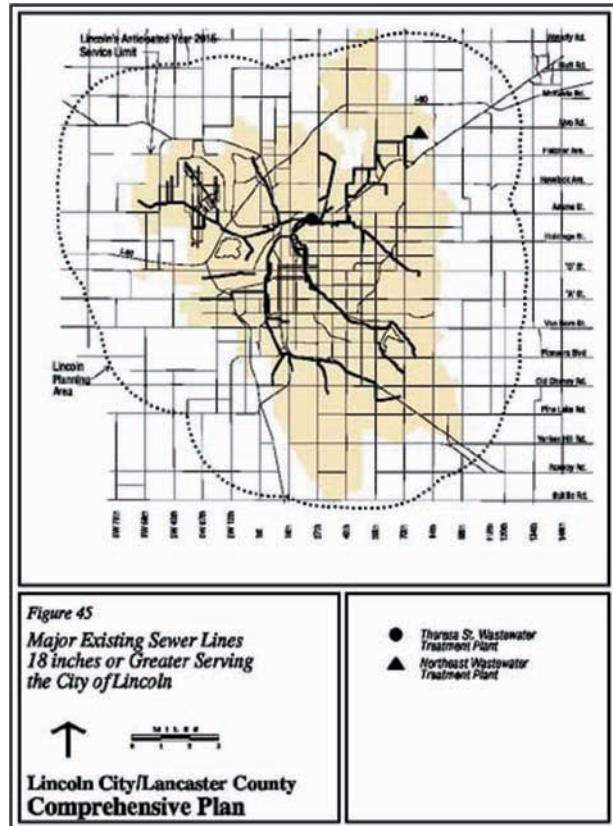
Plan Type	City-County
Plan Cluster	Weak-Accommodating
Goal Emphasis	Physical Containment
Policies:	
Housing	■
Land Supply	■
Open Space	○
Infrastructure	■
Fact Basis	■
Intergovernmental Coordination	■

**Jurisdiction Characteristics:**

1990 Population	213,641
1990–2000 Growth Rate	17%
1990 Percentage Black	2%
1989 Per Capita Income (\$s)	13,803
1990 Persons Per Square Mile	255

**Legend:**

- Strong    ■ Moderate    ○ Weak



Older neighborhoods see as much investment as new suburban neighborhoods. Furthermore, the provision of new infrastructure drives the pattern of new urban development. The primary challenge faced by planners is the proliferation of large lot subdivisions within designated growth areas (Schmitt 2002).

Lincoln, Nebraska, is home to the state's capitol and a major university, the University of Nebraska. The city and surrounding Lancaster County have a long tradition of cooperative city-county containment planning. Since the establishment of a joint planning commission in 1959, the city and county have worked together to develop a joint plan that manages growth primarily through infrastructure phasing policies.

The 1994 Lincoln-Lancaster County comprehensive plan restricts the extension of municipal water and sewer services to areas that lie within the corporate limits. In addition, by identifying existing infrastructure needs and proposed infrastructure extensions for a 20-year planning period, the city manages growth by directing the path of future infrastructure extensions and annexations. The state of Nebraska has also granted Lincoln extraterritorial zoning authority over land within three miles of its boundaries. Thus the city can coordinate future annexations and infrastructure extensions with the land-use patterns that emerge within the urban fringe. Furthermore, the state has prohibited the incorporation of new cities within five miles of the Lincoln city limits without the city's approval. These powers, combined with relatively flexible state-defined annexation procedures, give Lincoln the ability to manage growth through the planned expansion of its municipal boundaries.

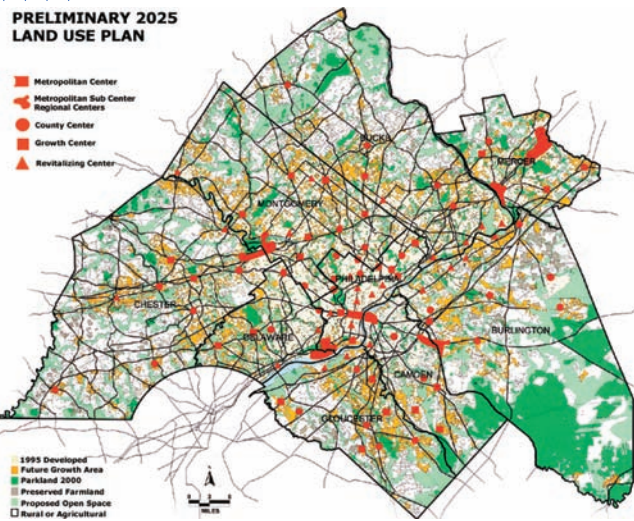
By all accounts, the Lincoln-Lancaster County plan has been successful in minimizing leapfrog patterns of development and ensuring that new development occurs in an orderly, phased fashion. Public facilities are considered to be of high quality, and the downtown area remains a vital core for the region. Despite these positive trends, recent evidence suggests that significant amounts of large-lot development have been occurring within rural areas. A plan revision in the mid-1990s allocated 22.5 square miles of low-density development to areas outside the planned urban service area (Porter 1996). Increases in sprawling suburban development that do not rely on public water or sewer services will likely emerge as a significant planning issue in years to come.

The Delaware Valley Regional Planning Commission is currently working to develop an innovative land-use and transportation plan that will guide growth and development within a region that includes nine counties, the city of Philadelphia, and many smaller cities spread across two states. The strength of its Horizons 2025 plan is its extensive fact basis foundation. As part of the planning process, planners developed 26 specific indicators in eight substantive planning areas that will be used to monitor progress toward plan implementation. These indicators rely on readily available public data to measure aspects of physical form, traffic congestion, environmental quality, air quality, economic development, freight movement, mobility, and housing. Projections were prepared using these indicators to determine the likely impact of planning policies. Of the 26 indicators, 11 showed projected improvements from the implementation of the new regional plan, six showed a decline in conditions, and nine gave mixed results. Based on an innovative comparison of differences in land consumption under a planned growth scenario relative to a continuance

**DELAWARE VALLEY, PENNSYLVANIA**

**Plan Summary:**

Plan Type	Regional
Plan Cluster	Weak-Accommodating
Goal Emphasis	Development Accommodation
Policies	
Housing	○
Land Supply	○
Open Space	○
Infrastructure	■
Fact Basis	●
Intergovernmental Coordination	○



**Jurisdiction Characteristics:**

1990 Population	5,182,705
1990–2000 Growth Rate	4%
1990 Percentage Black	19%
1989 Per Capita Income (\$s)	16,305
1990 Persons Per Square Mile	1,384

**Legend:**

- Strong
- Moderate
- Weak

of existing trends, planners predict that implementation of the regional plan will reduce the land required to accommodate new development by 26 percent.

Overall, the plan is designed to accommodate projected regional growth. Since it is primarily advisory in nature, the plan includes few strong implementation tools but instead relies on the designation of future growth areas, where new growth will be focused using targeted investments in water, sewer, and transportation infrastructure. This regional policy is coordinated with all comprehensive plans of counties and cities within the Delaware Valley. In Chester County, Pennsylvania, for example, 70 of the county's 73 municipalities participate in a program that relies on county grant funds to bring local plans into conformance with the county's Vision Partnership program. In New Jersey, a multijurisdictional water quality management board reviews local water and sewer proposals for consistency with the region's planned investment goals. Despite these successes, however, the primary challenge to plan implementation remains how to redirect and coordinate investments in infrastructure within this decentralized and multijurisdictional planning framework.

### SUMMARY

Weak-accommodating urban containment is the path taken in states with weak planning traditions or areas in which open-space preservation is not as important as in others. Plans of this type rely on few policies to limit suburban and exurban development and are designed primarily to lend predictability to the development process through phased infrastructure extensions and urban service areas.

This type of urban containment is perhaps best typified by Sioux Falls: South Dakota's planning statutes are not as rigorous as many others, especially in growing states, and with few exceptions its open spaces are not as vital for preservation as in other parts of the country. Moreover, the rural landscape does not lend itself to development outside urban areas because soils are not suitable for low-cost septic systems and deep-well groundwater tends to be too expensive to tap due to depth, productivity, treatment, or a combination of all three. With rural development a less pressing problem, Sioux Falls' plan makes efficient provision of services to accommodate urban development its principal objective. The city accepts that some development outside the city will occur. But it also realizes that rural development will be limited because of terrain and water supply constraints. Its focus on guiding development through infrastructure extension policies, therefore, is the result of a careful analysis of local conditions and needs, which make a weak-accommodating framework well-suited for the area.

*Weak-accommodating urban containment is the path taken in states with weak planning traditions or areas in which open-space preservation is not as important as in others.*



CHAPTER 6

## **Strong-Accommodating Urban Containment Framework**

**G**rowth management plans with strong containment and growth accommodation have three basic features: the preservation of rural and other open spaces beyond a boundary for nonurban uses, the containment of urban-scale development within a boundary, and a program of accommodating growth within the boundary. This category is by far the largest of the containment plans we have analyzed: we have examined 50 examples of this kind in the United States, many of which encompass entire metropolitan statistical areas as defined by the U.S. Census Bureau.

**TABLE 10.**  
**CHARACTERISTICS OF STRONG-ACCOMMODATING PLANS**

**Plan Characteristics**

- Physical containment and growth accommodation goal emphasis
- Strong housing, land supply, infrastructure, and open space policies
- Strong fact basis
- Strong intergovernmental coordination

**Jurisdiction Characteristics**

- Large population
- Common in states that require local planning
- Common in states that require local containment plans

Growth management plans with a strong-accommodating framework are diverse and have a wide range of goals, with several policies supporting each goal. These plans also tend to be supported by strong fact bases and a high degree of intergovernmental coordination. The state plays an important role in shaping the content of these plans, as suggested by the predominance of such plans in states that require local planning and the preparation of local urban containment programs.

The case studies selected here illustrate the diversity of approaches to the strong-accommodating urban containment framework. Perhaps the best-known example of this type is the regional plan in metropolitan Portland, Oregon. In many ways, this plan includes every element of a well-designed regional containment approach, including a strong rural land preservation initiative and an aggressive affordable housing strategy. Although described extensively in the literature, metropolitan Portland merits additional discussion in the context of our framework of urban containment typologies. The plan in Palm Beach County, Florida, includes one of the strongest policy programs in the country: it uses a tiered approach that clearly separates urban and rural land uses to support a wide range of containment objectives. Howard County, Maryland, was selected as an example of a successful land preservation program that also accommodates urban development needs. Kitsap County, Washington, is another example of a jurisdiction that relies heavily on intergovernmental cooperation and strong physical containment planning. The final example chosen is Tucson, Arizona, which only recently adopted its urban containment program. Like the Palm Beach program, Tucson relies on the designation of separate districts, each having its own unique land-use planning needs.

The Portland, Oregon, urban growth boundary initiative is one of the nation's oldest and best-known urban containment programs. It was adopted in 1979 in accordance with Oregon's statewide land-use planning program and was drawn to accommodate a 20-year supply of urban development. Inside the urban growth boundary, policies such as minimum density standards have been established to promote higher-density development. Outside the boundary, land is designated for rural uses only, although there are pockets where nonrural development is allowed because it was already built or committed to nonrural development.

It is important to emphasize that Portland's program emerged not in isolation, but in response to action at the state level. Oregon's 1973 Land

## METROPOLITAN PORTLAND, OREGON

### Plan Summary:

Plan Type	Regional
Plan Cluster	Strong-Accommodating
Goal Emphasis	Physical Containment

### Policies:

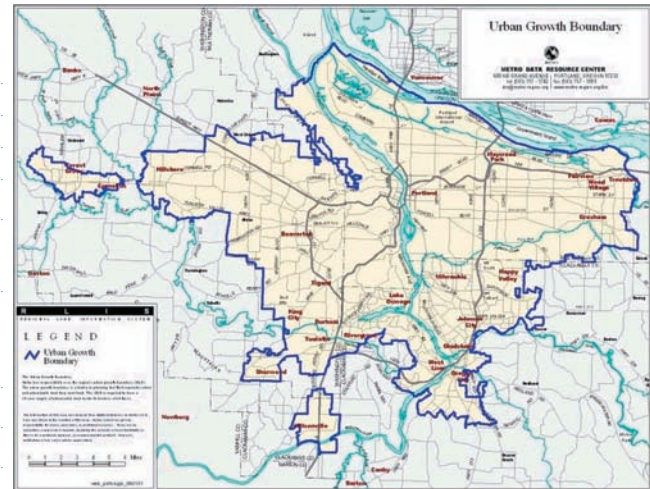
Housing	■
Land Supply	■
Open Space	■
Infrastructure	○

Fact Basis ●

Intergovernmental Coordination ●

### Jurisdiction Characteristics:

1990 Population	1,239,842
1990–2000 Growth Rate	55%
1990 Percentage Black	3.1%
1989 Per Capita Income (\$s)	15,286
1990 Persons Per Square Mile	331.2



### Legend:

● Strong   ■ Moderate   ○ Weak

Conservation and Development Act required incorporated cities and urban areas of counties to draw urban growth boundaries and restrict the use of land outside the boundaries to rural activities. The Oregon State Legislature directed the regional Metropolitan Services District (now called Metro) in Portland to design and manage an urban growth boundary encompassing 24 cities and portions of three counties. In 1978, voters approved a new charter that gave Metro formal powers for regional planning. This referendum made Metro the only directly elected regional government in the United States, consisting now of a seven-member board and an executive officer. A year later, the state accepted Metro's urban growth boundary.

The state subsequently adopted the Metropolitan Housing Rule, which requires the 27 jurisdictions within the Portland region to accommodate their fair share of affordable housing by reducing minimum-lot-size requirements and setting targets for the distribution of housing within density categories. An Urban Growth Management Functional Plan provides the framework for allocating projected housing demand among local governments within the region in accordance with the recently adopted 2040 Growth Concept Plan. Thus Portland's combination of strong containment and strong growth accommodation features would not exist without strong regional and state-level planning institutions.

Diverse ecological resources combined with decades of rapid suburbanization have created unique planning challenges for Palm Beach County, Florida, planners. The county is sandwiched between Lake Okeechobee and the Everglades on the west and the Atlantic Ocean on the east. The western two-thirds of the county is devoted to agricultural uses, primarily the cultivation of sugar cane, rice, and vegetables. The central and northern portions of the county support citrus farming. Amidst these natural resources lives a rapidly growing suburban population. The threats to the natural amenities

## PALM BEACH COUNTY, FLORIDA

**Plan Summary:**

Plan Type	County
Plan Cluster	Strong-Accommodating
Goal Emphasis	Physical Containment

**Policies:**

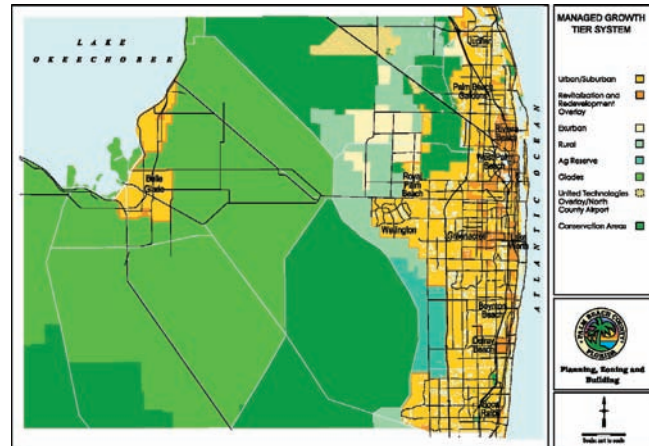
Housing	●
Land Supply	●
Open Space	■
Infrastructure	●

**Fact Basis**

Intergovernmental Coordination	○
--------------------------------	---

**Jurisdiction Characteristics:**

1990 Population	863,518
1990–2000 Growth Rate	31%
1990 Percentage Black	12.5%
1989 Per Capita Income (\$)	19,937
1990 Persons Per Square Mile	424.5

**Legend:**

● Strong	■ Moderate	○ Weak
----------	------------	--------

imposed by encroaching suburban development have earned the county the dubious distinction of being the most sprawl-threatened of any medium-size metropolitan area in the nation, according to the Sierra Club (Meck 2000).

So as to tailor planning strategies to the needs of the landscape and the local population, the county's comprehensive plan defines several different tiers within the county, each with unique planning issues. Palm Beach planners describe their urban containment strategy as a "managed growth tier system." Within each of the tiers, water and sewer service is provided at one of three different levels. Within urban service areas, water and sewer are provided by a centralized potable water supply system and centralized sanitary sewer system. Within rural service areas, wells and septic tanks are the only allowable means of providing water and sewer. Between these two tiers is a third—the limited urban service area—which allows a mix of urban and rural services. Level of service standards for roads, mass transit, stormwater, fire/rescue, parks, solid waste, and libraries do not vary by service area, although many Florida communities may also define spatially varying level of service standards for roads to ensure that new growth potential is not unintentionally directed to exurban areas because of high level of service capacity regulations.

Palm Beach County's unique tiered approach to urban containment was awarded the 2000 Current Topic Award for Growing Smart Initiatives by the American Planning Association. A recent evaluation of the plan found that it would generate significant public benefits, including a savings of 8,089 acres of developable land, 5,620 acres of environmentally sensitive land, and \$22 million in infrastructure costs attributable to the reduced demand for local roads and water and sewer hookups. The net benefit to each taxpayer was estimated to be on the order of \$8,000 per resident (APA 2000).

As with many county-level growth management efforts, the success of the plan is likely to lie in the hands of the 39 municipalities within Palm

## HOWARD COUNTY, MARYLAND

**Plan Summary:**

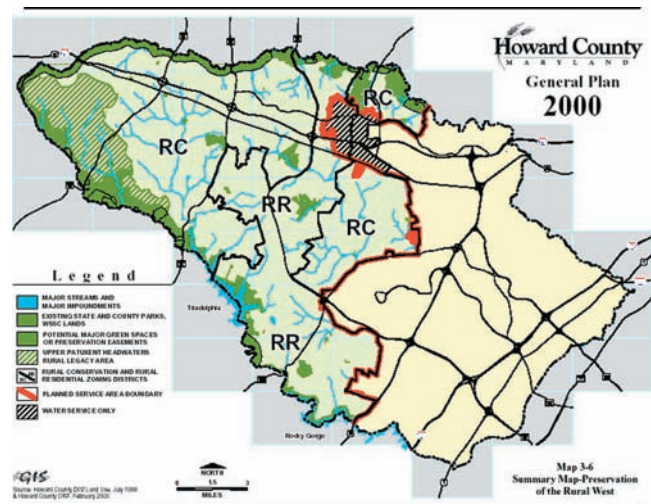
Plan Type	County
Plan Cluster	Strong-Accommodating
Goal Emphasis	Open Space
Policies:	
Housing	■
Land Supply	■
Open Space	■
Infrastructure	■
Fact Basis	■
Intergovernmental Coordination	■

**Jurisdiction Characteristics:**

1990 Population	187,328
1990–2000 Growth Rate	32%
1990 Percentage Black	12%
1989 Per Capita Income (\$)	22,704
1990 Persons Per Square Mile	743

**Legend:**

- Strong    ■ Moderate    ○ Weak



Beach County. To ensure increased densities within the urban service tiers, municipalities must be willing to accept density transfers from agricultural areas. At least one local public official has expressed reluctance on the part of residents to accept increased development densities (Meck 2000).

The 2000 General Plan of Howard County, Maryland, acknowledges the jurisdiction's transition from a rapidly growing county to a maturing one with well-defined urban cores and a limited supply of land for new development. Furthermore, the 2000 plan is Maryland's first to incorporate the mandates of the state's smart growth legislation, passed in the early and mid-1990s. According to Howard County's planners, the new state legislation did not radically change their approach to growth management. However, new planning tools offered by the state, such as the Rural Legacy Program and Priority Funding Areas, strongly reinforced the county's dual emphasis on open space preservation and geographically focused investments in urban infrastructure. State goals are repeatedly stated throughout Howard County's plan and serve as a basis for the county's six planning visions: coordination with state and regional initiatives, rural land preservation, establishment of an urban growth boundary, the creation of livable communities, the protection of environmentally sensitive resources, and citizen participation in planning decisions.

One distinguishing feature of the Howard County plan is a major initiative to preserve a large tract of rural land that lies within the western portion of the county. All land within this large region is zoned for rural purposes. The plan also proposes a variety of other measures to preserve more than 30,000 acres in this "Rural West," including the purchase of agricultural conservation easements using local and state funds and the promotion of cluster subdivision design. Between 1989 and 1997, the county

invested \$55 million in agricultural land preservation, placing the county first in the nation for local dollars invested in agricultural land preservation, according to the American Farmland Trust (Howard County 2000, 44). In addition to its aggressive land preservation program, the county supports the local agricultural industry through its “right to farm” legislation and agricultural marketing program.

The changing context of local and state planning in Washington played a major role in shaping Kitsap County’s first major plan revision since the late 1970s. The new Kitsap County comprehensive plan, adopted in 1998, and subsequently amended in 2002, was created largely in response to the state’s 1990 Growth Management Act, which required urban containment planning in the state’s major urban areas. This legislation, combined with Kitsap County’s rapid growth—its rate of growth was twice that of Washington’s between 1970 and 1990—created planning challenges never before seen in the county.

Kitsap County’s response was to develop a strong urban containment plan that emphasizes physical containment while accommodating growth at projected rates based on previous trends. The Countywide Planning Policy adopted in 1992 established the framework for the development of urban growth areas surrounding each of the county’s major cities. The county’s plan, in turn, was integrated into the Puget Sound Regional Plan. In 1998, however, the county revised its plan in response to a finding by the regional Growth Management Hearings Board that the 1992 plan failed

### KITSAP COUNTY, WASHINGTON

#### Plan Summary:

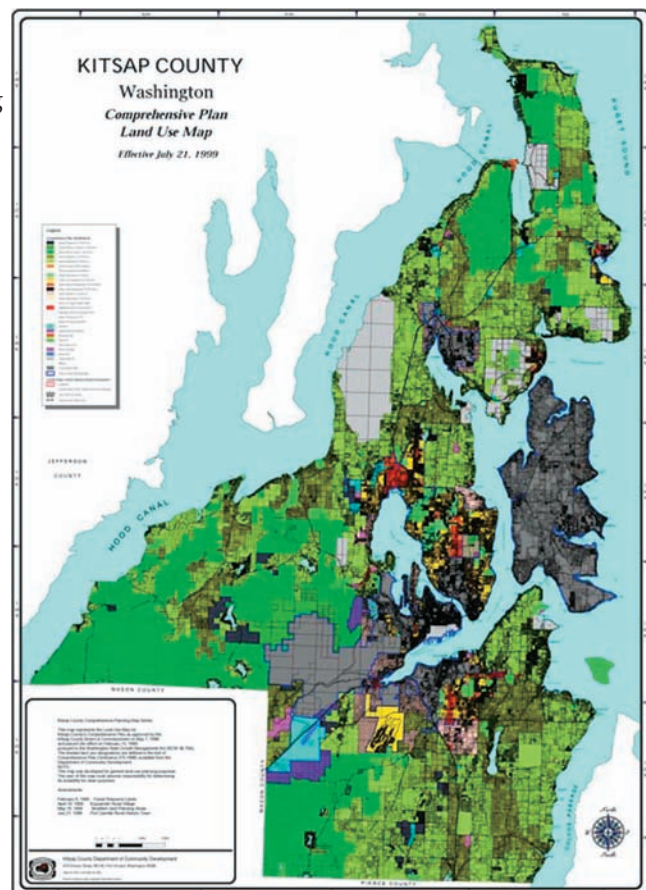
Plan Type	County
Plan Cluster	Strong-Accommodating
Goal Emphasis	Physical Containment
Policies:	
Housing	■
Land Supply	○
Open Space	■
Infrastructure	■
Fact Basis	■
Intergovernmental Coordination	●

#### Jurisdiction Characteristics:

1990 Population	189,731
1990–2000 Growth Rate	22%
1990 Percentage Black	3%
1989 Per Capita Income (\$s)	14,311
1990 Persons Per Square Mile	479

#### Legend:

- Strong    ■ Moderate    ○ Weak



to meet the objectives of the state's Growth Management Act. The basis for noncompliance was the extent of the defined urban growth areas, which were deemed too large to effectively contain urban expansion. Thus, in Kitsap County, as in other Washington counties, a web of intergovernmental coordination provides the necessary checks and balances to ensure that plans affecting the spatial pattern of development are consistent both within and across jurisdictional lines.

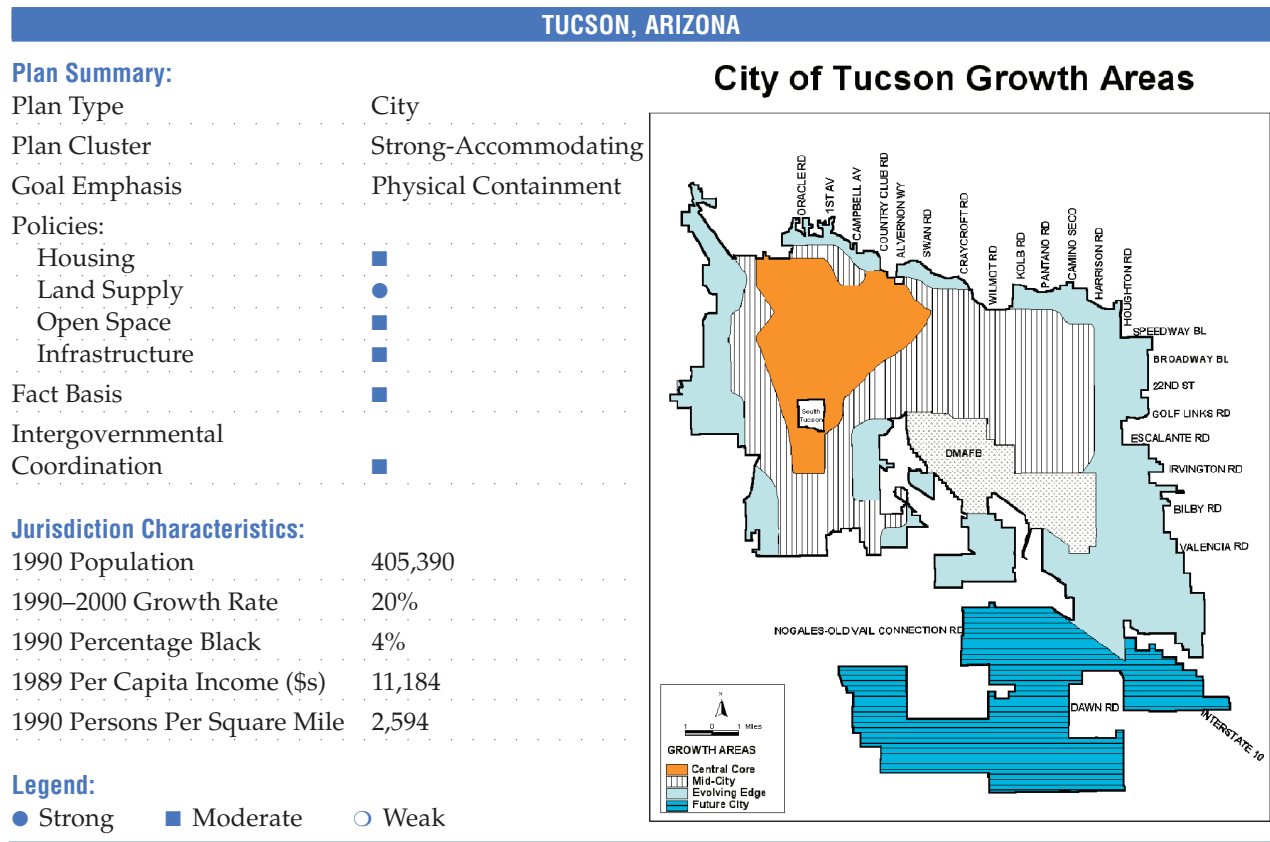
In an ongoing effort to resolve disputes between the county and the cities regarding the establishment and modification of urban growth areas, Kitsap County's latest comprehensive plan identifies several joint planning areas that lie within the unincorporated areas adjacent to local municipalities. These areas may include land that either is currently within an existing urban growth area or is designated for future inclusion in such an area. The city and county engage in a coordinated planning effort in these areas to resolve multijurisdictional land-use and capital facility siting issues. Annexations by the cities cannot occur unless interlocal agreements pertaining to the joint planning areas have been signed and all local comprehensive plans have been modified to reflect the content of the agreements.

Tucson, Arizona, adopted its general plan in 2001 in response to the state's smart growth legislation, which requires communities to designate growth areas, establish strategies that ensure that new growth pays its fair share of the cost of new infrastructure, and adopt policies that preserve open space and mitigate the negative environmental impacts of development.

Like the Palm Beach County plan, Tucson's general plan divides the city into four growth areas that each have unique planning issues. Within each area, policies are tailored to specific urban development needs. The central core growth area contains the pre-World War II historic center of the city. Within this area, a mix of transportation, land use, and urban design policies are in place to facilitate downtown development. The mid-city growth area is designed to promote the revitalization of vacant commercial shopping centers and first-generation suburban neighborhoods. The evolving edge growth area contains more recent suburban residential and industrial-park development and includes many larger tracts suitable for new development. Within this area, the city adopts a series of policies designed to ensure that new development is compact and is provided concurrent with planned public facilities. The future city growth area lies to the south of the city and contains more than 50 square miles of undeveloped land. Much of this land is owned and managed by a state land trust. Developable land within the future city growth area is gradually released from the trust as community infrastructure and services become available.

Land outside Tucson is managed by Pima County. The county's Sonora Desert Conservation Plan is an accommodating plan that is somewhat weaker in content than that adopted by Tucson, primarily due to its lack of emphasis on overall housing needs. The state land trust mentioned above manages a large proportion of eastern Pima County. Planners calculate that this land plus a small number of privately owned ranches comprise an area of 1.6 million acres of potentially developable land beyond Tucson's municipal boundaries.

One proposed strategy for managing urban sprawl beyond Tucson is to maintain a boundary of publicly owned land that is currently leased for grazing purposes. Based on a comprehensive assessment of rural land preservation options in the county, planners found that by simply maintaining these lands for ranching purposes, a "grazing lease boundary" could be established to define the edge of the expanding Tucson urban area. Interestingly, this strategy was devised despite the fact that, in 2000, voters



defeated a state proposal to preserve land in a similar manner by extending grazing leases and allowing 270,000 acres of state trust land to be preserved as permanent open space.

#### SUMMARY

Growth management plans with a strong-accommodating urban containment framework are the most prevalent form of urban containment in our survey. These metropolitan or sub-metropolitan areas have decided to preserve open spaces while also accommodating development needs. This approach would seem to be the best compromise between interests wishing to contain urban sprawl by preserving open spaces and those wishing to meet needs associated with growth.

The strong-accommodating framework is typically found in areas where open spaces have important value for agriculture, scenery, and environmental protection (such as air cleansing and flood control). It also tends to be used in states with strong planning traditions, and especially in states with planning laws that require both open space preservation and accommodation of projected development needs within clearly defined urban areas. Florida, Hawaii, Oregon, and Washington are the most prominent examples.

*Growth management plans with a strong-accommodating urban containment framework are the most prevalent form of urban containment in our survey.*





CHAPTER 7  
**Findings and Implications  
for Planning**

In this final chapter we review our major research findings and comment on what our research may mean for the future of planning practice in the United States. One thing is certain: no one urban containment framework is best for all situations.

## SUMMARY AND FINDINGS

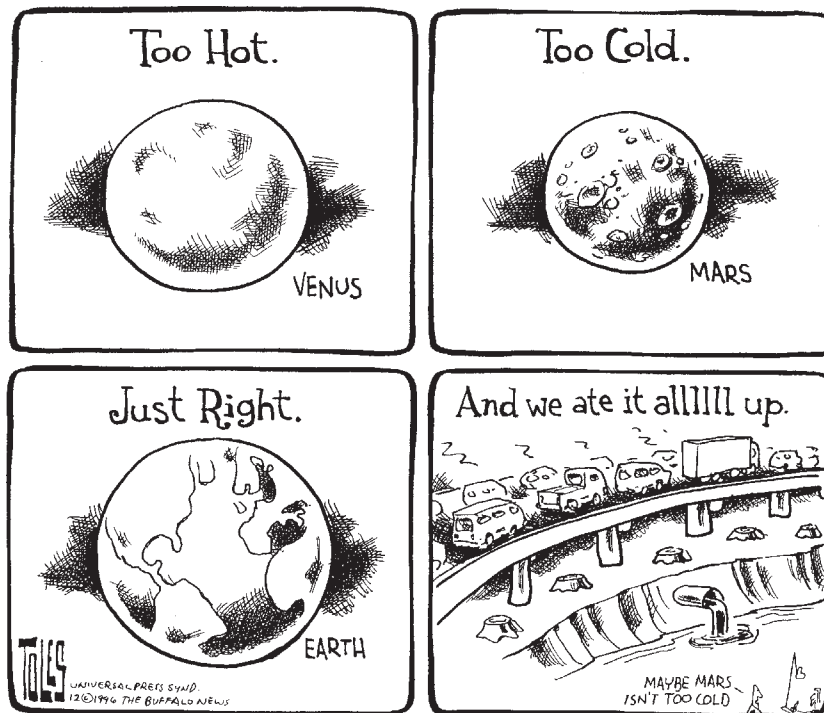
From its modest beginnings in the 1950s, urban containment has steadily gained momentum as a framework to guide growth management planning and implementation. Although we collected and evaluated 131 urban containment plans for this PAS Report, we know many more exist. Whether and the extent to which urban containment improves quality of life will be the subject of future research. But that it is here to stay is indisputable. What is also indisputable is that urban containment will come in various types. In this report, we have identified four major types of containment:

1. Many growth management plans are composed of weak containment measures, but they adopt restrictive policies toward accommodating growth. They are found mostly in California, Colorado, and Maryland but are also present in other states. We have called this approach the *weak-restrictive* framework.
2. Some growth management plans have strong containment but do not place a high priority on meeting regional development needs. Boulder, Colorado, may be the best-known example, but others, mostly in California, also take this approach. We have called this approach the *strong-restrictive* framework.
3. Other growth management plans employ weak urban containment measures, principally through lax management of rural development within the county or region. But these plans nonetheless attempt to accommodate development pressures. The best-known example of this framework is in the Twin Cities of Minneapolis-St. Paul, but numerous other examples also exist. Indeed, this type of containment exists in more states than any other. We have called this approach the *weak-accommodating* framework.
4. Some growth management plans contain development through spatial growth limits combined with aggressive open space preservation. These plans also meet projected growth needs to accommodate development pressures. While metropolitan Portland may be the best-known example of this kind of containment, it is not alone: we have identified similar plans throughout the West Coast and in Florida. We have called this approach the *strong-accommodating* framework.

*The urban containment plans we have analyzed are tremendously diverse.*

The urban containment plans we have analyzed are tremendously diverse. We realize, therefore, that to some extent it is too simplistic to group all flavors of containment into just four categories. Still, these categories help to characterize major differences between groups, and, more importantly, they allow for a level of systematic research into these plans' outcomes than had previously been impossible.

To classify growth management plans into these categories, we relied on a cluster analysis procedure, followed by a discriminant analysis that identified the characteristics of the plans falling within each cluster type. Our most significant finding is the strong discriminating power of state planning mandates. The requirement to plan and the requirement to prepare a local containment policy are strong discriminators across both the policy clusters and the goal clusters. The presence of a state plan requirement also increases the likelihood that a plan will be classified as having a strong urban containment framework that relies on an urban growth boundary to direct the pattern of growth. Interestingly, the goal cluster results suggest that the requirement to prepare a local urban containment policy not only increases the likelihood that the plan will include an urban growth boundary, but it also increases the likelihood that the growth boundary will be combined with measures to



accommodate growth. In other words, local containment policies adopted without state oversight will tend to be more restrictive than those adopted under a statewide containment regime. This finding is consistent with those of Dawkins and Nelson (2003), who find that local governments in states with strong growth management programs tend to be more successful at accommodating larger shares of a region's new residential growth.

Our second significant finding is that intergovernmental coordination matters. In our analysis, the coefficients for the intergovernmental coordination scores suggest that having a strong intergovernmental coordination program in place increases the likelihood that a local government's plans will fall into the most accommodating containment categories.

Taken together, therefore, our findings regarding intergovernmental agreements and state planning mandates suggest that strong regional and state constraints on local decision making reduce the likelihood that local jurisdictions will adopt exclusionary and antigrowth goals and policies.

Lewis (1996) offers an explanation for the connection between strong regional and state coordination structures and growth accommodation. He argues that the pattern of development within a metropolitan region is structured by patterns of local and regional land-use authority. If all land-use decisions are localized, it is in each local government's best interests to adopt "beggar thy neighbor" policies that maximize local political interests, even when the regional consequences of these decisions may be disastrous. For example, in a highly decentralized region, an unwanted land use such as high-density affordable housing may be excluded entirely from individual jurisdictions, despite the damaging regional consequences that would occur if all local governments adopted this same strategy. This problem is the classic "prisoners' dilemma" discussed by game theorists (For a description of the prisoners' dilemma, see [www.pespmc1.vub.ac.be](http://www.pespmc1.vub.ac.be).)

Game theorists also recognize that it is possible to overcome the prisoners' dilemma through the creation of an appropriate mix of incentives and disincentives. Creating this mix is the responsibility of intergovernmental agreements and state planning requirements. By bringing regional and state

interests to the local political table, intergovernmental structures increase the local political benefits of cooperating on state and regional issues. According to Lewis (1996, 34), in regions with coordinated land-use decision-making structures, a different scheme of preference aggregation, internal to a single political system, is at work. Localized opposition to certain land uses may be overwhelmed by a more widespread, if less intense, preference for other goals in the rest of the city: economic vitality, for example, or regional transportation mobility, or an equalization of living conditions. Such regional issues as job creation and transportation problems will now have a political outlet.

Our third significant finding is that plan types vary markedly across different regions in the United States. Plans in the Midwest, for example, tend to be urban infrastructure-based plans without the strong urban growth boundaries or strong conservation policies found more often in other parts of the country, especially in the West.

Finally, we note that high population density increases the likelihood that local governments will adopt more restrictive planning measures, and that restrictive plans are more prevalent among locales that have recently experienced high population growth. Both of these findings were largely expected. Communities that face significant growth challenges are more likely to take measures to curb future growth. But we have also found that proper planning and data analysis often curb the temptation to adopt exclusionary policies. We deduce that a plan's fact basis has a significant impact on the type of plan adopted. As one might expect, a strong initial fact-gathering phase increases the likelihood the plan will be designed to accommodate rather than restrict growth.

#### IMPLICATIONS FOR PLANNING

Increasingly, "business-as-usual" does not appear to be a viable long-term option to guide development. More, not fewer, metropolitan areas will see some form of containment in the coming decades. We have found more than 100 significant urban containment plans in metropolitan areas; given current rates of growth and development, that number may double to include nearly half the metropolitan areas in the United States—within the next generation.

Assuming the choice is not between urban containment and business-as-usual but between different containment frameworks, which should a jurisdiction pursue? We can say confidently that it depends. We have emphasized in this report that no one type of urban containment fits all situations. Likewise, local planners should resist the temptation to pick what they see as the "best" of the four frameworks when, in fact, a hybrid framework may be most effective in their jurisdiction. In Chapter 6, we identify the strong-accommodating framework as the best compromise between those who want to preserve open space and those who want to accommodate growth. While a compromise between these two interests should be the goal of any containment program, local conditions may make adoption of a strong-accommodating plan impossible. We have noted, for example, that Petaluma's urban containment plan is strong-restrictive, meaning that it preserves open spaces outside the urban area but does not necessarily strive to accommodate regional development needs within the urban area. In the absence of regional growth management leadership but given growth pressures, Petaluma has decided to shape its urban form mostly on its own, albeit with some coordination with Sonoma County. A strong-accommodating framework would have been inappropriate for the city, therefore, because of an important local condition: the lack of regional growth management coordination. A strong-restrictive plan, while perhaps not the "best," is the most appropriate

*Assuming the choice is not between urban containment and business-as-usual but between different containment frameworks, which should a jurisdiction pursue? We can say confidently that it depends.*

**TABLE 11**  
**URBAN CONTAINMENT FRAMEWORK**  
**BY GROWTH MANAGEMENT ENVIRONMENT**

Containment Type	Desire to balance open spaces with growth pressures and to shape metropolitan urban form	No regional strategy; self-determined urban form	Limited open space protection; weak planning statutes; minimize facility costs	Inward-focused growth management strategy; unclear ultimate urban form
Strong-Accommodating	X			
Strong-Restrictive		X		
Weak-Accommodating			X	
Weak-Restrictive				X

and thus the most effective approach to shaping the metropolitan urban form of Petaluma.

When choosing a containment framework, therefore, planners should always take as their first priority the conditions and needs—the environment, in other words—of their communities. Table 11 illustrates our urban containment typology in the context of growth management environments.

### THE CHALLENGE AHEAD

What is the magnitude of growth now facing planners? The first generation of the twenty-first century will challenge planners perhaps as no other before (Nelson 2005). The U.S. population is projected to reach 375 million by 2030, which exceeds the population in 2000 by a third. These 375 million people will live in about 154 million housing units, almost 40 million more than in 2000. Twenty million more units will also replace currently existing housing, which means nearly 60 million new housing units will be built between 2000 and 2030.

Proportionately more growth will be seen in employment and the space needed to support it. There will be nearly 194 million jobs in 2030, 50 percent more than in 2000. Those jobs will require 55 billion more square feet of nonresidential space than existed in 2000. Including the nearly 45 billion square feet to be replaced, about 100 billion square feet of nonresidential space will need to be constructed between 2000 and 2030.

To accommodate growth to 2030, the United States will construct 50 percent more residential units and 90 percent more nonresidential space than existed in 2000. Most of this new growth will occur in the South and West, but all regions will be affected. Put differently, half of all development extant nationally in 2030 will have been built since 2000. In the South and West, that figure will approach two-thirds or more in rapidly growing metropolitan areas.

Nationally, we may see \$20 trillion or more in private development and several more trillion dollars in public investment over the next generation. If these projections hold, more urban development may be seen during the first three decades of the twenty-first century than during any other comparable period of the nation's history.

There is no better time than now to begin to shape the future of America's built environment. Urban containment holds great promise as an effective, efficient framework to guide growth management plans and thereby guide future development in a manner consistent with smart growth principles.

*There is no better time than now to begin to shape the future of America's built environment.*



## APPENDIX A

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## Appendix B. Containment Framework Summary

CONTAINMENT FRAMEWORK SUMMARY						
Jurisdiction	Plan Type	Framework Cluster	Goal Emphasis	Policy Strength	Fact Basis	Intgov. Coord.
Adams Co., CO	□	○	◇	▸	▸	●
Alachua Co., FL	□	●	◆	▸	▸	●
Alameda Co., CA	□	●	◇	●	●	●
Albuquerque-Bernalillo Co., NM	■	○	◇	○	○	▸
Anchorage, AK	□	●	◆	▸	▸	○
Aspen, CO	□	○	◇	○	○	○
Austin, TX	□	○	◇	○	○	○
Baltimore Co., MD	■	○	◇	▸	○	▸
Barnstable Co., MA	■	○	◇	▸	▸	○
Bellingham, WA	□	●	◇	▸	▸	●
Bend, OR	□	●	◇	▸	▸	▸
Benton Co., WA	□	●	◇	○	●	▸
Bismarck, ND	□	○	◇	○	○	○
Bloomington, IN	□	○	◇	○	▸	▸
Boulder, CO	□	○	◇	▸	▸	●
Boulder Co., CO	□	○	◇	○	○	●
Bozeman, MT	□	○	◇	○	▸	○
Brevard Co., FL	□	○	◇	▸	○	▸
Broward Co., FL	□	●	◇	●	▸	▸
Bucks Co., PA	□	●	◇	○	▸	○
Calvert Co., MD	□	○	◇	▸	▸	▸
Carroll Co., MD	□	○	◇	○	▸	▸
Charleston, SC	□	●	◇	○	▸	●
Charlotte-Mecklenberg Co., NC	■	●	◆	○	○	▸
Chico, CA	□	○	◇	●	▸	●

Legend:	□ City Plan	○ Weak Restrictive	◇ Open Space	○ Weak
	□ County Plan	○ Strong Restrictive	◇ Physical Containment	▸ Moderate
	■ Regional Plan	● Weak Accommodating	◆ Dev. Accom.	● Strong
		● Strong Accommodating		

**CONTAINMENT FRAMEWORK SUMMARY**

Jurisdiction	Plan Type	Framework Cluster	Goal Emphasis	Policy Strength	Fact Basis	Intgov. Coord.
Clackamas Co., OR	□	●	◇	●	▸	▸
Clark Co., WA	□	●	◇	▸	▸	●
Clarksville, TN	□	●	◇	○	▸	●
Collier Co., FL	□	●	◆	▸	▸	▸
Contra Costa Co., CA	□	○	◇	●	▸	●
Cookeville, TN	□	●	◆	○	▸	●
Corvallis, OR	□	●	◇	▸	▸	●
Dane-Madison, WI	■	●	◆	○	●	●
Davis, CA	□	○	◇	▸	○	▸
Delaware Valley, PA	■	●	◆	○	●	○
Denver, CO	□	○	◇	○	○	○
Denver Region, CO	■	●	◇	○	▸	○
Deschutes Co., OR	□	●	◇	▸	▸	●
Dorchester Co., MD	□	●	◆	○	○	▸
Douglas Co., CO	□	●	◇	▸	▸	●
Eau Claire, WI	□	○	◇	○	▸	○
El Dorado Co., CA	□	●	◇	▸	○	●
Fayetteville, NC	□	●	◇	○	▸	▸
Flagstaff, AZ	□	●	◇	▸	●	●
Fort Collins, CO	□	●	◇	▸	○	●
Frederick Co., MD	□	○	◇	▸	▸	●
Greely, CO	□	○	◇	○	▸	○
Green Bay, WI	□	○	◇	○	○	●
Honolulu, HI	■	○	◇	○	○	●
Howard Co., MD	□	●	◇	▸	▸	▸
Humboldt Co., CO	□	○	◇	▸	○	○
Iowa City, IA	□	●	◇	○	○	●
Jackson Co., OR	■	●	◇	○	▸	▸
Jacksonville, FL	□	●	◆	●	▸	●

Legend:

- City Plan
- Weak Restrictive
- Moderate
- Regional Plan
- Weak Accommodating
- Strong Accommodating
- Strong Restrictive
- ◇ Open Space
- ◇ Physical Containment
- ◆ Dev. Accom.
- Weak
- Strong

CONTAINMENT FRAMEWORK SUMMARY						
Jurisdiction	Plan Type	Framework Cluster	Goal Emphasis	Policy Strength	Fact Basis	Intgov. Coord.
Kane Co., IL	■	○	◇	○	○	▸
Kent Co., DE	□	○	◆	○	○	▸
King Co., WA	■	●	◇	▸	○	●
Kitsap Co., WA	□	●	◇	▸	▸	●
Lancaster Co., PA	■	○	◇	○	▸	○
Larimer Co., CO	□	○	◇	○	○	●
Lee Co., FL	■	●	◆	●	▸	●
Lexington-Fayette Co., KY	■	○	◆	▸	▸	▸
Lincoln, NE	□	○	◇	▸	▸	●
Los Gatos, CA	□	○	◇	▸	○	▸
Loudoun Co., VA	□	●	◇	●	▸	●
Manatee Co., FL	□	●	◇	▸	○	▸
Marin Co., CA	□	●	◇	●	●	●
Marion Co., FL	□	●	◆	▸	○	○
Martin Co., FL	□	○	◇	▸	▸	▸
Medford, OR	□	○	◇	▸	▸	●
Merced Co., CA	□	○	◇	▸	▸	▸
Mesa, AZ	□	○	◇	●	▸	▸
Miami-Dade Co., FL	□	●	◇	▸	▸	●
Montgomery Co., MD	■	●	◇	●	●	▸
Morgan Hill, CA	□	○	◇	▸	○	●
Napa Co., CA	□	○	◇	●	▸	○
Nevada Co., CA	□	○	◇	●	○	●
Novato, CA	□	○	◇	▸	▸	●
Okaloosa Co., FL	□	○	◇	▸	○	▸
Olmsted Co., MN	□	○	◇	○	▸	▸
Olympia, WA	□	●	◇	▸	●	●
Orlando, FL	□	●	◆	●	○	▸
Palm Beach Co., FL	■	●	◇	●	○	▸

Legend:	□ City Plan	○ Weak Restrictive		
	□ County Plan	○ Strong Restrictive	◇ Open Space	○ Weak
	■ Regional Plan	● Weak Accommodating	◇ Physical Containment	▸ Moderate
		● Strong Accommodating	◆ Dev. Accom.	● Strong

**CONTAINMENT FRAMEWORK SUMMARY**

Jurisdiction	Plan Type	Framework Cluster	Goal Emphasis	Policy Strength	Fact Basis	Intgov. Coord.
Petaluma, CA	□	○	◇	●	●	○
Pierce Co., WA	▣	●	◇	●	▸	●
Pima Co., AZ	▣	●	◆	○	▸	○
Pinelands, NJ	■	○	◇	○	○	○
Polk Co., OR	▣	●	◇	○	○	●
Portland Region, OR	■	●	◇	▸	●	●
Prince George's Co., MD	▣	○	◇	○	○	○
Prince William Co., VA	▣	○	◇	○	○	○
Queen Anne's Co., MD	▣	●	◇	▸	▸	●
Riverside Co., CA	■	●	◆	▸	●	▸
Rohnert Park, CA	□	○	◇	●	▸	▸
Sacramento, CA	□	●	◆	▸	●	●
Sacramento Co., CA	▣	●	◆	●	●	●
Salem, OR	■	●	◇	○	○	●
San Bernardino Co., CA	▣	●	◇	▸	▸	▸
San Diego, CA	□	○	◇	○	▸	○
San Diego Co., CA	■	●	◆	●	▸	●
San Luis Obispo, CA	□	○	◇	●	○	▸
San Mateo Co., CA	▣	○	◇	▸	▸	▸
Santa Clara Co., CA	▣	●	◇	▸	▸	●
Santa Cruz Co., CA	▣	○	◇	●	▸	●
Santa Rosa, CA	□	○	◇	●	▸	▸
Sarasota Co., FL	▣	●	◆	▸	▸	▸
Seminole Co., FL	▣	●	◇	●	▸	▸
Sioux Falls, SD	□	●	◇	○	▸	▸
Snohomish Co., WA	▣	●	◇	●	○	●
Sonoma Co., CA	▣	○	◇	●	○	●
Spokane, WA	▣	●	◆	○	○	●

Legend:	□ City Plan	○ Weak Restrictive		
	▣ County Plan	○ Strong Restrictive	◇ Open Space	○ Weak
	■ Regional Plan	● Weak Accommodating	◇ Physical Containment	▸ Moderate
		● Strong Accommodating	◆ Dev. Accom.	● Strong

**CONTAINMENT FRAMEWORK SUMMARY**

Jurisdiction	Plan Type	Framework Cluster	Goal Emphasis	Policy Strength	Fact Basis	Intgov. Coord.
St. Lucie Co., FL	□	●	◆	▸	▸	▸
Sutter Co., CA	□	●	◆	▸	●	▸
Talbot Co., MD	□	○	◇	○	○	▸
Tallahassee, FL	■	●	◇	▸	○	●
Tampa, FL	□	●	◆	▸	▸	▸
Thurston Co., WA	□	●	◇	▸	▸	●
Tucson, AZ	□	●	◇	▸	▸	▸
Tulare Co., CA	□	○	◇	○	▸	●
Twin Cities, MN	■	○	◆	▸	●	▸
Ventura Co., CA	□	○	◇	▸	▸	▸
Virginia Beach, VA	□	○	◇	▸	▸	○
Whatcom Co., WA	□	●	◇	●	▸	●
Wicomico Co., MD	□	○	◇	▸	▸	▸
Wichita, KS	■	○	◆	○	○	●
Wilmington, NC	■	○	◆	○	○	▸
Windsor, CA	□	○	◇	●	○	●
Worcester Co., MD	□	○	◇	○	○	○
Yakima Co., WA	□	●	◇	▸	▸	●
Yamhill Co., OR	□	○	◇	○	○	●

Legend:	□ City Plan	○ Weak Restrictive		
	□ County Plan	○ Strong Restrictive	◇ Open Space	○ Weak
	■ Regional Plan	○ Weak Accommodating	◇ Physical Containment	▸ Moderate
		● Strong Accommodating	◆ Dev. Accom.	● Strong

Note: "Regional" means multiple jurisdictions either within or between counties.



# Appendix C. Summary of Plans Reviewed

## PART 1. GOAL FREQUENCIES

Goal Category	Goals / Objectives	Objective Score	Strong-accommodating		% Within Goal Category		Strong-restrictive		% Within Goal Category		Weak-accommodating		% Within Goal Category		Weak-restrictive		% Within Goal Category		
			Cluster Frequency	Cluster Frequency	by Type	by Type	Cluster Frequency	Cluster Frequency	by Type	by Type	Cluster Frequency	Cluster Frequency	by Type	by Type	Cluster Frequency	Cluster Frequency	by Type	by Type	
Physical Containment	Goals	Not Mentioned	0	0	0%	0%	1	1	4%	4%	0	0	0%	0%	0	0	0%	0%	
		Limitations on Development	1	1	2%	2%	2	2	8%	8%	0	0	0%	0%	2	2	10%	10%	
		Timing and Phasing of Development	8	8	16%	16%	3	3	12%	12%	5	5	17%	17%	5	5	24%	24%	
		Urban Service Boundary	11	11	22%	22%	3	3	12%	12%	14	14	47%	47%	5	5	24%	24%	
		Urban Growth Boundary	30	30	60%	60%	17	17	65%	65%	11	11	37%	37%	9	9	43%	43%	
	Objectives	Not Mentioned	4	4	8%	8%	2	2	8%	8%	7	7	23%	23%	3	3	14%	14%	
		One nonmeasurable objective	29	29	58%	58%	15	15	58%	58%	16	16	53%	53%	9	9	43%	43%	
		One measurable objective	17	17	34%	34%	9	9	35%	35%	7	7	23%	23%	9	9	43%	43%	
	Open Space	Goals	Not Mentioned	5	5	10%	10%	2	2	8%	8%	2	2	7%	7%	1	1	5%	5%
			Small-lot Zoning	17	17	34%	34%	4	4	15%	15%	8	8	27%	27%	5	5	24%	24%
		Large-Lot Zoning	8	8	16%	16%	5	5	19%	19%	3	3	10%	10%	3	3	14%	14%	
		Open Space Zoning	10	10	20%	20%	8	8	31%	31%	11	11	37%	37%	5	5	24%	24%	
		Development Right Acquisition	6	6	12%	12%	5	5	19%	19%	5	5	17%	17%	3	3	14%	14%	
		Land Acquisition	4	4	8%	8%	2	2	8%	8%	1	1	3%	3%	4	4	19%	19%	
Objectives		Not Mentioned	9	9	18%	18%	3	3	12%	12%	9	9	30%	30%	4	4	19%	19%	
		One nonmeasurable objective	28	28	56%	56%	15	15	58%	58%	15	15	50%	50%	12	12	57%	57%	
		One measurable objective	13	13	26%	26%	8	8	31%	31%	6	6	20%	20%	5	5	24%	24%	
Goals		Not Mentioned	0	0	0%	0%	9	9	35%	35%	0	0	0%	0%	9	9	43%	43%	
Development Accommodation		Limitation on growth accommodated	0	0	0%	0%	14	14	54%	54%	0	0	0%	0%	12	12	57%	57%	

**PART 1. GOAL FREQUENCIES (CONTINUED)**

Goal Category	Goals / Objectives	Goal / Objective Score	Strong-accommodating		% Within Goal Category by Type		Strong-restrictive		% Within Goal Category by Type		Weak-accommodating		% Within Goal Category by Type		Weak-restrictive		% Within Goal Category by Type	
			Cluster	Frequency	Cluster	Frequency	Cluster	Frequency	Cluster	Frequency	Cluster	Frequency	Cluster	Frequency	Cluster	Frequency	Cluster	Frequency
		Accommodate share of projected growth	0	0	0%	0	3	12%	0	0%	0	0	0%	0	0	0%	0	0%
		Accommodate all projected growth	50	50	100%	50	0	0%	30	100%	30	30	100%	0	0	0%	0	0%
Objectives		Not Mentioned	6	6	12%	6	9	35%	13	43%	13	13	43%	9	9	43%	9	43%
		One nonmeasurable objective	17	17	34%	17	4	15%	8	27%	8	8	27%	4	4	19%	4	19%
		One measurable objective	27	27	54%	27	13	50%	9	30%	9	9	30%	8	8	38%	8	38%

## PART 2. POLICY FREQUENCIES

Policy	Policy Score	Strong- accommodating		Strong- restrictive		Weak- accommodating		Weak- restrictive	
		Cluster Frequency	% Within Policy By Type	Cluster Frequency	% Within Policy By Type	Cluster Frequency	% Within Policy By Type	Cluster Frequency	% Within Policy By Type
W/S Limitation	Not Mentioned	4	8%	2	8%	1	3%	4	19%
	Mentioned, No Detail Given	3	6%	2	8%	0	0%	3	14%
	Mentioned in Detail, Not Required	3	6%	3	12%	8	27%	5	24%
	In Place or Required to be in Place	40	80%	19	73%	21	70%	9	43%
Small-lot Zoning	Not Mentioned	15	30%	13	50%	14	47%	11	52%
	Mentioned, No Detail Given	1	2%	0	0%	0	0%	2	10%
	Mentioned in Detail, Not Required	0	0%	0	0%	2	7%	0	0%
	In Place or Required to be in Place	34	68%	13	50%	14	47%	8	38%
Large-lot Zoning	Not Mentioned	21	42%	10	38%	15	50%	10	48%
	Mentioned, No Detail Given	0	0%	0	0%	1	3%	4	19%
	Mentioned in Detail, Not Required	0	0%	0	0%	0	0%	2	10%
	In Place or Required to be in Place	29	58%	16	62%	14	47%	5	24%
Open Space Zoning	Not Mentioned	18	36%	7	27%	10	33%	10	48%
	Mentioned, No Detail Given	0	0%	2	8%	0	0%	2	10%
	Mentioned in Detail, Not Required	2	4%	0	0%	6	20%	2	10%
	In Place or Required to be in Place	30	60%	17	65%	14	47%	7	33%
Transfer of Development Rights (TDR)	Not Mentioned	8	16%	11	42%	17	57%	10	48%
	Mentioned, No Detail Given	11	22%	2	8%	5	17%	3	14%
	Mentioned in Detail, Not Required	6	12%	3	12%	6	20%	2	10%
	In Place or Required to be in Place	25	50%	10	38%	2	7%	6	29%
Inclusionary Zoning	Not Mentioned	24	48%	11	42%	26	87%	16	76%
	Mentioned, No Detail Given	2	4%	2	8%	1	3%	4	19%
	Mentioned in Detail, Not Required	6	12%	1	4%	1	3%	0	0%
	In Place or Required to be in Place	18	36%	12	46%	2	7%	1	5%

**PART 2. POLICY FREQUENCIES (CONTINUED)**

Policy	Policy Score	Strong-accommodating		Strong-restrictive		Weak-accommodating		Weak-restrictive	
		Cluster Frequency	% Within Policy By Type	Cluster Frequency	% Within Policy By Type	Cluster Frequency	% Within Policy By Type	Cluster Frequency	% Within Policy By Type
Accessory Housing Unit Regulations	Not Mentioned	12	24%	7	27%	23	77%	19	90%
	Mentioned, No Detail Given	3	6%	4	15%	2	7%	2	10%
	Mentioned in Detail, Not Required	1	2%	1	4%	3	10%	0	0%
	In Place or Required to be in Place	34	68%	14	54%	2	7%	0	0%
Mixed-use Zoning	Not Mentioned	0	0%	1	4%	3	10%	6	29%
	Mentioned, No Detail Given	4	8%	4	15%	3	10%	5	24%
	Mentioned in Detail, Not Required	3	6%	0	0%	8	27%	2	10%
	In Place or Required to be in Place	43	86%	21	81%	16	53%	8	38%
Minimum-density Zoning	Not Mentioned	27	54%	20	77%	21	70%	17	81%
	Mentioned, No Detail Given	1	2%	0	0%	0	0%	0	0%
	Mentioned in Detail, Not Required	3	6%	1	4%	4	13%	3	14%
	In Place or Required to be in Place	19	38%	5	19%	5	17%	1	5%
Transit-Oriented Development	Not Mentioned	8	16%	10	38%	15	50%	12	57%
	Mentioned, No Detail Given	6	12%	5	19%	6	20%	2	10%
	Mentioned in Detail, Not Required	6	12%	3	12%	3	10%	3	14%
	In Place or Required to be in Place	30	60%	8	31%	6	20%	4	19%
Density Bonus for Affordable Housing	Not Mentioned	14	28%	5	19%	20	67%	16	76%
	Mentioned, No Detail Given	7	14%	3	12%	7	23%	4	19%
	Mentioned in Detail, Not Required	3	6%	2	8%	2	7%	1	5%
	In Place or Required to be in Place	26	52%	16	62%	1	3%	0	0%

**PART 2. POLICY FREQUENCIES**

Policy	Policy Score	Strong- accommodating		Strong- restrictive		Weak- accommodating		Weak- restrictive	
		Cluster Frequency	% Within Policy By Type	Cluster Frequency	% Within Policy By Type	Cluster Frequency	% Within Policy By Type	Cluster Frequency	% Within Policy By Type
Adequate Public Facilities Ordinance (APFO)	Not Mentioned	6	12%	8	31%	19	63%	11	52%
	Mentioned, No Detail Given	0	0%	1	4%	1	3%	2	10%
	Mentioned in Detail, Not Required	7	14%	1	4%	5	17%	3	14%
	In Place or Required to be in Place	37	74%	16	62%	5	17%	5	24%
Capital Improvements Plan	Not Mentioned	1	2%	1	4%	8	27%	5	24%
	Mentioned, No Detail Given	1	2%	1	4%	1	3%	2	10%
	Mentioned in Detail, Not Required	0	0%	0	0%	3	10%	3	14%
	In Place or Required to be in Place	48	96%	24	92%	18	60%	11	52%
Development Caps	Not Mentioned	46	92%	14	54%	29	97%	15	71%
	Mentioned, No Detail Given	2	4%	0	0%	0	0%	0	0%
	Mentioned in Detail, Not Required	0	0%	1	4%	1	3%	1	5%
	In Place or Required to be in Place	2	4%	11	42%	0	0%	5	24%
Jobs/Housing Balance	Not Mentioned	27	54%	8	31%	24	80%	15	71%
	Mentioned, No Detail Given	3	6%	4	15%	3	10%	3	14%
	Mentioned in Detail, Not Required	9	18%	2	8%	3	10%	1	5%
	In Place or Required to be in Place	11	22%	12	46%	0	0%	2	10%
Reserve Areas	Not Mentioned	24	48%	17	65%	12	40%	11	52%
	Mentioned, No Detail Given	0	0%	0	0%	0	0%	0	0%
	Mentioned in Detail, Not Required	0	0%	1	4%	1	3%	2	10%
	In Place or Required to be in Place	26	52%	8	31%	17	57%	8	38%

**PART 2. POLICY FREQUENCIES (CONTINUED)**

Policy	Policy Score	Strong- accommodating		Strong- restrictive		Weak- accommodating		Weak- restrictive	
		Cluster Frequency	% Within Policy By Type	Cluster Frequency	% Within Policy By Type	Cluster Frequency	% Within Policy By Type	Cluster Frequency	% Within Policy By Type
Intermediate Boundaries	Not Mentioned	40	80%	21	81%	25	83%	15	71%
	Mentioned, No Detail Given	0	0%	0	0%	0	0%	0	0%
	Mentioned in Detail, Not Required	0	0%	1	4%	0	0%	1	5%
	In Place or Required to be in Place	10	20%	4	15%	5	17%	5	24%
Public Investment/Land Use Coordination	Not Mentioned	0	0%	4	15%	2	7%	6	29%
	Mentioned, No Detail Given	3	6%	2	8%	4	13%	1	5%
	Mentioned in Detail, Not Required	2	4%	1	4%	8	27%	5	24%
	In Place or Required to be in Place	45	90%	19	73%	16	53%	9	43%
Affordable Housing Architectural Consistency	Not Mentioned	25	50%	14	54%	26	87%	17	81%
	Mentioned, No Detail Given	10	20%	4	15%	0	0%	1	5%
	Mentioned in Detail, Not Required	1	2%	0	0%	2	7%	3	14%
	In Place or Required to be in Place	14	28%	8	31%	2	7%	0	0%
Redevelopment Plan	Not Mentioned	22	44%	10	38%	12	40%	7	33%
	Mentioned, No Detail Given	7	14%	2	8%	6	20%	4	19%
	Mentioned in Detail, Not Required	7	14%	0	0%	6	20%	3	14%
	In Place or Required to be in Place	14	28%	14	54%	6	20%	7	33%
Regional Affordable Housing Target	Not Mentioned	28	56%	13	50%	27	90%	20	95%
	Mentioned, No Detail Given	3	6%	2	8%	1	3%	1	5%
	Mentioned in Detail, Not Required	2	4%	2	8%	2	7%	0	0%
	In Place or Required to be in Place	17	34%	9	35%	0	0%	0	0%

**PART 2. POLICY FREQUENCIES (CONTINUED)**

Policy	Policy Score	Strong- accommodating		% Within Policy		Strong- restrictive		% Within Policy		Weak- accommodating		% Within Policy		Weak- restrictive		% Within Policy	
		Cluster Frequency	Cluster Frequency	By Type	By Type	Cluster Frequency	Cluster Frequency	By Type	By Type	Cluster Frequency	Cluster Frequency	By Type	By Type	Cluster Frequency	Cluster Frequency	By Type	By Type
Clustering	Not Mentioned	4	4	8%	19%	5	8	19%	27%	6	29%						
	Mentioned, No Detail Given	3	3	6%	19%	5	7	19%	23%	5	24%						
	Mentioned in Detail, Not Required	4	4	8%	4%	1	8	4%	27%	6	29%						
	In Place or Required to be in Place	39	39	78%	58%	15	7	58%	23%	4	19%						
Mixed-Housing Zoning	Not Mentioned	5	5	10%	12%	3	7	12%	23%	9	43%						
	Mentioned, No Detail Given	4	4	8%	4%	1	11	4%	37%	7	33%						
	Mentioned in Detail, Not Required	1	1	2%	8%	2	5	8%	17%	3	14%						
	In Place or Required to be in Place	40	40	80%	77%	20	7	77%	23%	2	10%						
Affordable Housing Dispersal	Not Mentioned	25	25	50%	54%	14	24	54%	80%	11	52%						
	Mentioned, No Detail Given	3	3	6%	12%	3	0	12%	0%	5	24%						
	Mentioned in Detail, Not Required	2	2	4%	12%	3	2	12%	7%	4	19%						
	In Place or Required to be in Place	20	20	40%	23%	6	4	23%	13%	1	5%						
Conservation Easements	Not Mentioned	9	9	18%	23%	6	13	23%	43%	8	38%						
	Mentioned, No Detail Given	14	14	28%	23%	6	8	23%	27%	3	14%						
	Mentioned in Detail, Not Required	4	4	8%	8%	2	6	8%	20%	3	14%						
	In Place or Required to be in Place	23	23	46%	46%	12	3	46%	10%	7	33%						
Manufactured Housing/ Group Home Regulations	Not Mentioned	9	9	18%	12%	3	16	12%	53%	14	67%						
	Mentioned, No Detail Given	1	1	2%	8%	2	5	8%	17%	0	0%						
	Mentioned in Detail, Not Required	1	1	2%	8%	2	5	8%	17%	3	14%						
	In Place or Required to be in Place	39	39	78%	73%	19	4	73%	13%	4	19%						

**PART 2. POLICY FREQUENCIES (CONTINUED)**

Policy	Policy Score	Strong- accommodating		Strong- restrictive		Weak- accommodating		Weak- restrictive	
		Cluster Frequency	% Within Policy By Type	Cluster Frequency	% Within Policy By Type	Cluster Frequency	% Within Policy By Type	Cluster Frequency	% Within Policy By Type
Zero Lot Line Provisions	Not Mentioned	29	58%	18	69%	25	83%	15	71%
	Mentioned, No Detail Given	7	14%	4	15%	3	10%	5	24%
	Mentioned in Detail, Not Required	0	0%	0	0%	1	3%	1	5%
	In Place or Required to be in Place	14	28%	4	15%	1	3%	0	0%
Market Factor Used in Land Allocation	Not Mentioned	42	84%	24	92%	24	80%	19	90%
	Mentioned, No Detail Given	0	0%	0	0%	1	3%	2	10%
	Mentioned in Detail, Not Required	0	0%	0	0%	1	3%	0	0%
	In Place or Required to be in Place	8	16%	2	8%	4	13%	0	0%
Tiered Level of Service	Not Mentioned	28	56%	19	73%	18	60%	16	76%
	Mentioned, No Detail Given	1	2%	0	0%	1	3%	1	5%
	Mentioned in Detail, Not Required	0	0%	0	0%	1	3%	2	10%
	In Place or Required to be in Place	21	42%	7	27%	10	33%	2	10%
Jurisdiction Affordable Housing Target	Not Mentioned	29	58%	12	46%	29	97%	19	90%
	Mentioned, No Detail Given	2	4%	0	0%	0	0%	0	0%
	Mentioned in Detail, Not Required	3	6%	0	0%	1	3%	1	5%
	In Place or Required to be in Place	16	32%	14	54%	0	0%	1	5%
Conservation Lands Acquisition	Not Mentioned	6	12%	3	12%	12	40%	8	38%
	Mentioned, No Detail Given	8	16%	7	27%	6	20%	4	19%
	Mentioned in Detail, Not Required	2	4%	3	12%	7	23%	1	5%
	In Place or Required to be in Place	34	68%	13	50%	5	17%	8	38%

## PART 2. POLICY FREQUENCIES (CONTINUED)

Policy	Policy Score	Strong-accommodating		Strong-restrictive		Weak-accommodating		Weak-restrictive	
		Cluster Frequency	% Within Policy By Type	Cluster Frequency	% Within Policy By Type	Cluster Frequency	% Within Policy By Type	Cluster Frequency	% Within Policy By Type
Redevelopment Land Acquisition	Not Mentioned	41	82%	23	88%	28	93%	19	90%
	Mentioned, No Detail Given	5	10%	2	8%	1	3%	2	10%
	Mentioned in Detail, Not Required	3	6%	1	4%	0	0%	0	0%
	In Place or Required to be in Place	1	2%	0	0%	1	3%	0	0%
Affordable Housing Land Acquisition	Not Mentioned	34	68%	15	58%	26	87%	17	81%
	Mentioned, No Detail Given	6	12%	5	19%	3	10%	0	0%
	Mentioned in Detail, Not Required	5	10%	3	12%	0	0%	3	14%
	In Place or Required to be in Place	5	10%	3	12%	1	3%	1	5%
Property Tax Incentives for Conservation	Not Mentioned	19	38%	8	31%	20	67%	11	52%
	Mentioned, No Detail Given	8	16%	4	15%	4	13%	4	19%
	Mentioned in Detail, Not Required	1	2%	1	4%	2	7%	5	24%
	In Place or Required to be in Place	22	44%	13	50%	4	13%	1	5%
Impact Fees	Not Mentioned	6	12%	6	23%	17	57%	8	38%
	Mentioned, No Detail Given	2	4%	2	8%	4	13%	4	19%
	Mentioned in Detail, Not Required	5	10%	2	8%	3	10%	4	19%
	In Place or Required to be in Place	37	74%	16	62%	6	20%	5	24%
Linkage Fees	Not Mentioned	35	70%	16	62%	29	97%	20	95%
	Mentioned, No Detail Given	8	16%	1	4%	1	3%	1	5%
	Mentioned in Detail, Not Required	0	0%	3	12%	0	0%	0	0%
	In Place or Required to be in Place	7	14%	6	23%	0	0%	0	0%

**PART 2. POLICY FREQUENCIES (CONTINUED)**

Policy	Policy Score	Strong- accommodating		% Within Policy		Strong- restrictive		% Within Policy		Weak- accommodating		% Within Policy		Weak- restrictive		% Within Policy	
		Cluster Frequency	Cluster Frequency	By Type	By Type	Cluster Frequency	Cluster Frequency	By Type	By Type	Cluster Frequency	Cluster Frequency	By Type	By Type	Cluster Frequency	Cluster Frequency	By Type	By Type
Housing Trust Fund	Not Mentioned	25	14	50%	54%	14	30	100%	19	90%							
	Mentioned, No Detail Given	5	3	10%	12%	3	0	0%	1	5%							
	Mentioned in Detail, Not Required	3	1	6%	4%	1	0	0%	0	0%							
	In Place or Required to be in Place	17	8	34%	31%	8	0	0%	1	5%							
Purchase of Development Rights (PDR)	Not Mentioned	23	18	46%	69%	18	18	60%	14	67%							
	Mentioned, No Detail Given	7	3	14%	12%	3	4	13%	2	10%							
	Mentioned in Detail, Not Required	5	0	10%	0%	0	4	13%	1	5%							
	In Place or Required to be in Place	15	5	30%	19%	5	4	13%	4	19%							
Low- and Moderate- Income Housing Assistance	Not Mentioned	9	3	18%	12%	3	17	57%	11	52%							
	Mentioned, No Detail Given	8	2	16%	8%	2	6	20%	3	14%							
	Mentioned in Detail, Not Required	5	0	10%	0%	0	2	7%	2	10%							
	In Place or Required to be in Place	28	21	56%	81%	21	5	17%	5	24%							
Public Education on Planning Issues	Not Mentioned	14	7	28%	27%	7	13	43%	8	38%							
	Mentioned, No Detail Given	4	4	8%	15%	4	1	3%	4	19%							
	Mentioned in Detail, Not Required	2	1	4%	4%	1	4	13%	1	5%							
	In Place or Required to be in Place	30	14	60%	54%	14	12	40%	8	38%							
Implementation Advisory Council	Not Mentioned	20	13	40%	50%	13	15	50%	11	52%							
	Mentioned, No Detail Given	2	0	4%	0%	0	0	0%	3	14%							
	Mentioned in Detail, Not Required	1	1	2%	4%	1	2	7%	2	10%							
	In Place or Required to be in Place	27	12	54%	46%	12	13	43%	5	24%							

## PART 2. POLICY FREQUENCIES (CONTINUED)

Policy	Policy Score	Strong- accommodating		% Within Policy		Strong- restrictive		% Within Policy		Weak- accommodating		% Within Policy		Weak- restrictive		% Within Policy	
		Cluster Frequency	Frequency	By Type	By Type	Cluster Frequency	Frequency	By Type	By Type	Cluster Frequency	Frequency	By Type	By Type	Cluster Frequency	Frequency	By Type	By Type
Public Hearings	Not Mentioned		3	6%	4	15%	4	13%	4	6	29%						
	Mentioned, No Detail Given		2	4%	2	8%	2	7%	2	2	10%						
	Mentioned in Detail, Not Required		1	2%	1	4%	1	0%	0	1	5%						
	In Place or Required to be in Place		44	88%	19	73%	24	80%	12	57%							
Neighborhood Plans	Not Mentioned		21	42%	14	54%	16	53%	13	62%							
	Mentioned, No Detail Given		3	6%	1	4%	0	0%	1	5%							
	Mentioned in Detail, Not Required		1	2%	2	8%	3	10%	3	14%							
	In Place or Required to be in Place		25	50%	9	35%	11	37%	4	19%							
Community Visioning	Not Mentioned		30	60%	19	73%	20	67%	17	81%							
	Mentioned, No Detail Given		1	2%	0	0%	0	0%	1	5%							
	Mentioned in Detail, Not Required		1	2%	1	4%	3	10%	0	0%							
	In Place or Required to be in Place		18	36%	6	23%	7	23%	3	14%							
Online Plan	Not Mentioned		8	16%	0	0%	9	30%	7	33%							
	Mentioned, No Detail Given		40	80%	23	88%	20	67%	13	62%							
	Mentioned in Detail, Not Required		2	4%	0	0%	0	0%	0	0%							
	In Place or Required to be in Place		0	0%	3	12%	1	3%	1	5%							
Flexible Design Review	Not Mentioned		21	42%	10	38%	18	60%	14	67%							
	Mentioned, No Detail Given		8	16%	1	4%	3	10%	2	10%							
	Mentioned in Detail, Not Required		1	2%	0	0%	4	13%	4	19%							
	In Place or Required to be in Place		20	40%	15	58%	5	17%	1	5%							
Performance Standards	Not Mentioned		13	26%	8	31%	11	37%	8	38%							
	Mentioned, No Detail Given		2	4%	3	12%	3	10%	5	24%							
	Mentioned in Detail, Not Required		3	6%	1	4%	4	13%	2	10%							
	In Place or Required to be in Place		32	64%	14	54%	12	40%	6	29%							

**PART 2. POLICY FREQUENCIES (CONTINUED)**

Policy	Policy Score	Strong- accommodating		% Within Policy		Strong- restrictive		% Within Policy		Weak- accommodating		% Within Policy		Weak- restrictive		% Within Policy	
		Cluster Frequency	By Type	Cluster Frequency	By Type	Cluster Frequency	By Type	Cluster Frequency	By Type	Cluster Frequency	By Type	Cluster Frequency	By Type	Cluster Frequency	By Type	Cluster Frequency	By Type
Limitations on Permit Processing Time	Not Mentioned	23	46%	12	46%	23	77%	15	71%								
	Mentioned, No Detail Given	13	26%	4	15%	4	13%	5	24%								
	Mentioned in Detail, Not Required	4	8%	4	15%	2	7%	1	5%								
	In Place or Required to be in Place	10	20%	6	23%	1	3%	0	0%								
Required Preapplication Meeting	Not Mentioned	44	88%	22	85%	30	100%	17	81%								
	Mentioned, No Detail Given	4	8%	1	4%	0	0%	1	5%								
	Mentioned in Detail, Not Required	0	0%	2	8%	0	0%	0	0%								
	In Place or Required to be in Place	2	4%	1	4%	0	0%	3	14%								
One-Stop Permitting	Not Mentioned	44	88%	19	73%	29	97%	17	81%								
	Mentioned, No Detail Given	1	2%	2	8%	0	0%	2	10%								
	Mentioned in Detail, Not Required	0	0%	1	4%	0	0%	1	5%								
	In Place or Required to be in Place	5	10%	4	15%	1	3%	1	5%								
Preferential Permitting for Affordable Housing	Not Mentioned	19	38%	6	23%	28	93%	16	76%								
	Mentioned, No Detail Given	8	16%	5	19%	1	3%	3	14%								
	Mentioned in Detail, Not Required	3	6%	2	8%	0	0%	1	5%								
	In Place or Required to be in Place	20	40%	13	50%	1	3%	1	5%								
Streamlined Judicial Review	Not Mentioned	45	90%	24	92%	28	93%	21	100%								
	Mentioned, No Detail Given	1	2%	0	0%	0	0%	0	0%								
	Mentioned in Detail, Not Required	1	2%	1	4%	1	3%	0	0%								
	In Place or Required to be in Place	3	6%	1	4%	1	3%	0	0%								
Zoning / Permitting Consistency	Not Mentioned	2	4%	2	8%	9	30%	9	43%								
	Mentioned, No Detail Given	2	4%	1	4%	7	23%	3	14%								
	Mentioned in Detail, Not Required	5	10%	0	0%	4	13%	3	14%								
	In Place or Required to be in Place	41	82%	23	88%	10	33%	6	29%								





**PART 4A. INTERGOVERNMENTAL COORDINATION FREQUENCIES (INTERNAL COORDINATION)**

Coordination Issue	Coordination Score	Strong-accommodating		Strong-restrictive		Weak-accommodating		Weak-restrictive	
		Cluster Frequency	% Within Issue By Type	Cluster Frequency	% Within Issue By Type	Cluster Frequency	% Within Issue By Type	Cluster Frequency	% Within Issue By Type
Annexation	Not Mentioned	14	28%	15	58%	16	53%	14	67%
	Mentioned, No Strategy	4	8%	0	0%	3	10%	2	10%
	Information-Sharing	2	4%	0	0%	1	3%	1	5%
	Intergovernmental Agreement	22	44%	5	19%	10	33%	3	14%
	Coordination Required by State	1	2%	0	0%	0	0%	0	0%
	Multijurisdictional Planning Agency	6	12%	6	23%	0	0%	0	0%
	Consolidated city-county govt	1	2%	0	0%	0	0%	1	5%
Containment Boundary Adjustments	Extraterritorial jurisdiction	0	0%	0	0%	0	0%	0	0%
	Not Mentioned	20	40%	15	58%	14	47%	16	76%
	Mentioned, No Strategy	3	6%	1	4%	2	7%	0	0%
	Information-Sharing	0	0%	2	8%	0	0%	0	0%
	Intergovernmental Agreement	20	40%	2	8%	11	37%	4	19%
	Coordination Required by State	1	2%	0	0%	1	3%	0	0%
	Multijurisdictional Planning Agency	5	10%	6	23%	1	3%	0	0%
Public Facility Siting	Consolidated city-county govt	1	2%	0	0%	1	3%	1	5%
	Extraterritorial jurisdiction	0	0%	0	0%	0	0%	0	0%
	Not Mentioned	12	24%	14	54%	9	30%	11	52%
	Mentioned, No Strategy	4	8%	5	19%	7	23%	3	14%
	Information-Sharing	3	6%	0	0%	0	0%	0	0%
	Intergovernmental Agreement	26	52%	5	19%	11	37%	5	24%
	Coordination Required by State	0	0%	0	0%	0	0%	0	0%
Multijurisdictional Planning Agency	4	8%	2	8%	2	7%	1	5%	
Consolidated city-county govt	1	2%	0	0%	1	3%	1	5%	
Extraterritorial jurisdiction	0	0%	0	0%	0	0%	0	0%	

**PART 4A. INTERGOVERNMENTAL COORDINATION FREQUENCIES (INTERNAL COORDINATION) (CONTINUED)**

Coordination Issue	Coordination Score	Strong-accommodating		% Within Issue		Strong-restrictive		% Within Issue		Weak-accommodating		% Within Issue		Weak-restrictive		% Within Issue		
		Cluster	Frequency	By Type	By Type	Cluster	Frequency	By Type	By Type	Cluster	Frequency	By Type	By Type	Cluster	Frequency	By Type	By Type	
Plan Modifications	Not Mentioned		13	26%	65%	17	7	23%	11	52%								
	Mentioned, No Strategy		4	8%	19%	5	7	23%	1	5%								
	Information-Sharing		11	22%	8%	2	4	13%	3	14%								
	Intergovernmental Agreement		20	40%	8%	2	8	27%	4	19%								
	Coordination Required by State		1	2%	0%	0	0	0%	0	0%								
	Multijurisdictional Planning Agency		0	0%	0%	0	3	10%	1	5%								
	Consolidated city-county govt		1	2%	0%	0	1	3%	1	5%								
	Extraterritorial jurisdiction		0	0%	0%	0	0	0%	0	0%								
	Development Review	Not Mentioned		11	22%	62%	16	12	40%	10	48%							
		Mentioned, No Strategy		6	12%	8%	2	5	17%	2	10%							
Information-Sharing			10	20%	8%	2	2	7%	2	10%								
Intergovernmental Agreement			22	44%	19%	5	7	23%	5	24%								
Coordination Required by State			0	0%	0%	0	0	0%	0	0%								
Multijurisdictional Planning Agency			0	0%	4%	1	3	10%	1	5%								
Consolidated city-county govt			1	2%	0%	0	1	3%	1	5%								
Extraterritorial jurisdiction			0	0%	0%	0	0	0%	0	0%								

**PART 4B. INTERGOVERNMENTAL COORDINATION FREQUENCIES (HORIZONTAL COORDINATION)**

Annexation	Not Mentioned	42	84%	16	62%	25	83%	17	81%
	Mentioned, No Strategy	2	4%	2	8%	1	3%	1	5%
	Information-Sharing	0	0%	0	0%	1	3%	0	0%
	Intergovernmental Agreement	5	10%	1	4%	2	7%	2	10%
	Coordination Required by State	0	0%	0	0%	0	0%	0	0%

**PART 4B. INTERGOVERNMENTAL COORDINATION FREQUENCIES (HORIZONTALCOORDINATION) (CONTINUED)**

Coordination Issue	Coordination Score	Strong-accommodating		Strong-restrictive		Weak-accommodating		Weak-restrictive	
		Cluster Frequency	% Within Issue By Type	Cluster Frequency	% Within Issue By Type	Cluster Frequency	% Within Issue By Type	Cluster Frequency	% Within Issue By Type
Multijurisdictional Planning Agency		1	2%	7	27%	0	0%	1	5%
Consolidated city-county govt		0	0%	0	0%	0	0%	0	0%
Extraterritorial jurisdiction		0	0%	0	0%	1	3%	0	0%
Containment Boundary Adjustments		42	84%	15	58%	25	83%	17	81%
Mentioned, No Strategy		1	2%	2	8%	1	3%	2	10%
Information-Sharing		1	2%	0	0%	0	0%	0	0%
Intergovernmental Agreement		5	10%	4	15%	3	10%	2	10%
Coordination Required by State		0	0%	0	0%	0	0%	0	0%
Multijurisdictional Planning Agency		1	2%	5	19%	0	0%	0	0%
Consolidated city-county govt		0	0%	0	0%	0	0%	0	0%
Extraterritorial jurisdiction		0	0%	0	0%	1	3%	0	0%
Public Facility Siting		14	28%	9	35%	20	67%	14	67%
Mentioned, No Strategy		16	32%	9	35%	5	17%	3	14%
Information-Sharing		9	18%	1	4%	0	0%	3	14%
Intergovernmental Agreement		9	18%	4	15%	4	13%	1	5%
Coordination Required by State		0	0%	1	4%	0	0%	0	0%
Multijurisdictional Planning Agency		2	4%	2	8%	0	0%	0	0%
Consolidated city-county govt		0	0%	0	0%	0	0%	0	0%
Extraterritorial jurisdiction		0	0%	0	0%	1	3%	0	0%
Plan Modifications		19	38%	13	50%	20	67%	10	48%
Mentioned, No Strategy		10	20%	9	35%	5	17%	4	19%
Information-Sharing		12	24%	1	4%	3	10%	2	10%

**PART 4B. INTERGOVERNMENTAL COORDINATION FREQUENCIES (HORIZONTAL COORDINATION) (CONTINUED)**

Coordination Issue	Coordination Score	Strong-accommodating		% Within Issue		Strong-restrictive		% Within Issue		Weak-accommodating		% Within Issue		Weak-restrictive	
		Cluster	Frequency	By Type	By Type	Cluster	Frequency	By Type	By Type	Cluster	Frequency	By Type	By Type	Cluster	Frequency
			7	14%		2	8%		1	3%		5	24%		
			1	2%		1	4%		0	0%		0	0%		
			1	2%		0	0%		0	0%		0	0%		
			0	0%		0	0%		0	0%		0	0%		
			0	0%		0	0%		1	3%		0	0%		
Development Review			21	42%		15	58%		22	73%		15	71%		
			10	20%		2	8%		3	10%		2	10%		
			7	14%		4	15%		0	0%		1	5%		
			9	18%		4	15%		4	13%		3	14%		
			3	6%		1	4%		0	0%		0	0%		
			0	0%		0	0%		0	0%		0	0%		
			0	0%		0	0%		0	0%		0	0%		
			0	0%		0	0%		1	3%		0	0%		

**PART 4C. INTERGOVERNMENTAL COORDINATION FREQUENCIES (VERTICAL COORDINATION)**

Annexation			45	90%		17	65%		28	93%		19	90%		
			0	0%		0	0%		1	3%		1	5%		
			0	0%		0	0%		0	0%		0	0%		
			0	0%		0	0%		0	0%		0	0%		
			2	4%		0	0%		1	3%		0	0%		
			3	6%		9	35%		0	0%		1	5%		
			0	0%		0	0%		0	0%		0	0%		
			0	0%		0	0%		0	0%		0	0%		

## PART 4C. INTERGOVERNMENTAL COORDINATION FREQUENCIES (VERTICAL COORDINATION) (CONTINUED)

Coordination Issue	Coordination Score	Strong-accommodating		% Within Issue		Strong-restrictive		% Within Issue		Weak-accommodating		% Within Issue		Weak-restrictive		% Within Issue	
		Cluster	Frequency	By Type	By Type	Cluster	Frequency	By Type	By Type	Cluster	Frequency	By Type	By Type	Cluster	Frequency	By Type	By Type
Containment Boundary Adjustments	Not Mentioned		30	60%	50%	13	24	80%	18	86%							
	Mentioned, No Strategy		1	2%	4%	1	0	0%	1	5%							
	Information-Sharing		0	0%	0%	0	0	0%	0	0%							
	Intergovernmental Agreement		2	4%	4%	1	0	0%	1	5%							
	Coordination Required by State		17	34%	8%	2	6	20%	1	5%							
	Multijurisdictional Planning Agency		0	0%	35%	9	0	0%	0	0%							
	Consolidated city-county govt		0	0%	0%	0	0	0%	0	0%							
Public Facility Siting	Extraterritorial jurisdiction		0	0%	0%	0	0	0%	0	0%							
	Not Mentioned		13	26%	62%	16	17	57%	11	52%							
	Mentioned, No Strategy		23	46%	27%	7	9	30%	4	19%							
	Information-Sharing		4	8%	0%	0	1	3%	3	14%							
	Intergovernmental Agreement		1	2%	4%	1	0	0%	1	5%							
	Coordination Required by State		9	18%	8%	2	3	10%	2	10%							
	Multijurisdictional Planning Agency		0	0%	0%	0	0	0%	0	0%							
Plan Modifications	Consolidated city-county govt		0	0%	0%	0	0	0%	0	0%							
	Extraterritorial jurisdiction		0	0%	0%	0	0	0%	0	0%							
	Not Mentioned		8	16%	50%	13	16	53%	12	57%							
	Mentioned, No Strategy		9	18%	4%	1	4	13%	2	10%							
	Information-Sharing		1	2%	0%	0	1	3%	3	14%							
	Intergovernmental Agreement		1	2%	4%	1	0	0%	0	0%							
	Coordination Required by State		31	62%	42%	11	9	30%	3	14%							
Plan Modifications	Multijurisdictional Planning Agency		0	0%	0%	0	0	0%	1	5%							
	Consolidated city-county govt		0	0%	0%	0	0	0%	0	0%							
	Extraterritorial jurisdiction		0	0%	0%	0	0	0%	0	0%							
	Extraterritorial jurisdiction		0	0%	0%	0	0	0%	0	0%							



## Glossary of Growth Management and Urban Containment Techniques

*[Editor's Note: Terms within the description of a policy that appear in bold, italic type (e.g., **adequate public facility requirements**) appear elsewhere in this appendix. The references cited in this appendix are listed at the end of the policy description.]*

This is a list of significant growth management and urban containment techniques. It is more expansive than the list used to evaluate characteristics of urban containment plans.

\*Indicates summary provided by Dr. Robert Paterson, Dr. Susan Handy, Dr. Kara Kockelman, Dr. Chandra Bhat, Jumin Song, Jayanthi Rajamani, Juchul Jung, Kari Banta, Urvi Desai, and John Waleski under the direction of Drs. Handy and Paterson of the Center for Transportation Research at the University of Texas, Austin, for the Texas Department of Transportation (Research Report 0-4420-2).

†Indicates this technique was used to evaluate plans for urban containment characteristics.

### Accessory Housing Unit Regulations†

Accessory housing units, also known as “granny flats,” “mother-in-law suites,” or “carriage houses,” are housing units constructed on the same lot as another existing housing unit. Although accessory units are a flexible way to increase the supply of *affordable housing* and increase the diversity of *affordable housing* options, such units are often prohibited within single family residential zones. Many urban containment communities have revised these restrictions to allow accessory housing units within all urban zones. Case/Example: King County, Washington

### Adequate Public Facility (APF) Standards/Requirements\*†

APF requirements are formal mechanisms used to enforce one of the most fundamental tenets of land use planning—that development should not be permitted where it cannot be adequately accommodated by critical public facilities and services (i.e., minimum required levels of service for water, sewer, drainage, and traffic flow). From Florida to Washington State, APF standards are increasingly used to ensure that urban growth does not overburden municipal facilities and reduce current service. APF ordinances encourage *infill development*, facilitate municipal service delivery, and direct development toward facility-rich areas. Case/Example: APF Requirements of Florida. Source/Reference: NACo, JCSC, and SGN, 2001, pp. 30-31.

### Affordable Housing Architectural Consistency†

Residents often object to the provision of affordable housing within their neighborhood out of the fear that such housing will reduce property values. Although existing evidence does not support these fears, the negative perception of affordable housing as a contributor to urban blight is often a significant barrier to the implementation of many needed affordable housing projects. To reduce the potential for such fears, many communities include specific guidelines requiring consistency between new affordable housing and existing housing units within the community. Such measures include requirements for lot placement, façade materials, porch design, and yard maintenance. For this strategy to be effective, regulations should be reasonable and not significantly add to the cost of constructing affordable housing. Case/Example: City of Boulder, Colorado

### Affordable Housing Dispersal Strategies†

Many urban containment plans include provisions designed to ensure that affordable housing is evenly dispersed throughout the urban area. This type of policy serves two purposes. First, this strategy ensures that affordable housing options will be readily available within any urban neighborhood. Second, by dispersing the residential locations

of those living below the poverty line, unemployed residents are more likely to find housing near job opportunities. Case/Example: Bellingham, Washington

#### **Agricultural and Forest Programs\***

Agricultural zoning, including forestry zoning, is the most common method of resource land preservation used by local governments. Such zoning restricts land uses to farming and livestock, other kinds of open space activity, and limited home building. Hawaii and Oregon require the use of agricultural zoning by all local governments that have prime agricultural farmland. The most important element of agricultural zoning is the extent to which it restricts the intrusion of new, nonfarm uses into established agricultural areas. Four general approaches to resource-land-use zoning are: nonexclusive use zoning, voluntary agricultural districts, exclusive use zoning, and agricultural buffers. Case/Example: Agricultural zoning of Hawaii and Oregon. Source/Reference: Nelson and Duncan, 1995, pp. 51-54.

#### **Annexation\*†**

Most states authorize their municipalities to annex territory to retain some control over urban development. The political possibility of exercising this power, however, varies from state to state. Some states, such as North Carolina and Texas, require only that the city provide or commit to providing urban services in the area annexed. Other states have established elaborate annexation procedures that require affirmative votes from residents of the annexing jurisdiction, the jurisdiction losing territory, and the residents of areas to be annexed—a difficult test in many growing urban areas. Case/Example: Specific Plan in Tracy (CA). Source/Reference: Porter, 1997, pp. 71-72.

#### **Brownfield Redevelopment\***

Brownfields are abandoned, idled, or underused industrial and commercial facilities where expansion or *redevelopment* is complicated by real or perceived environmental consequences. Brownfields, like *infill* sites, have the potential to absorb significant amounts of development. Brownfields in Detroit, Chicago, Milwaukee, and Cleveland could absorb 1 to 5 years of residential development, 10 to 20 years of industrial development, or 200 to 400 years of office space (Simons, 1996). Brownfield sites are different from other urban *infill* sites because of uncertainties about environmental liability and clean-up costs. Site owners, developers, and lenders often avoid investing in brownfields because of fear of contamination and the costs associated with it. Source/Reference: U.S. EPA, 2001, pp. 38.

#### **Capital Improvement Programs (CIPs)\*†**

Capital improvement programs (CIPs) establish a schedule and funding basis for extending and improving facility systems (e.g., streets, water and sewer lines, septic systems, schools, libraries, parks, and other common facilities). If well linked, coordinated, and constantly updated, these ways of managing infrastructure can be effective. Yet many communities find that they must rely on other means to ensure that infrastructure development corresponds to other aspects of community development, especially in meeting funding requirements. Many communities use some or all of the techniques—functional plans; *adequate public facility (APF) requirements*; *exactions*, *impact fees*, and special districts for these purposes; and so on. Source/Reference: Porter, 1997, pp. 25-26 and pp. 47-49.

#### **Carrying Capacity Limitations\***

Carrying capacity is a term borrowed from the ecological sciences. Carrying capacity systems attempt to identify the upper capacity limits of the natural and built environment of a defined geographic area. The notion of carrying capacity usually focuses on natural systems. Man-made systems, however, are also characterized by capacity limitations. Critical population thresholds, roadway networks, water and wastewater systems, and even social systems such as fiscal resources or school systems can be identified that indicate when excess demand is being made on systems. Case/Example: Sanibel (FL). Source/Reference: Nelson and Duncan, 1995, pp. 95 and pp. 110-111.

#### **Cluster Development\*†**

In newly developed areas, clustering development into concentrated areas can protect natural habitat. Cluster developments are built at gross densities comparable to

conventional developments but leave more open space by reducing lot sizes. Square footage of buildings and residential and commercial capacity may remain the same, but compact clusters reduce the dimensions and geometry of individual lots and shorten road lengths. One of the main advantages of cluster development as a conversion tool is that it does not take development potential away from developers, since it changes the arrangement but not the number of units permitted on a property. It can also reduce costs for developers by requiring fewer miles of roads and water and sewer lines. Source/Reference: US EPA, 2001, pp. 39.

#### Compact Development\*

Compact metropolitan development generally means that the space needs of a population can be satisfied with less land area. Compact development can take various forms, and communities can develop more compactly by using three techniques: *infill development*, *brownfields redevelopment*, and *cluster development*. Source/Reference: US EPA, 2001, pp. 37.

#### Comprehensive Plan Consistency Requirements\*

A comprehensive plan consistency requirement ensures that all local zoning and land use decisions made by the governing body are consistent with the local comprehensive plan. Several states have included this mandate as part of state planning and zoning legislation. Source/Reference: Georgia DCA, 1998, pp. 24.

#### Comprehensive Plans\*

Comprehensive plans include “community vision,” “information and projections (an inventory of what currently exists and what growth in population and land use is expected),” “land classification and zoning,” “economic development,” “residential areas,” and “facilities and infrastructure (Local officials need to know the capacity of current infrastructure and where they anticipate locating future facilities or extensions. A comprehensive plan can assist communities in determining the appropriate timing and location for infrastructure repair and extension).” To be effective, they must be updated regularly. However, many comprehensive plans are outdated and cannot adequately guide new development, respond to growth pressures, and carry out the community vision. Case/Example: Seattle Municipal Plan, “Toward a Sustainable Seattle” (WA); Chester County Land Use Plan (PA); and Lincoln/Lancaster County Joint Comprehensive Plan (NE). Source/Reference: NACo, JCSC, and SGN, 2001, pp. 9-10.

#### Conservation Easements\*†

Conservation easements involve the transfer of development rights from a property owner to a third party, such as the Conservation Foundation. Conservation easements enable landowners to retain title to an undivided tract and use it for resource purpose. The advantage to the landowner is reducing the value of land to its inherent value for resource activities. For many landowners, this enables them to continue living on their land without facing higher property taxes. It also gives them the altruistic opportunity to preserve resource lands as open space in perpetuity. Local government can play a role in facilitating conservation easements by putting third parties active in acquiring them in contact with potentially receptive resource landowners. Source/Reference: Nelson and Duncan, 1995, pp. 51.

#### Cross-Acceptance Process\*

The cross-acceptance process is the process of comparing the planning policies of different governmental levels in order to attain compatibility between local and state plans. The process is designated to result in written statements that specify areas of agreement or disagreement between local plans and a preliminary state plan. This consensus-building approach was adopted by the State of New Jersey as a way to achieve *vertical plan consistency* while preserving local home rule. Case/Example: New Jersey’s Cross-Acceptance Process. Source/Reference: Georgia DCA, 1998, pp. 24; New Jersey OSP, A.

#### Density Bonus for Affordable Housing Provision†

Many communities use this incentive-based strategy as a way to encourage the provision of *affordable housing* by private developers. The technique is implemented by trading density permits for *affordable housing* guarantees. For example, a participating developer

may be granted an increase in the allowable number of units within a proposed development if the developer agrees to ensure that a certain percentage of those units will be affordable to households below 50% of the median family income for the surrounding area. Case/Example: City of Davis, California

#### **Development Caps and Rate Allocation Systems\*†**

Rate-of-growth systems typically have annual development caps similar to *growth-phasing systems* but are less closely linked to public facility constraints. Development caps represent an attempt to set an absolute upper limit on development within a community or some portion of an area, such as Boca Raton (FL)'s 40,000 dwelling unit caps. Development caps are usually accompanied by a *carrying capacity* analysis. Historically, communities experiencing rapid population growth and extreme development pressures have enacted caps and allocation systems. Development rate allocation systems are the growth management systems that set limitations on the total amount of development allowable within a certain time period. Depending on the community's growth management goals and the purpose of the regulation, most rate allocation systems place an annual cap on the total number of new residential units or commercial space allowable in a community over a period of one to three years. Petaluma (CA) limits the total number of new residential units to a 500 annual average not to exceed 1,500 over a three-year period. Case/Example: Development Caps of Boca Raton (FL); Development Rate Allocation Systems of Boulder and Aspen (CO) and Petaluma (CA). Source/Reference: Nelson and Duncan, 1995, pp. 105-110; Georgia DCA, 1998, pp. 24.

#### **Development Exactions\***

Development exactions often require developer contributions of land, facilities, or funding for certain types of public facilities that may serve more than the developer's project or be located off site. Typical exactions include the dedication of land such as park land, school sites, and road rights-of-way and public facilities such as widening the portion of a substandard street. Nelson and Duncan (1995, pp. 119) divide exactions into four broad categories: mandatory land dedication requirements, negotiated exactions, *impact or linkage fees*, and development taxes. A major limitation common to the first two types of exactions is that they tend to address only those public improvements that are either on-site or in close proximity to the development. Case/Example: North Carolina and Virginia (negotiated exactions tightly regulated in a state-level). Source/Reference: Nelson and Duncan, 1995, pp. 118-120; Porter, 1996, pp. 10-11.

#### **Development Policy Areas\***

Known by several terms, including tiers, development policy areas are typically designated to maintain and/or redevelop existing urbanized areas, continue urbanization in developing areas, reserve land for future urbanization, and preserve land for open space, agricultural production, or environmental protection. Policy areas then provide a framework for other planning and zoning requirements. The standard version delineates an "urban" area of established neighborhoods and centers, "urbanizing" areas where most new development will take place, and an "urban reserve" area where open space is preserved until some future date. Source/Reference: Porter, 1997, pp. 44; Porter, 1996, pp. 8.

#### **Developments of Regional Impact (DRI)\***

DRI requires review of development projects that are of sufficient size to have an impact beyond a local jurisdiction. Review is designed to improve communication among governments on large-scale developments and to provide a means of identifying and assessing potential development impacts before related conflicts arise. Since DRI review processes provide a mechanism for communication on regional land use issues, the DRI process acts as a tool for *regional growth management*. Case/Example: DRI process of Florida. Source/Reference: Georgia DCA, 1998, pp. 24.

#### **Differential Assessment Programs\***

Differential assessment programs are programs that allow local officials to assess farmland at its agricultural use value, rather than its fair market value. Since fair market values are generally higher, especially in urban fringe areas, differential assessment can

be used as a way to encourage farmers to maintain the agricultural use of their land. This provides an incentive to conserve land, thus limiting urban sprawl. Source/Reference: Georgia DCA, 1998, pp. 24-25.

#### Extraterritorial Jurisdiction\*

Municipalities in many states are given powers to oversee planning and zoning for development in a circumscribed area around their boundaries. These powers vary widely from state to state: “oversee” can mean total control over setting development standards, simply the right to review and comment on rezoning and subdivision proposals, or to prepare plans for the areas involved. Case/Example: Raleigh (NC) and Fresno (CA). Source/Reference: Porter, 1997, pp. 45 and pp. 70-71; Porter, 1996, pp. 13.

#### Facility Financing\*

In the face of declining federal assistance and local voter opposition to tax and utility rate increases, cities and counties must turn to alternative techniques to finance growth-related capital facilities. These techniques include *development exactions*, *impact fees*, special taxing districts, cost-based utility and stormwater fees, and development taxes. Despite their differences, these funding techniques have a common theme: they shift the costs of new infrastructure from the general public to the new developments that create the need. Source/Reference: Nelson and Duncan, 1995, pp. 112.

#### Farmland Preservation Credits\*

Farmland preservation credits are the programs that allow farmers to claim state income tax credits to offset their local property tax bills. The credits encourage farmers to continue farming rather than sell their land for development. This eases the development pressure on exurban land. Source/Reference: Georgia DCA, 1998, pp. 25.

#### Flexible Design Review†

Many otherwise beneficial development projects often fail in the permitting phase due to outdated or rigid regulations, which do not permit innovative design solutions to urban problems. Flexible design review processes acknowledge specific outcome requirements and *performance standards* but grant the developer considerably more latitude to meet those standards using creative design solutions. Often, developers that can demonstrate compliance with *performance standards* are exempt from portions of the public review process. Case/Example: Wilmington, North Carolina

#### Floating Zones\*

Floating zones are zoning districts and provisions for which locations are not identified until enacted for a specific project. Such zones are used to anticipate certain uses, such as regional shopping centers, for which locations will not be designated on the zoning map until developers apply for zoning. They usually require special review procedures. Montgomery County (MD) has pursued aggressively the development of higher densities around Metro-rail stations. Of particular value in this effort was the creation of floating zones that permit higher densities in some business areas subject to design review and contributions of amenities. The zoning provisions have been applied particularly in rail/bus station areas to encourage transit-friendly development and a high order of design and appearance. Case/Example: Bethesda transit-station area in Montgomery County (MD). Source/Reference: Porter, 1997, pp. 26 and pp. 38.

#### Growth Limits/Controls\*

Growth limits/control programs (including *development caps* and *rate allocation* systems, *carrying capacity* limitations, and moratoriums) typically impose quantitative limits or quotas on residential and/or non-residential development, whereas growth management seeks to accommodate growth while directing the location and pattern of new development. Historically, communities experiencing rapid population growth and extreme development pressures have enacted caps and allocation systems. Many California and Colorado communities and some local jurisdictions in other states have adopted growth limits/controls. Source/Reference: Porter, 1996, pp. 9; Nelson and Duncan, 1995, pp. 105-111.

### **Growth-Phasing Systems for Public Facilities\***

Growth-phasing systems (more closely linked to “public facility constraints,” as compared to *development caps*) are an attempt to address some of the shortcomings of performance-based adequate public facilities (APF) systems. Unlike APF requirements that are administered on a project-by-project basis, growth-phasing systems limit the amount of new development that can be approved “over a certain period of time,” typically one year. The capacity of a community to absorb growth is a measure that requires continual updating. The factors used to measure compliance with growth-phasing controls must be updated and reevaluated on a regular basis, even though the basic level of service standards by which conformance is measured remain unchanged. Septic system management is part of the equation of Growth-Phasing Systems. Case/Example: Montgomery County (MD), San Jose (CA), Westminster (CO), and Livermore (CA). Source/Reference: Nelson and Duncan, 1995, pp. 100-105.

### **Horizontal Plan Consistency Requirements\*†**

Horizontal plan consistency requirements are the state requirements for uniformity between the plans of adjacent local jurisdictions. Horizontal plan consistency ensures that local governments plan beyond their borders and regulate with adjacent jurisdictions in mind. Consistent local plans can help to ensure uniform regional development standards and efficient regional public facility provision. Horizontal plan consistency is normally achieved either by giving a state or regional organization the authority to require local governments to amend their plans to achieve consistency or by providing a communication process whereby local jurisdictions consult one another about *extraterritorial* land-use issues. Source/Reference: Georgia DCA, 1998, pp. 25.

### **Housing Trust Fund†**

This technique provides a source of financing for *affordable housing* projects. Housing trust funds are usually capitalized from dedicated sources of revenue including local taxes, development fees, state or federal grants, or contributions from private or nonprofit entities. These dedicated funds are then used for a variety of *affordable housing* projects, including *land acquisition, rehabilitation*, new construction, and technical assistance. Case/Example: City of San Diego, California

### **Impact Fees\*†**

Impact fees (also known as development impact fees, system development charges, and the capital expansion component of connection charges) are one-time fees imposed on new development, often to fund off-site public facilities necessitated by that development. Unlike many other financing options, impact fees can encourage efficient development patterns as well as raise revenue. Jurisdictions can use impact fees as a positive growth management tool by encouraging growth (through the use of lower fees) in areas already served by public facilities and discouraging growth (through the use of higher fees) in areas without infrastructure. San Diego is a leading example of this practice. Case/Example: San Diego (CA). Source/Reference: Nelson and Duncan, 1995, pp. 120-124; Porter, 1996, pp. 11.

### **Implementation Advisory Council†**

Implementing the goals of an urban containment plan requires constant monitoring and evaluation to ensure that regulatory decisions and boundary modifications are made in accordance with community objectives. Often, it is useful to designate a “watch dog” group with the authority to periodically monitor plan implementation and report on progress towards containment objectives. Ideally, this group would consist of business and community leaders who have a stake in plan implementation. Case/Example: Palm Beach, Florida

### **Inclusionary Zoning\*†**

Many communities employ inclusionary zoning practices to avoid exclusion of low-income housing. These strategies include removal of exclusionary barriers and provision of affordable and fair-share housing. The states of California, Florida, New Jersey, and Oregon require forms of inclusionary zoning in local plans. Source/Reference: Nelson and Duncan, 1995, pp. 83.

**Internal Consistency†**

To ensure that containment goals are acknowledged in all areas of the permitting process, many communities require that development review decisions, public facility siting decisions, regulations, and boundary adjustments be consistent with the overall framework established in the urban containment plan. Often consistency also extends to future plan modifications to ensure that the goals of the community are met by future generations. From time to time, communities may conduct periodic “smart growth audits” to ensure that urban containment goals are being implemented in practice. Case/Example: Lee County, Florida

**Infill Development\***

Infill development occurs in locations where some development has already taken place and infrastructure is already in place. In urban areas, *infill development* is typically executed by converting old buildings and facilities into new uses (*redevelopment*) or by filling undeveloped space within these areas with environmental review exemptions sometimes acting as incentives. Efficiently facilitated *infill* and *redevelopment* is needed to ensure that urban areas remain vital, to respond to changing needs when and where needed, and to help dampen urban sprawl pressures. The principle benefits include: making better use of urban land supplies; increasing access of people to jobs, and jobs to labor force; making better use of existing infrastructure and lowering costs of public services; providing *affordable housing*; promoting economic development (for example, by relocating office buildings to downtowns); reducing the time, money, energy, and air pollution associated with commuting and other use of SOPs; renewing older neighborhoods and housing stock; and preserving historical landmarks. Case/Example: Boulder (CO), Palm Beach County (FL), and Atlanta (GA). Source/Reference: ARC, C, pp. 10; Nelson and Duncan, 1995, pp. 85-87, pp. 148; US EPA, 2001, pp. 37.

**Interim Zoning\***

Interim zoning regulations may be imposed to avoid auto-oriented uses until the time when a specific *neighborhood plan* can be enacted. The regulations may include any combination of the smart growth zoning approaches.

**Interjurisdictional Agreements\***

Interjurisdictional (interlocal) agreement plays an important role in securing guidance over development outside jurisdictional boundaries. The agreements are allowed in most states to permit agreements between local governments on development plans, standards, and infrastructure extensions in locations of mutual interest. The agreements may be made informally, through such mechanisms as advisory groups, or by formal, signed agreements or compacts, or by contractual understandings for specified services. Case/Example: Raleigh (NC) and Lincoln/Lancaster County (NE). Source/Reference: Porter, 1997, pp. 73-74; Porter, 1996, pp. 13.

**Intermediate Growth Boundaries (IGB)\*†**

IGBs are short-term development boundaries within long-term containment boundaries. The IGB accommodated development from 1975 to about 1985 (Portland, Oregon), when the IGB was effectively removed and development could extend out to the urban growth boundary. Consequently, IGBs are used to prevent the premature development of land located near the URBAN GROWTH BOUNDARY before land inside the IGB is first suitably developed. Case/Example: 1976-1985, Portland (OR). Source/Reference: Nelson and Duncan, 1995, pp. 81.

**Jobs/Housing Balance Requirements†**

One measure of the efficiency of urban spatial structure is the ratio between jobs and the number of housing units available to house workers for those jobs within a given small geographic area. If this ratio is equal to 1, jobs and housing are sufficiently “balanced” and overall commute times will be minimized. Some communities adopt this metric as a policy requirement and rely on specific indicators of jobs/housing balance as a basis for the issuance of building permits and zoning permissions. Case/Example: Sonoma County, California

### Land Acquisition and Banking\*†

Acquisition of land is the most certain means of preserving the land's environmental and open space attributes. Land banking is the process of purchasing land or improved property and holding it for future use. This land is normally used to provide land for government services, redevelop previously developed lands, improve local land markets, and recapture land values created by government activities. The most direct and often-used means of acquisition is outright purchase of fee simple ownership by governments or by nonprofit groups that will hold it in trust for conservation purposes. Many states have voted new taxes or earmarked selected revenues to acquire lands for conservation. Local governments frequently pursue their own acquisition strategies to manage growth. While many states set aside funds for fee-simple open space acquisition, it is more common for states to acquire *conservation easements* and development rights. Easement acquisition is generally cheaper and allows land to remain in private ownership, thus maintaining property tax revenues. Development right acquisition also relieves the public of the responsibility of maintaining the land. Case/Example: Nantucket Island, Massachusetts. Source/Reference: Porter, 1997, pp.45-46; Georgia DCA, 1998, pp. 26.

### Large Lot (and Small Lot) Zoning Outside Urban Containment Boundary†

To ensure that the urban containment boundary effectively delineates urban from rural areas, many communities adopt large lot zoning requirements within areas outside the urban containment. Most limit the lot sizes of rural homes to 5 to 10 acres, although some weaker urban containment programs allow homes on lots as small as 2 acres outside urban containment boundaries. Within the strongest urban containment programs, lot sizes outside the urban containment boundary are usually at least 5 to 10 acres in size to ensure an identifiable urban—rural demarcation. Case/Example: Marin County, California

### Linkage Fees†

Within many urban containment communities, developers of market rate housing and nonresidential development are charged a fee that is placed into a local *housing trust fund*. These dedicated funds are then used for a variety of *affordable housing* projects, including *land acquisition, rehabilitation*, new construction, and technical assistance. Linkage fees are often viewed as an in-lieu alternative to an outright requirement to provide *affordable housing* within new market rate developments. Case/Example: City of Sacramento, California

### Low/Moderate-Income Housing Assistance†

Many urban containment communities meet the housing needs of the low to moderate income population by providing direct housing assistance in the form of rental subsidies, mortgage assistance, or subsidies for housing *rehabilitation*. The source for these funds usually comes from federal funding sources such as the Community Development Block Grant and the Section 8 program. Such assistance is often used in tandem with other *affordable housing* initiatives such as *inclusionary zoning, housing trust funds*, and mixed-use/mixed-housing-type zoning. Case/Example: Baltimore County, Maryland

### Manufacturing Housing/Group Home Regulations†

Manufactured homes and group homes are often very difficult to site due to the “Not in My Backyard” syndrome and the perception that such land uses contribute to an overall decline in property values. Regulations in many communities encode these fears and effectively prohibit many *affordable housing* types or relegate these types to one or two isolated zones within the community. As a way to promote the provision of *affordable housing* within contained urban areas, many communities have retooled these restrictions to permit a diversity of housing types community-wide. Case/Example: Orlando, Florida

### Market Factors†

Within a few contained areas, planners adjust the supply of land allocated to urban uses upward by 5% to 10% beyond base projections to facilitate competition among land users. To be effective, the additional land allocated using such “market factors” should be comparable to other urban land within the contained area. Furthermore, the market factor should not be so large that the goals of urban containment are compromised. Case/Example: Cookeville, Tennessee

**Minimum Density Zoning/Standards\*†**

Minimum density zoning contrasts with the traditional approach to regulating maximum densities. By setting a minimum number of allowable units per acre or maximum lot sizes, zoning can be used to promote compact urban development patterns in areas targeted for higher density growth. For example, the Oregon Land Conservation and Development Commission (LCDC)'s Metropolitan Housing Rule specifically requires of local governments in metropolitan Portland: for cities with projected populations of less than 8,000, the overall housing density must be at least six units per net developed acre by the year 2000. Such a target can be met only by minimum density standards that are either used formally by regulation or informally in review processes. Case/Example: Metropolitan Housing Rule of Portland (OR). Source/Reference: Nelson and Duncan, 1995, pp. 83-84.

**Mixed-Housing Type Zoning†**

Traditionally, zoning has been used to separate land uses and housing types. In recent years, many have come to realize the potential costs associated with this strategy. Since affordable rental housing is more likely to be attached and of a higher density, relegating certain housing types to specific zones serves to reduce the accessibility of *affordable housing* throughout the community. Mixed-housing type zoning districts that allow a variety of single family and multi-family housing types are one potential solution to this problem. Case/Example: Green Bay, Wisconsin

**Mixed-Use Land Development\*†**

Mixed-use development (or mixed land uses) can occur on a number of levels. On a site-specific basis, individual buildings or complexes can be designed to incorporate a variety of uses. At the neighborhood level, mixed-use development refers to the arrangement of different uses across several blocks or acres of land so that they are not physically isolated from one another. At the subregional level, mixed-use often aims to balance jobs and housing so that people have the opportunities to live closer to their places of employment. Mixed-use zoning represents flexible zoning that allows various types of land uses to be combined with a single district. Land use mixing may influence travel demand in a number of ways, but its greatest impact is thought to be on mode choice (Cervero, 1996a, pp. 363). At sites with TDM incentives, areas with a substantially mixed land use had more than double the transit mode share of other sites, that is, 6.4% share in centers with a substantial mix compared with 2.9% in those with a limited mix (US DOT, 1994). Controlling for other land use and household factors, a doubling in accessibility results in a 7.5% decrease in the number of vehicles owned (Kockelman, 1997). Source/Reference: US EPA, 2001, pp. 59-65; Smart Growth Network, 2000, pp. 43

**Neighborhood Plans†**

Many communities rely on neighborhood-level planning as a supplement to overall urban containment efforts. Neighborhood plans help to tailor urban containment goals to the needs of specific communities within the urban area. Since many urban communities may object to the increased urban density allowances required under urban containment plans, a neighborhood-level planning effort is a useful way to ensure that such density provisions are consistent with local goals. Case/Example: Seminole County, Florida

**Open Space Zoning†**

As a way to minimize rural to urban land conversion outside the urban containment boundary, many communities rely on open space zoning to designate sensitive landscapes for open space, forest, or recreational uses only. To maximize open space protection, open space zones are often supplemented with other open space preservation techniques, such as *conservation easements*, *large lot zoning*, and *land acquisition* programs. Case/Example: Boulder County, Colorado

**Overlay Zoning/Districts\***

Overlay zoning, applied over one or more other districts, creates a second, mapped zone that is superimposed over the conventional zoning districts. Overlay zones typically provide for a higher level of regulations in certain areas such as transit station areas, downtown areas, and historic districts, but may also be used to permit exceptions or

less restrictive standards (fewer parking spaces in a downtown or transit station area, or more density in an economic development area). Source/Reference: Porter, 1997, pp. 26 and pp. 50; ARC, D, pp. 1-2.

#### **Performance Standards†**

Many urban containment communities are turning away from traditional use-based zoning regulations and toward performance-based regulatory approaches, which define specific measurable outcome requirements for new development while allowing developers maximum flexibility to meet those requirements. Such outcome requirements are usually designed according to the *carrying capacity* demands of the surrounding environmental systems. This regulatory approach gives developers more flexibility to mix land uses as appropriate as long as minimum regulatory targets are met. Case/Example: Montgomery County, Maryland

#### **Planned Unit Development (PUD)\***

The most common form of flexible planning is PUD, which offers options to developers for determining uses, densities, building placement, and other planning and design factors applied to their sites. It allows more flexible site design than ordinary zoning would allow by permitting options or relaxing some requirements. PUD provisions establish overall parameters for development, such as average densities and open space requirements, but allow variable treatment of these factors within a given site. PUDs almost always require special review procedures, including design reviews, to approve these variations from normal requirements. *Overlay zoning districts* can be adopted to provide for special treatment of certain areas such as transit station areas, downtown areas, and historic districts. Source/Reference: Porter, 1997, pp. 26 and pp. 50.

#### **Preferential Permitting for Affordable Housing†**

As a way to promote the provision of *affordable housing*, many urban containment communities exempt *affordable housing* development proposals from rigid regulatory requirements and offer such proposals an expedited development review option. For example, in many California communities, restrictions on the rate of growth and the issuance of new building permits are lifted for developers of *affordable housing*. Case/Example: Los Gatos, California

#### **Property Tax Incentives for Land Conservation†**

Many urban containment communities offer reduced property taxes to landowners who agree to certain restrictions on development. For example, under California law, local governments are allowed to enter into contracts with private landowners for the purpose of restricting parcels of land to agricultural or open space uses. In return for these restrictions, landowners received reduced property tax assessments that are based on the agricultural use of the land rather than the full market value. A special state fund is used to supplement the forgone local tax revenues lost under this program. Case/Example: Nevada County, California

#### **Public Investment—Land-Use Policy Coordination†**

Many urban containment plans include overall measures designed to ensure consistency between public investment siting decisions and land use policies. For example, new schools may be sited only in areas designated for and with the capacity to support new urban growth. Such siting plans are then generally designed to be consistent with the location of new water and sewer facilities as well as new transportation improvements. In practice, consistency is often achieved by integrating the land use plan and the capital budgeting process. Case/Example: Flagstaff, Arizona

#### **Public Participation Strategies†**

It is important to solicit public input early in the planning process to ensure that the entire community is on board with proposed urban containment goals. With improvements in communications technology, extensive community participation can now be achieved at various stages of the planning process with minimal cost. Many urban containment communities now post their plans online and engage the citizenry in creative visioning exercises, where alternative development scenarios are modeled

and discussed in a public forum. Data from such exercises is increasingly being integrated into containment goals and policies. Case/Example: Yakima County, Washington

#### **Purchase of Development Rights (PDR)\*†**

Government agencies or private land trusts pay landowners for the development rights of a parcel to preserve it from future development. To date, the use of PDR programs is rare. One economic problem with such programs is that they involve taxpayers paying twice for those rights, first through infrastructure investments and development patterns that create development value and again for the value created. Another limitation is that since PDRs are voluntary programs, they suffer from the same limitations as *TDRs* in not assuring preservation of the critical mass of resource land needed to sustain the regional resource economic base. Case/Example: King County (WA) and Suffolk County (NY). Source/Reference: Nelson and Duncan, 1995, pp. 49-50; NACo, JCSC, and SGN, 2001, pp. 28.

#### **Redevelopment Plans†**

In contained urban areas, redevelopment plans are important tools for managing the supply of urban land. Such plans are often used as the basis for urban *land banking* strategies, *affordable housing* initiatives, and transit oriented development proposals. Redevelopment planning is also essential to ensuring the viability of the central business district as the core of the contained urban area. Case/Example: Bloomington, Indiana

#### **Regional and Jurisdictional Affordable Housing Targets†**

Many communities and regions around the country have taken aggressive measures to ensure that projected *affordable housing* needs are being met. Most rely on population projections and land use estimates to develop specific targets for the number of affordable units that would be required to house the population over the short term planning horizon (5 to 10 years) and over the long run (15 to 20 years). Some metropolitan areas have developed regional affordable housing targets in cooperation with regional planning officials that are then used to determine how many units would be required within each community over the planning horizon. A few states go one step further and require local governments to take steps to meet their "fair share" of the region's *affordable housing* needs. Case/Example: Association of Bay Area Governments, San Francisco, California

#### **Regional Growth Management Hearing Boards\***

Regional growth management hearing boards are the quasi-judicial bodies that hear complaints alleging either that a local jurisdiction's plan is not in compliance with state policy or that a local government is not adhering to the local plan. Washington's three growth management hearing boards help to ensure *vertical consistency* between local government plans and the goals stated in the State Growth Management Act. Case/Example: Growth Management Hearing Boards (WA). Source/Reference: Georgia DCA, 1998, pp. 26; State of Washington, A.

#### **Regional Planning Councils\***

A regional planning council is a multipurpose regional entity that plans and coordinates intergovernmental responses to growth related problems. In Florida, regional planning councils are granted the power to prepare regional plans that are consistent with the state comprehensive plan and include ad hoc regional planning organizations. Local governments must in turn adopt local plans that are consistent with the regional plan. Each regional planning council also establishes a dispute resolution mechanism to resolve planning and growth management issues among local governments. Many cities have appointed regional councils with varying amounts of administrative powers (i.e., enforcement and fundraising abilities). Portland, Oregon, is the only city with an elected regional council with legislative powers. Case/Example: Florida Regional Planning Councils. Source/Reference: Georgia DCA, 1998, pp. 26; NACo, JCSC, and SGN, 2001, pp. 14-15; Florida RCA, A.

#### **Regional Service Provider\***

Giving a single regional agency the authority to oversee the provision of public infrastructure needed to support new development (e.g., water supply, sewage treatment,

and roads) can enhance growth management efforts and guarantee a coordinated approach to development through the region. The Portland metropolitan region (OR) provides garbage disposal services, recycling services, a regional park system, regional entertainment facilities, and regional land use/transportation planning services through its regional service provider, Metro. Case/Example: Metro of the Portland metropolitan region (OR). Source/Reference: Georgia DCA, 1998, pp. 26; Metro, A.

#### **Rehabilitation Zoning Codes\***

In many metropolitan areas, efforts at *infill* and adaptive reuse of existing building stock can be hampered by modern zoning and building codes that make the regulatory and *redevelopment* costs too burdensome. In such cases, communities have had to adopt more parallel codes or special ordinances that provide a more flexible performance-oriented approach so that adaptive reuse can occur while still safeguarding the public health, safety and welfare. Case/Example: States of New Jersey and Maryland and the City of Wilmington, Delaware and Denver Colorado. Source/Reference: Maryland's 2000 Infill Guidelines, <http://www.mdp.state.md.us/planning/m&gs/01-22.htm>

#### **Sensitive Area Zoning\***

Zoning strategies such as Large Minimum Lot Size, and No Minimum Lot Size go toward land preservation by ensuring that adequate residential development necessary to sustain agricultural/forest development is demonstrated. Buffer Zoning can preserve land by separating rural and residential uses from exclusive resource uses.

#### **Special Financing Districts\***

Special districts are geographic areas within fees or taxes are collected (in addition to jurisdictionwide general taxes) to fund capital investments or special services that clearly benefit properties within the district. The distinctive feature of special district is the very close and visible tie between the facility constructed or maintained and those who benefit from and pay for it. Unlike other financial options (such as *development exactions* or *impact fees*) that target new development to pay for a share of communitywide improvements, special districts assess and tax all properties in a defined area, developed and undeveloped alike. Due to the diversity of special district approaches (See Nelson and Duncan, 1995, pp. 127-29), generalizations about this flexible technique should be viewed cautiously. Case/Example: Montgomery County (MD). Source/Reference: Nelson and Duncan, 1995, pp. 127-129.

#### **Specific-Area Development Plans\***

*Neighborhood*, downtown, and other special-area plans are increasingly popular. To address special planning problems in parts of their communities, local governments often prepare plans for special areas, such as residential neighborhoods, downtown or other business centers, historic preservation areas, and critical areas of environmental significance. Source/Reference: Porter, 1996, pp. 10.

#### **Split-Rate Property Tax\***

An approach to property taxation where land and its buildings or structures are taxed at different rates, the rate on land being significantly higher than the rate on buildings. The traditional land-building property assessment method (i.e., the assessment method at same rates) creates an incentive for sprawl as local governments seek development to improve land in their community and increase property tax revenues. Landowners in dense areas or near transit have an incentive to build or improve their properties. The split-rate property tax is a valuable tool for commercial revitalization and compact development. It discourages land speculation and increases *redevelopment* at sites adjacent to infrastructure. This tool may work very similar to site-value taxation. Source/Reference: Georgia DCA, 1998, pp. 27; NACo, JCSC, and SGN, 2001, pp. 36.

#### **State Capital Investment Priorities (Priority Funding Areas)\***

State capital investment priorities establish criteria for defining the state's "priority funding areas." As a result of a bottom-up process, local governments define the location of all priority funding areas in accordance with the state's infrastructure and economic development investment priorities. Priority funding areas include existing municipalities, areas planned for industrial development, enterprise zones, neighborhood revitalization

areas, and any other area where adequate urban infrastructure and services are available. Similarly, New Jersey has “Focused State Investment Plan.” Case/Example: Priority Funding Areas (MD) and Focused State Investment Plan (NJ). Source/Reference: Georgia DCA, 1998, pp. 27.

#### State Development Plans\*

A state development plan defines state urban development goals and delineates local, regional, and state responsibilities in meeting these goals. Effective state development plans can encourage coordination among all players involved in implementing a state growth management program. New Jersey’s State Planning Commission and the Office of State Planning prepare and update the State Plan and ensure that local plans are consistent with the State Plan. In addition to requiring that local plans be consistent with the State Plan, Florida requires all state agencies to adopt a strategic plan that implements some portion of the State Comprehensive Plan. Case/Example: State development plans of New Jersey and Florida. Source/Reference: Georgia DCA, 1998, pp. 27.

#### State Policy Assessment\*

A state policy assessment is a detailed analysis of state agency policies, rules, and regulations to determine whether they are in conflict with the state’s growth management goals. The location of state investments, the tax incentives offered to private citizens, the state’s land development regulations, and the criteria for receiving state grants all contribute to shaping statewide development patterns. A state policy assessment can be used to identify which of these policies are inconsistent with statewide development goals. State policy assessments can lead to requiring change of the inconsistent policies by executive order of the governor or other means. Source/Reference: Georgia DCA, 1998, pp. 27.

#### Strategic Policy Plans\*

As an example, the Tampa Bay, Florida, *regional planning council* has the strategic regional policy plan for the nine areas: *affordable housing*, economic development, emergency preparedness, natural resources, regional transportation, education, people, public safety, and health. The plan includes trends and conditions statements, regional goals, indicators, policies, a listing of regionally significant resources and facilities, and a listing of agencies to be coordinated in implementing the policies. Case/Example: Tampa Bay (FL)’s state regional policy plan. Source/Reference: Tampa Bay Regional Planning Council, A.

#### Streamlined Judicial Review†

Land use appeals often take years to resolve within the court system. A few states have reformed laws governing land use appeals and created special courts that hear such appeals. Decisions upon appeal often must be rendered within a specific time frame. Within the state of Oregon, for example, local governments must issue final discretionary land use decisions within 120 days. After this decision, appeals go to the land use board of appeals (LUBA) and must be heard within 30 days of the receipt of a petition. A final decision must then be rendered within 120 days. Case/Example: The State of Oregon. Source/Reference: Nelson and Duncan, 1995, p. 141.

#### Streamlined Permit Processing\*†

The aim of streamlining is to reduce application review times and increase certainty and predictability in the permitting process. Streamlining can take place in several ways (See NACo, JCSC, and SGN, 2001, pp. 60-61; Nelson and Duncan, 1995, pp. 135-136.). Promising approaches to streamlined permitting include permitting deadlines, exemplified by California and Oregon, and special permitting processes, exemplified by Orlando (FL). Another way to maximize the efficiency of the application stage of the planning process is to develop a one-stop permitting shop. Under a one-stop permitting system, all permits and applications are assembled and issued at a single location, although many different agencies may be involved in the creation of each permit. Required pre-application meetings with developers are also effective ways to identify and address potential problems before they become embedded in the permitting process. Case/Example: Permitting deadlines of California and Oregon; Permitting processes of

Orlando (FL). Source/Reference: Nelson and Duncan, 1995, pp. 134-137; NACo, JCSC, and SGN, 2001, pp. 60-61.

#### **Targeted Tax Abatement\***

Targeted tax abatement is a program that encourages certain types of development in targeted areas through property tax reductions. By tying tax abatement provisions to local growth management goals, tax abatement can act as a financial inducement to those developers who wish to build developments that meet objectives established by the community. Property tax abatement can be used to encourage *affordable housing*, *infill development*, or job-creating commercial development in economically depressed areas. Source/Reference: Georgia DCA, 1998, pp. 27.

#### **Tax-Base Sharing\***

Tax base competition encourages cities to overzone for commercial and industrial development and underzone for land uses that do not generate substantial tax revenues. Most tax-base sharing or tax equalization plans redistribute a portion of the increases in property tax revenues to all jurisdictions within a region. Other plans typically call for redistributing the tax increases to jurisdictions according to need-based formulas or population formulas. Also, creating a financial bond across a metropolitan area can be a sure way to build regional collaboration. Establishing a tax-base sharing program is a daunting task that requires strong local government leadership and broad community support. Case/Example: Minneapolis/St. Paul (MN). Source/Reference: NACo, JCSC, and SGN, 2001, pp. 15-16; Georgia DCA, 1998, pp. 27.

#### **Tiered Levels of Service (LOS)†**

Many communities adopting a “phased” approach to public facility provision adjust levels of service standards according to the development needs of different planning districts. For example, urbanized areas may receive extensive water and sewer service, suburban areas may receive a mix of public water and sewer along with private or shared facilities, while rural areas may rely solely on private sources for water and sewer. Other facilities may be similarly “tiered” according to the density of development to ensure that urban facilities are provided primarily to existing urban areas. Case/Example: Collier County, Florida

#### **Transit-Oriented Development (TOD)†**

In recognition of the importance of providing transportation alternatives to community residents, many urban containment plans include measures designed to encourage higher density development in and around public transit stations. Regulatory techniques designed to encourage transit-oriented development include *mixed-use zoning*, *overlay zoning*, and *density bonuses*. Public-private initiatives between local governments and the owners of developable land around transit stations are also increasingly being used as ways to facilitate area-wide high density development. Case/Example: Portland, Oregon

#### **Transfer of Development Rights (TDR)\*†**

A TDR separates the value of potential development of land from the value of the current use of that parcel and transfers that development value to another site. A TDR program permits owners of land in development-restricted areas called sending districts to sever the development rights from their property and sell those rights to property owners in specified receiving districts. Landowners who purchase development rights are then able to increase the amount of development that can be built on the receiver site. TDRs can be used to save historic structures from demolition, prevent urbanization of farmland, and preserve unique environmental areas and scenic vistas. Case/Example: Montgomery County (MD). Source/Reference: Nelson and Duncan, 1995, pp. 48-49.

#### **Upzoning/Downzoning\***

One of the principle outcomes of urban containment policies is the reallocation of land to achieve particular results. Upzoning represents selective rezoning of residential land to allow higher density development of single- and/or multi-family housing. If certain rural lands are intended to be used for farming and forestry but are zoned for one-, two-, five-, or even ten-acre minimum lot sizes, their ultimate use will not be farming or

forestry but rather small-acreage homesites. Such lands should be downsized to exclusive farm and forest uses with minimum lot sizes (named “Large Lot Zoning”). Case/Example: Ann Arundel County (MD). Source/Reference: NACo, JCSC, and SGN, 2001, pp. 28 and pp. 43; Nelson and Duncan, 1995, pp. 82; Porter, 1997, pp. 108-109.

#### Urban Containment Strategies—Generally\*

Urban containment strategies represent an attempt to control the spatial pattern of development within a community or region. The benefits of successful urban containment techniques can include greater predictability of the development process, more cost-effective provision of public services, encouragement of *infill* and *redevelopment* of existing urban areas, reduction of urban sprawl, and protection of agricultural land and environmental resources. Source/Reference: Nelson and Duncan, 1995, pp. 73.

#### Urban Development Phasing\*

When urban development fills in and redevelops inner areas, outer areas must be prepared for future development. For examples, the Twin Cities region (MN) anticipates development needs over a ten-year period by redrawing its urban service limits every five years. Two phasing approaches are used in combination with urban containment boundaries: intermediate growth boundaries and *urban development reserves*. Source/Reference: Nelson and Duncan, 1995, pp. 81.

#### Urban Development Reserves\*†

Two phasing approaches are used in combination with urban containment boundaries: *intermediate growth boundaries* and urban development reserves. Metropolitan Dade County (FL) has a long-term *urban growth boundary (UGB)* that is designed to meet development needs to about the year 2010. The long term development plans anticipate the need to expand the supply of buildable land into particular areas located within an urban development reserve. This area has sufficient land to accommodate five to ten years’ development when the urban growth boundary is filled in. The urban reserves will be managed as to prevent low-density development that could preempt efficient urban growth boundary expansion. Case/Example: Metropolitan Dade County (FL) and Metropolitan Portland (OR). Source/Reference: Nelson and Duncan, 1995, pp. 81.

#### Urban Growth Boundaries (UGBs)\*†

Urban development is allowed within an urban growth boundary, while areas outside the boundary are preserved as rural or agricultural land. UGBs contain development within predetermined areas and preserve the surrounding open space, agricultural lands, watersheds, and other valuable lands. UGBs are generally designated to accommodate growth for a significant period of time—typically 20 years or more and they are updated periodically. The first metropolitan area to establish an UGB was Lexington, KY in 1958, however, Portland (OR, in 1979) is the most well known. Case/Example: Portland (OR) and Lexington (KY). Source/Reference: Georgia DCA, 1998, pp. 28; Nelson and Duncan, 1995, pp. 75; NACo, JCSC, and SGN, 2001, pp. 31.

#### Urban Service Areas/Boundaries (USAs or USBs)\*†

By defining areas of urban service provision, jurisdictions can avoid unnecessary infrastructure costs associated with extending infrastructure to leap-frog developments and limit the rate of rural to urban land conversion. Generally, USAs are more flexible in expansion than *urban growth boundaries* because they are drawn mostly consistent with the economics of planned public facilities. Urban services areas are usually supplemented by regulatory restrictions on the provision of capital facilities within areas outside the defined urban service area. Case/Example: Sacramento County (CA). Source/Reference: Georgia DCA, 1998, pp. 28; Nelson and Duncan, 1995, pp. 75.

#### Vertical Plan Consistency Requirements\*†

Vertical plan consistency requirements are the state requirements for uniformity between local plans, regional plans, and the state plan. Vertical plan consistency requirements help to ensure consistency between state growth management goals and local planning. In states with bottom-up planning, local governments are granted considerable leeway to adopt and forward their own development goals, and the state attempts to develop a state plan that consolidates the goals of the local plans. The state generally acts as a

coordinator and mediator of sub-state conflicts. In states with top-down forms of vertical consistency, the state establishes urban development goals that must be implemented by local governments. Source/Reference: Georgia DCA, 1998, pp. 28.

#### **Zero Lot Line Zoning†**

Many zoning and subdivision ordinances unintentionally promote urban sprawl by requiring new housing developments to allocate large acreage to front and side yard space. This design concept is in contrast to traditional urban communities, which were often built on smaller lots with minimal space between housing units. Zero lot line zoning ordinances relax frontage and side yard requirements to allow housing units to be constructed up to the property line in many cases. Case/Example: Chico, California

## Excerpts from the American Planning Association Policy Guide on Smart Growth

[For the full text of this policy, please go to [www.planning.org/policyguides/smartgrowth.htm](http://www.planning.org/policyguides/smartgrowth.htm)]

*Adopted by Chapter Delegate Assembly, April 14, 2002*

*Ratified by Board of Directors, April 15, 2002*

This policy guide is divided into four sections.

- I. A motion to adopt a definition of Smart Growth, including a statement of Smart Growth principles.
- II. A description of the Smart Growth issue, including an historical overview.
- III. Specific policy motions in five categories:
  - A. Planning Structure, Process and Regulation
  - B. Transportation and Land Use
  - C. Regional Management and Fiscal Efficiency
  - D. Social Equity and Community Building
  - E. Environmental Protection and Land Conservation
- IV. A list of outcomes to help readers understand what will be achieved by implementing these policies.

### **MOTION TO ADOPT A DEFINITION OF SMART GROWTH**

*Smart Growth is planning, designing, developing, and revitalizing communities to promote a sense of place, preserve natural and cultural resources, and equitably distribute the costs and benefits of development. Smart Growth enhances ecological integrity over the short- and long-term, and improves the quality of life by expanding the range of transportation, employment, and housing choices in a fiscally responsible manner. Compact, pedestrian-oriented, mixed-use development patterns epitomize Smart Growth and achieve more sustainable communities. Urban and rural low-density, auto-dependent development that wastes environmental, fiscal, and human resources is the antithesis of Smart Growth.*

In contrast to prevalent development practices, Smart Growth refocuses a larger share of regional growth within central cities, urbanized areas, inner suburbs, and areas that are already served by infrastructure. Smart Growth reduces the share of growth that occurs on newly urbanizing land, existing farmlands, and in environmentally sensitive areas. In areas with intense growth pressure, development in newly urbanizing areas may be appropriate or even desirable. However, this new development should be planned and developed according to Smart Growth principles.

Core principles of Smart Growth include:

*Recognition that all levels of government, and the nonprofit and private sectors, play an important role in creating and implementing policies that support Smart Growth.* Every level of government—federal, state, regional, county, and local—should identify policies and practices that are inconsistent with Smart Growth and develop new policies and practices that support Smart Growth. Local governments have long been the principal stewards of land and infrastructure resources through implementation of land-use policies. Smart Growth respects that tradition, yet recognizes the important roles that federal and state governments play as leaders and partners in advancing Smart Growth principles at the local level.

*State and federal policies and programs that support urban investment, compact development, and land conservation.* State and federal policies and programs have contributed to urban sprawl and need to be reexamined and replaced with policies and programs that support Smart Growth, including cost-effective, incentive-based investment programs that target growth-related expenditures to locally-designated areas.

***Planning processes and regulations at multiple levels that promote diversity, equity, and Smart Growth principles.*** All planning processes, as well as the distribution of resources, must be equitable. A diversity of voices must be included in community planning and implementation.

***Increased citizen participation in all aspects of the planning process and at every level of government.*** Appropriate citizen participation ensures that planning outcomes are equitable and based on collective decision making. Planning processes must involve comprehensive strategies that engage meaningful citizen participation and find common ground for decision making.

***A balanced, multimodal transportation system that plans for increased transportation choice.*** Land-use and transportation planning must be integrated to accommodate the automobile and to provide increased transportation choices, such as mass transit, bicycles, and walking. Development must be pedestrian friendly. All forms of transportation must be reliable, efficient, and user friendly, allowing full access by all segments of the population to housing, employment, education, and human and community services.

***A regional view of community.*** Smart Growth recognizes the interdependence of neighborhoods and municipalities in a metropolitan region and promotes balanced, integrated regional development achieved through regional planning processes.

***One Size Doesn't Fit All—there are a wide variety of approaches to accomplish Smart Growth.*** Customs, politics, laws, natural conditions, and other factors vary from state to state and from region to region. Each region must develop its own approach to problem solving and planning while involving the public, private, and nonprofit sectors. In some areas, this may require a significant change in perspective and culture, but such changes are necessary and beneficial in obtaining the results that Smart Growth aims to achieve.

***Efficient use of land and infrastructure.*** High-density development, infill development, redevelopment, and the adaptive re-use of existing buildings result in efficient use of land resources and more compact urban areas. Efficient use of public and private infrastructure starts with creating neighborhoods that maximize the use of existing infrastructure. In areas of new growth, roads, sewers, water lines, schools, and other infrastructure should be planned as part of comprehensive growth and investment strategies. Regional cooperation is required for large infrastructure investments to avoid inefficiency and redundancy.

***Central-city vitality.*** Every level of government should identify ways to reinvest in existing urban centers, to reuse former industrial sites, to adapt older buildings for new development, and to bring new development to older, low-income, and disadvantaged neighborhoods.

***Vital small towns and rural areas.*** APA recognizes that inefficient land use and low-density development is not confined to urban and suburban areas but also occurs around villages and small towns. Many once thriving Main Streets are checkered with abandoned storefronts while a strip of new commercial activity springs up on the edge of town together with housing and public facilities. Programs and policies need to support investment to improve the economic health of small town downtowns, and rural community centers. The high cost of providing basic infrastructure and services in rural communities demands compact development and efficient use of existing facilities. Housing choices in rural areas need to take into account changing needs resulting from shifting demographics, the cost of providing services and infrastructure, and the cost of services and infrastructure capacity, and must address upgrading of existing housing as an alternative or complement to new development. Smart Growth is critically important in rural and small town economic development initiatives because the limited availability of public funding means each dollar must accomplish more.

***A greater mix of uses and housing choices in neighborhoods and communities focused around human-scale, mixed-use centers accessible by multiple transportation modes.***

Mixed-use developments include quality housing, varied by type and price, integrated with shopping, schools, community facilities, and jobs. Human-scale design, compatible with the existing urban context, and quality construction contribute to successful compact, mixed-use development and also promote privacy, safety, visual coherency, and compatibility among uses and users.

*Conservation and enhancement of environmental and cultural resources.* Biodiversity, green infrastructure, and green architecture are integral to Smart Growth. Smart Growth protects the natural processes that sustain life; preserves agricultural land, wildlife habitat, natural landmarks, and cultural resources; integrates biodiversity, ecological systems, and natural open space (green infrastructure) into the fabric of development; encourages innovative stormwater management; is less consumptive and more protective of natural resources; maintains or improves air quality; and enhances water quality and quantity for future generations. Energy conservation is a major benefit and result of Smart Growth, helping to create more sustainable development and allow people to meet current needs without compromising the needs of future generations. Green architecture incorporates environmental protection and reduced natural resource consumption into the design and construction of buildings, also enhancing the comfort and health of the occupants.

*Creation or preservation of a "sense of place."* A "sense of place" results when design and development protect and incorporate the distinctive character of a community and the particular place in which it is located. Geography, natural features, climate, culture, historical resources, and ecology each contribute to the distinctive character of a region.

#### **SPECIFIC POLICY POSITIONS**

Other adopted policy statements that bear on this topic are Planning for Sustainability (adopted in 2000), Agricultural Land Preservation (adopted on April 25, 1999), Endangered Species and Habitat Protection (adopted on April 25, 1999), the Housing Policy Guide (adopted on April 25, 1999), the Policy Guide on Historic and Cultural Resources (adopted April 10, 1997) and policy statements currently under development or revision, including those for Water Resource Management, Wetlands, and Waste Management.

#### **Planning Structure, Process, And Regulation**

1. The American Planning Association and its Chapters affirm that reforming state enabling legislation is necessary to implement Smart Growth.
2. The American Planning Association and its Chapters affirm that effective comprehensive planning, based on Smart Growth principles, is the primary means of implementing Smart Growth.
3. The American Planning Association and its Chapters support regulations that require new urban growth to be coordinated with the provision of urban infrastructure capacity.
4. The American Planning Association and its Chapters support the modernization, restructuring, and (where necessary) consolidation of local governmental units.
5. The American Planning Association and its Chapters support statewide comprehensive planning.
6. The American Planning Association and its Chapters support federal and state incentives and guidance to local governments on the elements to be addressed in comprehensive plans, based on Smart Growth principles. The elements should include land use, transportation, infrastructure, housing, economic development, natural resources, ecological systems, and cultural preservation.
7. The American Planning Association and its Chapters support enabling legislation that provides incentives for adoption of a clearly defined comprehensive plan and capital improvements plan prior to the imposition of land-use regulations and controls at the local level.

8. The American Planning Association and its Chapters support enabling legislation that requires all actions of local government be consistent with the community's comprehensive plan including, but not limited to, zoning and other land-use regulations, as well as the provision of infrastructure.
9. The American Planning Association and its Chapters support requiring federal agencies to include the effect of federal actions on urban growth and sprawl in their analyses of environmental impacts and to actively support state and local plans for growth management.
10. The American Planning Association and its Chapters support regulatory processes that facilitate, encourage, and support Smart Growth while eliminating regulatory barriers that increase the cost of Smart Growth.
11. The American Planning Association and its Chapters support increased citizen participation in all levels of planning as a means to accommodate diversity while promoting equity and community.
12. The American Planning Association and its Chapters support the provision of a clearinghouse of advanced planning and geographic information for decisions makers and for the public by coordinated regional, state, and federal Internet systems.

#### **Transportation and Land Use**

1. The American Planning Association and its Chapters support planning and funding policies that increase transportation choices for both personal and commercial trips at the local and regional levels. The basis for transportation funding should reflect the true costs and relative efficiencies of various transportation modes. The costs of federal subsidies for automotive transportation should be reflected in evaluations of transportation investment alternatives.
2. The American Planning Association and its Chapters support planning and funding policies that acknowledge the continued importance of automotive transportation and support the automobile within a policy context that provides for mitigating its environmental and resource impacts, while increasing nonautomotive transportation choices, car-pooling, van-pooling, and flexible work hours.
3. The American Planning Association and its Chapters support planning policies, legislation, and practices that target transportation investments to correct system deficiencies identified through regular performance monitoring of all transportation modes within the system.
4. The American Planning Association and its Chapters support the development and maintenance of regional and statewide multimodal transportation plans.
5. The American Planning Association and its Chapters support federal and state incentives and local initiatives that encourage locating new development, especially the development of public facilities, in areas that are supported by a balanced transportation network that provides a variety of transportation choices.
6. The American Planning Association and its Chapters support changes to roadway design standards that promote and support the use of transit and nonmotorized transportation modes, including walking and biking.
7. The American Planning Association and its Chapters support policies and plans that place street connection as a high priority in the development of transportation systems.
8. The American Planning Association and its Chapters support increased transportation choice and mobility to and from work, home, and school, especially for the less advantaged.

#### **Regional Management and Fiscal Efficiency**

1. The American Planning Association and its Chapters support strengthening and modernizing state, metropolitan, and other regional institutions to facilitate multi-

jurisdictional decision-making and problem solving, including the creation of regional growth management institutions.

2. The American Planning Association and its Chapters support federal and state incentives for cooperative planning among local governments to address regional impacts.
3. The American Planning Association and its Chapters support a wide variety of approaches to accomplish Smart Growth, recognizing that one size doesn't fit all; yet, through a variety of means, Smart Growth principles can be applied to communities of all sizes and locations.
4. The American Planning Association and its Chapters affirm that land conservation, cultural preservation, fiscal efficiency, and ecological health are major benefits of regional planning.
5. The American Planning Association and its Chapters support policies that favor the use of existing infrastructure capacity over public construction of new infrastructure, including the requirement that new development either pay for the services it requires or be consciously subsidized.

### **Social Equity and Community Building**

1. The American Planning Association and its chapters support a sustained and focused initiative in federal public policy to reverse the general decline of urban neighborhoods and the trend toward isolated, concentrated poverty.
2. The American Planning Association and its Chapters support increased social, economic, and racial equity in our communities and call on the federal government to increase community development funds to remedy these inequities. The American Planning Association and its Chapters recognize a special responsibility to plan for the needs of politically and economically disadvantaged groups, to include input from all segments of our population in the planning process, and to ensure that planning and development decisions do not unfairly burden economically disadvantaged groups.
3. The American Planning Association and its Chapters support federal and state policies and programs that encourage mixed income neighborhoods as the foundation for healthy regions, including requirements for the provision of affordable housing in all new growth areas.
4. The American Planning Association and its Chapters support increased efforts by city officials, neighborhood groups, teachers, and parents to improve public schools and ensure a decent education for all children. APA will advocate for strategies that increase income and racial diversity in public schools.

### **Environmental Protection and Land Conservation**

1. The American Planning Association and its Chapters encourage public, private, and nonprofit cooperation to achieve a new level of partnership to preserve and enhance ecological integrity over the short and long term.
2. The American Planning Association and its Chapters support land and water conservation, including farmland preservation, soil, wetlands, and water conservation. An important tool is full funding of the federal Land and Water Conservation Fund.
3. The American Planning Association and its Chapters support protection and enhancement of biodiversity through the planning process. Planning for biodiversity should use the best available science to assess natural resources and determine areas of environmental vitality as the first step in incorporating "green infrastructure" into human settlements.
4. The American Planning Association and its Chapters support federal and state agencies providing assistance to county and local governments to collect and analyze

information on natural communities and processes. County and local governments should supplement this information with local knowledge. Using the combined information, all levels of government should work with nonprofit organizations, businesses, and citizens to designate green infrastructure policies and carry them out.

5. The American Planning Association and its Chapters support a balanced energy policy including energy conservation and development of renewable energy resources.
6. The American Planning Association and its Chapters support environmentally conscious design and construction, including “green architecture” practices and the adaptive reuse of buildings.
7. The American Planning Association and its Chapters support comprehensive water supply, distribution, treatment, and stormwater planning to protect water supplies, preserve water quality, and prevent flooding.

# of special interest



## Smart Growth Audits

PAS 512. Jerry Weitz and Leora Waldner. 2003. 55 pp.

Jerry Weitz AICP and Leora Waldner, a consultant from Alpharetta, Georgia, look at how a local government can examine the “genetic codes” of its planning—the regulations and plans that govern development—to answer whether those codes are programmed to facilitate sprawl or smart growth. This report describes the concept of a smart growth audit and provides methods to implement one in your community. Examples from a state (Illinois), regions (Indiana, Puget Sound and metropolitan Atlanta) are included, but the focus is on how to do an audit at the local level, using case studies of the audits in Charlotte–Mecklenburg County and Durham, North Carolina, and Brookings, Oregon. A range of possible audits are described from a very basic audit to a very comprehensive audit, for which a checklist is included.



## Regional Approaches to Affordable Housing

PAS 513/514. Stuart Meck, Rebecca Retzlaff, and James Schwab. 2003. 271 pp.

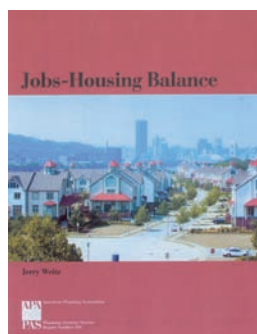
Evaluating 23 programs across the nation, the report examines fair-share regional housing planning in three states and one metropolitan area, and follows with an appraisal of regional housing funds—a new phenomenon. Also assessed are an incentive program in the Twin Cities region and affordable housing appeals statutes in Massachusetts, Rhode Island, and Connecticut. The study looks at recent private-sector initiatives to promote affordable housing production in the San Francisco Bay area and Chicago.



## Planning for Street Connectivity

PAS 515. Susan Handy, Robert G. Patterson, and Kent Butler. 2003. 95 pp.

The authors provide an overview of efforts by communities across the U.S. to increase street connectivity. They look at the motivation behind such efforts, the wide variety of issues these efforts have raised, and the different approaches that communities have taken to resolve them. Planners, decision makers, and residents will gain a better understanding of the concept of connectivity as well as ideas on how best to address the goal of connectivity in their own communities.



## Jobs-Housing Balance

PAS 516. Jerry Weitz. 2003. 41 pp.

Some argue that the market is the mechanism that will achieve jobs-housing balance. Weitz researched four types of jobs-housing imbalance and concluded that, in fact, the market failed to achieve such balance in three of the four scenarios he lays out. The report points to actions planners can take to help bring appropriate housing, jobs, and workforces together, resulting in overall community improvements.

