MANAGING URBAN GROWTH

VOLUME I AND II

D R A F T

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Volume I

Alternative Approaches to Local Growth Management: A Review of the State of the Practice

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Table of Contents

I. Introduction

Growth management became a popular subject in the 1970's as communities experiencing urban growth pressures began to formulate new and innovative ways to manage the pace, location and quality of this growth. The term conjures up the image of Petuluma, Ramapo and Boca Raton, among others. These were attempts to guide growth in some systematic or comprehensive fashion, or in some cases to stop growth completely (e.g. Boca Raton development cap...). While variable in their success, these experiences have tended to shape our conception of growth management. Our notion of growth management, however, while including these "systematic" efforts, is much broader. It also includes the more atomized efforts of localities and states to manage one or more aspects of growth. As the discussion to follow will indicate, we are interested in communities, for instance, which have made substantial efforts at protecting say, important viewsheds or important components of the ecosystem. They need not be addressing all such issues, nor addressing them in any kind of coordinated way. We are concerned here, as another example, with both single-purpose implementation/growth guidance tools and techniques (e.g. an impact fee or overlay zone) as well as implementation strategies or mechanisms which may command control over all or most development activities in a locality (e.g. a development point system). Each locality adopts those combinations of techniques, in some cases highly coordinated and centralized development guidance strategies, to address that issue or combination of issues and problems that are of local importance.

This paper has several objectives. First, it seeks to present a concise description of the primary trends in growth management at the national level.

While state-level programs are mentioned, the primary focus of this trend analysis is at the local level. Second, through this analysis of trends the authors hope to identify a number of promising tools and techniques which can be used in managing growth and development as well as provide some discussion of their relative advantages and disadvantages. Third, the paper provides specific examples of different local jurisdictions which are exploring these approaches. Two documents accompany and aid the objectives of this essay. One is a collection of two-to-three page (or more) case description of different local growth management programs, often focusing on a particularly interesting or innovative element (Volume II). A second document is a technical appendix which includes actual local ordinances, reports and other more detailed documentation that may be helpful to the reader (Volume III).

II. Some Emergent Goals in Growth Management

A. Scenic and Visual Management

Concern about protecting visual amenities has emerged in recent years as an important goal in many communities. Increasingly, visual blight is seen as an unfortunate and unnecessary side effect of urban growth. Several types of visual amenity-related concerns can be identified. For the sake of convenience these concerns can be roughly placed into two categories -- namely, concerns about protecting natural beauty and views of natural resources; and concerns about how the built environment looks, including concerns about such things as architectural style and the presence of billboards and other forms of visual clutter or blight. Often these two categories are merged when localities seek to preserve their visual image or flavor.

Increasingly local growth management efforts center on protecting views of the natural environment. The City of Denver has taken some strong actions

to protect views of the surrounding Rocky Mountains. The City has eight ordinance-designated view presentation areas in the city where the height of buildings is restricted. Together these designated areas cover 14 square miles or 12.5% of the city's land area, and include views from the state capital a number of city parks (City and County of Denver, 1985). The legality of these restrictions was recently upheld by the Colorado Supreme Court. In Landmark Land Company, Inc. v. The City and County of Denver, the court determined that protection of mountain views was a valid exercise of police power and that the height restrictions placed on buildings within viewsheds did not constitute unconstitutional takings of property. The court's opinion presents a strong statement in support of such aesthetic and visual management programs. The court finds that "(E)specially in the context of Denver--a city whose civic identity is associated with its connection with the mountains--preservation of the view of the mountains from a city park is within the city's police power." This program is described in more detail in the accompanying case study report (Volume II), and specific provisions of the program included in the appendix (Volume III).

In nearby Boulder, the city has acquired, through a one cent sales tax, more than 20,000 acres of open space around the city, including a 4,600 acre mountain park. These efforts were fueled in large part by concerns that if these lands were not secured the historical visual benefits they have provided would be jeopardized with the city's further growth and development. Boulder also has a 55-foot building height limitation, and special conditions must be met (including protecting existing views and vistas) before a building can be constructed over 35 feet. The Boulder program is discussed in greater depth in the case study volume. Boulder County has developed a similar acquisition program, though on a smaller scale and within the sales tax funding.

Fort Collins, Colorado, described in detail in the case studies volume, also has an active open space program and has, similar to Boulder, purchased most of the foothills to the west (the "Hogbacks").

Two states, North Carolina and South Carolina, have enacted Mountain Ridge Protection Acts which place restrictions on the permissible height of new structures in sensitive ridge zones (Heath, 1983). While the stated objectives of these programs included a range of concerns from the ability to provide adequate fire protection to the existence of aviation hazards, it is clear that the primary impetus behind them was a concern about preserving the aesthetic quality of the mountains. Local officials and representatives in North Carolina supported this bill largely because they saw it as important to maintaining the visual attractiveness of the mountains, and thus the economic vitality of the region which in turn depends on this attractiveness (e.g., through ski and resort activities, second home industry). The North Carolina law has been included in the technical appendix (Volume III).

Many communities are beginning to view visual amenities not simply as "extras," but rather as very essential to maintaining and indeed enhancing the salability of their communities to business and commerce. Even the City of Houston, Texas, long proud of its laissez faire attitude toward growth and development, and famous for the absence of zoning, has begun to become worried about how its physical appearance influences its economic health. As reported recently:

> Civic leaders who a few years ago were busy riding the development boom now confess that the city, still lacking any zoning laws, is at a competitive disadvantage in the midst of the oil patch recession. Its problem is one of perceptions. As one developer says from his new perch atop the growth control wagon, 'A businessman from outside Houston flies in, looks around and says this city looks like trash. Its like having guests and you've got garbage on the lawn.'
>
> Houston, the nation's fourth largest city, is not lacking in beautiful neighborhoods and snazzy corporate centers. But its failure to

> regulate growth has allowed its civic gateways to be subsumed in a tidal wave of ugly clutter. Billboards, a pennant-bedecked car lot, fast food joints and gas stations form the gauntlet that a visitor must run. Just driving into town from the airport is enough to make someone pity the full-time residents, rather than envy them.
>
> So what is the city doing to cure its hangover? Some of the biggest local boosters are kicking in 7.5 million dollars to begin a cleanup, starting with the airport roads. The boosters have made the connection between good appearance and good business (Raleigh News and Observer, June 24, 1987)

Communities are also concerned about obscuring views of important cultural and historic landmarks. Austin, Texas, for instance has enacted a Capital View Protection Overlay Zone as part of its zoning ordinance. This provision, following a study of important views of the capitol, from prominent points around the city, place height restrictions on buildings in designated view corridors. The Texas capitol building is the largest of the state capitols, is a foot taller than the United States Capitol building, and represents an important symbolic landmark in the City. For those property owners restricted by the ordinance, a transfer of development rights component allows them to transfer some of the unused density to other sites outside the capital view corridors. Similar provisions have been adopted by the City of Lincoln, Nebraska, and Denver, Colorado, to protect views of their capital buildings. (The Denver Capitol View Protection restrictions are discussed in the Denver case study in Volume II.)

Visual concerns have also been elevated at the national level in recent years, perhaps most notably in the Port America controversy in Washington, D.C.. Here, a fifty-four story trade tower was planned on the outskirts of the city (in Prince George's County, Maryland) (Forgery, 1986). Many feared this would serve to dwarf the city, which has imposed stringent building height limits since its early beginnings, as well as upstage the U.S. Capitol and other important national monuments. In response Senator Alan Cranston

(D-California) introduced a bill, the Nation's Capital Preservation Act, which would have placed severe economic sanctions on excessively high structures within designated sensitive visual zones (specifically, a $1 million per foot surcharge). The Port American project has recently been resolved in favor of two lower towers, and the Cranston bill has never been enacted.

Another recent federal effort in the visual management area, this one focused more on the natural environment, was the passage in 1986 of the Columbia River Gorge National Scenic Area Act (PL 99-663). This is a somewhat new model for federal involvement. The act created a bi-state commission with responsibility for developing a management plan and for passing on all local plans and implementing ordinances to ensure their consistency with the plan. Also, the U.S. Forest Service is charged with managing development and forest management practices in certain special management practices. While there are a number of stated objectives of the bill it is clear that preventing the loss of the incredible aesthetic beauty of the gorge is primary among them.

Another expression of concern about the aesthetics of growth relates to issues of urban design. Increasingly, it seems, growth is being held to high design standards. Larger cities are increasingly demanding that highrise buildings and development not be ugly and not damage the quality of other urban amenities through the development process. San Francisco has perhaps gone the furthest on this topic with the adoption in 1985 of its Downtown Plan. Concerned about the "Manhattanization" of San Francisco, the plan, among other things, places an annual cap on the quantity of downtown office development, reduces the permissible height of downtown structures (from 700 to 550 feet), and now requires tapered structures with "designer tops" (as opposed to flat rooftops). Many have criticized the new design standards as nothing more than a beauty contest (Myers, 1986). A November 1986 referendum

(Proposition M) further reduced the quantity of permissible office space that can be built downtown (to 450,000 square feet per year). (The text of Proposition M has been included in the Technical Appendix.) Through the Downtown Plan highrise growth has also been reoriented to minimize its impact on surrounding neighborhoods and views of the San Francisco Bay (Shaffer, 1985). In addition, the plan calls for the preservation of 250 historic buildings in the downtown. Boston has considered a similar plan for its downtown (Guenther, 1986).

The San Francisco experience is indicative of a trend toward the use of design review processes. The use of design review boards is an increasingly popular institutional approach to these types of visual issues, and they can be found in communities of almost all sizes (Zotti, 1987). Along with San Francisco, among the other noted examples of design review boards: New Orleans's Vieux Carre Commission, Cleveland's Fine Arts Advisory Committee, San Antonio's River Walk Advisory Commission, Washington D.C.'s Fine Arts Commission, and Boston's new Civic Design Commission. Such review bodies may or may not have specific design review standards or guidelines, and where they do exist they may vary in how well defined they are. Portland, Oregon's, for instance, are generally believed to be some of the more specific, reducing the uncertainty many builders have in responding to design standards. The Portland Standards, adopted in 1980, are intended to implement goals established in its Downtown Plan. Twenty general standards have been adopted and are used by the city addressing a spectrum of urban design issues, including the ration of open space to buildings, protecting existing pathway systems and pedestrian right-of-ways, protecting or reinforcing the special identifier of urban sub-areas, reinforcing the sense of gateway or entrance at bridgeheads, reinforcing intersections at activity areas, the provision of

features which connect interior activity of building with the street, and the provision of adequate places for people to stop or slow down, among others. There are also additional standards for special districts in the city (e.g., Broadway Street, Chinatown). For each standard, a series of examples are provided which illustrate how the standard has been or could be satisfied (City of Portland, 1983). These standards are included in the Technical Appendix (Volume III).

Restrictions on roadside billboards and commercial strip development have become common in recent years. In North Carolina, for instance, the City of Raleigh and the Town of Nags Head have stringent billboard restrictions. The land development codes of the Town of Hilton Head, South Carolina, and Medford Township, New Jersey (communities which are both described further in the case study volume) have stringent sign regulations.

B. Protecting Historic and Cultural Resources

Perhaps already evident, much of the rationale behind the protection of visual amenities is based on local desires to protect historic and cultural resources. Several of the communities studied and described in the case studies are good examples. The Town of Breckenridge, Colorado, an 1860's gold mining town, exhibits architecture from three different historic periods. Its charm and flavor derive in large degree from its history and clearly this is a major reason many tourists and skiers are attracted to the community. As described in Volume II, the town has taken substantial efforts to build upon and enhance these historic resources. Protecting the integrity of the historic district is specifically incorporating into the town's development standards and point system. As well, a separate historic commission has control over construction and renovation within the district, implementing

specific design standards. Among other things, the standards prevent modern buildings which attempt to "imitate" historic architecture. These standards have been included in their entirety in Volume III, the Technical Appendix. These provisions to protect the historic resources are not viewed in isolation of the need to protect other visual amenities. The Breckenridge program seeks as well to protect open space and views of the surrounding mountains, also important to the flavor and feel of the town.

Another community examined in the case studies is the City of Cannon Beach, Oregon. A coastal community nestled in the midst of incredible scenic beauty, the town has developed as an artist colony. Its efforts at protecting the "character" of the community center around maintaining this focus on art as well as maintaining the high quality of the natural environment. For Cannon Beach residents, developing in a non-commercialized way is important. As a consequence, they have also instituted a design review process for all development other than single-family detached units. Proposed developments must be reviewed by a Special Design Review Board, and must be consistent with adopted design standards. In an effort to keep the town from becoming commercialized, all "formula-food" restaurants (fast-food) are prohibited through the town's zoning ordinance.

The Town of Manteo, North Carolina, described in the case study volume, has also attempted to capitalize on its historic heritage. As the site of the first English colony in the New World, the town has much to boast about. Its land use plan and development regulations are intended to respect this history and indeed enhance it. Other communities studied, including Ft. Collins (Colorado), Nags Head (North Carolina), Eugene (Oregon), and Austin (Texas), among others, have sought to build upon their historic and cultural heritage. Protecting these elements of community character is usually seen by community

leaders as making good economic sense (i.e., promoting tourism, sense of local pride, enhancing community attractiveness).

C. Preserving Farmland and Open Space

Many growth management programs center around, or have as a major component, the acquisition of open space lands and the protection of farmland and other productive resource land. Often where land or interests in land are acquired, this acquisition is intended to serve multiple objectives. Acquisition of rights in farmland may be intended to protect these areas for their agricultural productivity but also typically because farmland represents an important and valued form of open space. Open space programs may, of course, serve natural and scenic lands that are not being protected for agricultural potential. Moreover many of these open space acquisition programs are, of course, the result of the increasing importance of aesthetic and visual quality (mentioned above). In any event, for purposes of practicality, we will tend to talk about open space and farmland preservation together.

A number of interesting and innovative open space acquisition programs have been developed in recent years. Increasingly localities appear committed to protecting, in some fashion, the open space and natural amenities so important to local quality of life. Moreover, localities, as well as states are exploring new and progressive ways to fund and implement such acquisition/preservation programs. Creation of the Nantucket Land Bank has been one of the more innovative and successful open space acquisition programs in recent years. Created in 1983 through a special act of the Massachusetts legislature, the land bank acquires land through funds collected from a 2% land transfer tax. Given the booming and speculative nature of the land

market on Nantucket Island, the amount of money raised through the transfer tax is incredible, now approaching some $80,000 per week. As of July 1986, the Bank had raised over $6 million from about 3,000 real estate transfers (Klein, 1986, p. 12). These monies have then been used by the Land Bank as leverage to float tax-free bonds. The Bank is governed by a five-member commission elected locally. The Bank has been given wide-ranging powers, including the power to acquire land through eminent domain. (The Massachusetts legislation creating the Nantucket Land Bank is included in the technical appendix, Volume III.) To many the experience of Nantucket is too unique to be very useful to the rest of the county, however. For one thing it is an island where the physical scarcity of its resources are especially apparent. Moreover, the level of real estate transactions is very high; a necessary feature to make such a transfer tax work. As well, there is the popular image of Nantucket as an exclusive upper-income resort, with a history of concern about conservation, historic preservation and architectural standards (Phillips, 1985). Yet, the concern felt by Nantucket residents and visitors about protecting the quality of this environment is, as we have seen, present in many locales, and increasingly common. The Nantucket strategy may well prove effective in other perhaps dissimilar localities.

Other communities are similarly using real estate transfer taxes. The Town of Little Compton and New Shoreham, Rhode Island, for instance, are implementing such a program. The 1985 Rhode Island Legislation creating the Little Compton Agricultural Conservancy Trust is included in the Technical Appendix (Volume III).

There has been a substantial increase, we believe, in the acceptance of the technique of acquiring less-than-fee-simple interests in open space and resource lands. One of the most successful of these programs has been the

King County, Washington, development rights purchase program. This program has acquired development rights to 12,650 acres of farmland (personal communication with Leroy A. Jones June 5, 1987). The program was funded through a voter-approved $50 million bond package in 1979. King County's farmland ordinance, also enacted in 1979, established detailed areas where acquisition of development rights could take place (in a series of maps serving as an appendix to the ordinance) and a set of priorities for the selection of farmlands. Acquisition occurred in several rounds over the course of an eight-year period. The county has just this year completed its development rights acquisition. County officials indicate that they feel the program has been a tremendous success, creating critical masses of preserved farmland and open space, and acquiring a large portion of lands identified as especially critical in early county studies. (A more detailed case study of the King County program is provided in Volume II, the case study report).

There have been other uses of the PDR as well. Perhaps the oldest example is that of Suffolk County, Long Island. There, again fueled by concerns about the loss of prime farmland and open space in the face of rapid suburbanization, they have acquired several thousand acres of rights. Several states have initiated statewide PDR programs, including Maryland, New Jersey and Connecticut (see Kwong, 1987). Forsyth County, North Carolina has recently initiated a PDR program to protect farmland, and has by the first of July completed four purchase transactions (Farmland Notes, 1987).

While a number of localities are moving toward acquisition as an effective approach to preserving agricultural and open land, regulatory approaches remain common. Under Oregon's Senate Bill 100, for example, all counties must place farmland of a certain quality (SCS Classes I through IV west of the Cascades, Class I through VI east of the Cascades) in Exclusive

Farm Use (EFU) zones and may not permit parcel sizes in these zones to fall below what is necessary for a commercially-viable farm unit (Beatley, 1984). This usually means the adoption of minimum lot sizes that may be quite large in some parts of the states (particularly in the east). Many communities across the country continue to rely on traditional zoning to protect farmland and open space, particularly large lot provisions. A number of Townships in New Jersey use this management technique, for example, including Plainsboro, Cransbury, Colts Neck, Franklin and Bethlehem Townships (personal communication). Perhaps one of the most successful large-lot agricultural programs is that of Napa County, California. It requires minimum lot sizes, for instance, of 40 acres in its Napa Valley Vineyards. This county has received tremendous growth pressures from the rapidly-growing San Francisco Bay Areas, and county officials feel that its large lot provisions, along with its annual growth caps, have done much to dissuade development in productive agricultural areas of the county (see the case study description in Volume II).

Some localities have sought to use the incentive of greater development density to encourage farmland and open space preservation. Boulder County, Colorado, for instance, has established special non-urban PUD (Planned Unit Development) provisions which provide greater density in exchange for a commitment to keep a certain percentage of the land in open space/farmland use in perpetuity. Specifically, in most rural zoning districts in the county the maximum permissible density is one dwelling unit per thirty-five acres. However, under the non-urban PUD provisions this density can be increased to two units per thirty-five acres (plus one pre-existing homestead unit) where the developer or landowner agrees to place the new structures on 25% of the PUD parcel, and agrees to enter into an easement to maintain the other 75% in

open space and agricultural uses. (See the Boulder City/County Case Study in Volume II.) The use of transferable development rights (TDR) to protect open space and farmland is increasingly common. This technique has been heavily use, for example, in Montgomery County, Maryland. (TDR is increasingly used to accomplish an array of growth management objectives; see case studies of Medford Township, New Jersey and Denver, Colorado contained in Volume II.)

One of the aspects of Oregon's farmland preservation program which makes it unique is the way in which it ties regulatory requirements to a specific definition of farmland productivity -- namely the SCS soil classes. In a similar direction, a number of local governments around the county have adopted farmland protection provisions based on the DOA's new LESA system--or, Land Evaluation and Site Assessment. Among these communities are such places as Clarke County, Virginia, and Linn County, Oregon.

D. Growth Management and the Natural Environment: Protecting Sensitive Areas and Mitigating Natural Hazards

Growth management programs are increasingly concerned with protecting the natural environment. The nature of this concern ranges from managing growth to reducing air pollution, to guarding against groundwater contamination, and to protecting sensitive habitat such as wetlands and coastal beaches and dunes. Groundwater, and the ways in which urban development influences its quality, have been receiving substantially greater attention in recent years. Communities such as Duxbury, Massachusetts, San Antonio and Austin, Texas and Suffolk County, New York are currently or are considering development regulations designed to restrict groundwater contamination (e.g., Celis, 1987)

Several New Jersey localities, including Hillsborough, Montgomery and East Arwell, have downzoned certain portions of their localities to protect groundwater resources. The Town of South Kingstown, Rhode Island, has enacted

a special rural low density five-acre minimum zone to protect its groundwater. The New Castle County, Delaware, Water Resources Agency has recently proposed prohibiting future development in certain important recharge areas, including sand and gravel areas (Pummer, 1987). Middletown, Rhode Island uses a special aquifer protection overlay. Nantuckett, Massachusetts, has similarly stringent groundwater protection provisions. As these examples indicate, groundwater protection has clearly been elevated to a growth management issue of substantial concern.

A number of localities have placed the protection of natural ecosystems and habitats at the center of their growth management efforts. The Sanibel, Florida, local use plan and land development provisions are explicitly based on the carrying capacity of that island's natural systems. Medford, New Jersey, implements a similar plan where the suitability of future development has been determined through the consideration of a range of natural characteristics, including geology, soils, vegetation, and visual quality. Their land use regulations and extensive performance and design standards are explicitly tied to the presence of these environmental constraints.

Development must increasingly satisfy stringent environmental performance standards. The case studies of Breckenridge and Fort Collins (Colorado), Hilton Head (South Carolina), Medford Township (New Jersey), Martin County (Florida), and Boulder (Colorado), are illustrative. In Boulder, for instance, all new development must achieve a certain minimum level of resource conservation (e.g., achieved through use of such things as orientation of buildings to take advantage of solar energy, use of water-efficient toilets, etc.). The development point systems used in Breckenridge and Ft. Collins, Colorado (described later in this paper as well as in the case studies volume), strongly incorporate environmental protection. For instance, under

the Breckenridge system development designs which incorporate a large number of fireplaces (e.g., one per unit), and thus contribute to the significant air quality problems of the region, are strongly penalized. A number of localities have adopted solar access ordinances, including Eugene, Oregon. (The Eugene Ordinance is discussed in Volume II case studies and included in its entirety in the Technical Appendix, Volume III.)

Communities are increasingly aware of the sensitive ecological habitats within their boundaries and are attempting to control growth to minimize impacts on these areas. Beaverton and Cannon Beach, Oregon, are examples of relatively developed areas which have recently taken efforts to protect the remaining wetlands within their boundaries. Beaverton, a suburb of Portland, has conducted an extensive review of its natural resources, resulting in the designation of sensitive environmental areas where special development restrictions apply (City of Beaverton, 1984). King County, Washington, has recently completed a similar assessment of natural habitats, and has already taken some efforts to protect their areas (e.g., acquisition of Cougar Mountain) (see King County, 1987). The Town of Nags Head, North Carolina, has taken special action to minimize the impact of development on a nature preserve -- The Nags Head Woods (these efforts are described in the Nags Head case study).

Much progress at the local level is, of course, a response to increasingly stringent state requirements. State coastal management programs, which are themselves largely stimulated by federal legislation (i.e., the Coastal Zone Management Act), have encouraged substantial local efforts at protecting natural resources. Arundel County, Maryland, for example, has adopted a strong shoreline management plan in response to the requirements of Maryland's Chesapeake Bay Critical Areas Program. As a further example, king

County has developed strong shoreline policies as a result of requirements under Washington States' Shoreline Management Program.

Incorporation of natural hazards in the management of land use and growth has been increasingly common. Restricting the quantity or type of development in high hazard flood areas is perhaps the most widespread of these management activities, spurred in part through the requirements of the National Flood Insurance Program. In coastal communities, development is typically required to setback a certain distance, often a considerable one, from the ocean. The Town of Nags Head, North Carolina, for instance, has made the mitigation of coastal hazards a major component of its growth management system and a number of implementing actions have either been taken or being considered to make future patterns of growth less vulnerable. The Nags Head program is described in greater detail in the case studies report (Volume II). The states of North Carolina and Florida now requires their coastal localities to prepare hurricane mitigation and disaster reconstruction plans as part of their normal land use planning requirements (see Brower, Godschalk and Beatley, 1986).

Localities which contain mountainous, high-slope areas have increasingly taken efforts to control growth in these areas to prevent slides and slope failure. Hazard reduction strategies can include reductions in the permissible density of development on high slopes, such as in the case of San Mateo County, California, which restricts the density of residential development in high slope - instability zones to one unit per forty acres (Kockelman, 1986). Or, many localities permit development in these hazardous high-slope areas but impose certain engineering requirements on it. The foothills ordinance in Boise, Idaho, for example, imposes special requirements on all proposed construction on slopes of 15% or greater, including the preparation of detailed grading and drainage plans. Development must adhere

to detailed hillside development standards, addressing, among other things, grading and vegetation, drainage controls, and roadways and circulation. (The Boise Ordinance is included in Volume III, the Technical Appendix). Benton County, Washington, developed detailed hillside development standards which are used to condition the issuance of special use permits in hillside areas (personal communication, June 9, 1987). Scottsdale, Arizona, has also adopted special regulations for development in its district. Similarly, some California communities have also taken actions to restrict growth in proximity to earthquake fault zones, as well as to require special seismic design standards for new structures in such high hazard areas (Brown and Kockelman, 1985).

E. Making Growth Pay Its Way

While for decades it has been quite common for localities to require the dedication for land, or fees in lieu of dedication, as a condition of subdivision or development approval, (as well as requirement that certain facilities be installed), the idea that growth and development should pay its own way has become especially popular in recent years. Increasingly, developers are being required to assume a much larger portion of the costs of growth, covering a wider range of public facilities and services from road construction to police and fire protection to the provision of libraries. Increasingly, developers are being required to assume a large portion of the "off-site" facility costs associated with their projects.

The extent to which this trend of making growth pay its own way is evident varies by state and region, as does the precise technique employed. Perhaps the most popular new technique to accomplish these objectives is the impact fee, used extensively by localities in California and Florida (Kirlin

and Kirlin, 1982; McKay, 1986; Snyder and Stegman, 1986). Indeed, Florida's innovative 1985 growth management package explicitly encourages localities to use impact fees (Bosselman and Stroud, 1985). A January 1986 survey of cities and counties in Florida found that fifteen of its sixty-seven counties and sixty-two of its ninety-eight counties were currently using impact fees to help pay for growth (Miller and Lines, 1986). The survey indicated, as well, that some twenty additional localities had impact fee ordinances or were considering the adoption of such fees. While the use of such techniques were pioneered in Florida and California they are becoming increasingly common, from Colorado to North Carolina. We found impact fees to be used extensively in Oregon and Washington, for instance, although they tended to be called different names, often "systems development charges."

The range of services and facilities for which new growth is expected to pay has been expanding. Martin County, Florida, for example, now has a Beach Impact Fee Ordinance which collects funds to pay for the acquisition of recreational beachlands (see case studies, Volume II). Commonly such fees are used to pay for the contribution of water and sewer improvements, the construction of roads, parks and recreational facilities, police and fire protection, and schools. The percentage of the total costs created by new development which are assessed through impact fees, and actual size of the fee, varies across the country, with some approaching 100%. These fees are increasingly quite large. The impact fees in Fairfield, California, are as high as $15,000 for example (Vesey, 1987).

Special units of local government, such as school districts, can also be given impact fee authority. A relatively new law in California now permits school districts there to directly charge new residential and commercial development a square-footage based school impact fee (Billiter, 1987). The

fee is not permitted to exceed $1.50 per square foot for new residences and $.25 per square foot for commercial structures. The Los Angeles Unified School District, the largest system in the state, adopted these new provisions soon after passage of the state law.

Partly in response to the legal requirements that a "rational nexus" between growth and the service demands created by it be established, localities are increasingly estimating and predicting the likely impacts of growth through sophisticated, usually computer-based impact models. Broward County, Florida's "TRIPS" (standing for "Traffic Review and Impact Planning System) system is illustrative. Here the county charges road impact fees which are directly related to the new street and traffic impacts of a project as predicted by the computer model (see Knack, 1984). Washington County, Oregon and Austin, Texas have been developing similar traffic impact models to use in assessing the effects of new development proposals and in calculating development fees (personal communications).

Increasingly larger cities are holding downtown development projects, particularly highrise-office development, more accountable for the social impacts such developments have on the broader community. San Francisco has perhaps been the leader in this area. For years residents of this city have been concerned with the effects of dramatic increases in the growth of downtown office buildings, and has for sometime required office development to contribute to a housing trust fund used to fund affordable housing units (the San Francisco linkage requirements are included in the Technical Appendix). In July of 1985 the city adopted its hotly debated "Downtown Plan," which added new requirements. The plan seeks to address the negative impacts of rapid office development in a number of ways (as discussed earlier). First, it placed a 950,000 square foot annual cap on new downtown development through

1988 (annual office space creation since 1979 has been about 3.5 million square foot), guiding development away from the city's financial district (Rubin, 1985). As mentioned earlier, Proposition "M", passed by voters in the fall of 1986, further reduces the annual office development permitted in the city. As well, the plan places new height restrictions on downtown buildings.

In addition to required contributions to the city's housing fund, new downtown development must also contribute to a transit fund, and perhaps for the first time in any major city, new employers must provide for child-care facilities. The child care provision applies to all buildings of 50,000 square feet or greater. Such development must either contribute on-site child care facilities or contribute to a city child care fund at the rate of $1 per square foot. Increasingly, new development is being required to mitigate the broader societal effects of its locational decisions. To many this is an issue of equity. It is the new office development that indeed creates these problems, it is argued (e.g., traffic congestion, need for housing for new workers, etc.), and thus they should be required to contribute in a major way to their resolution. As San Francisco residents recently noted, "These developers are getting a lot out of this city, so it's only right that they put something back in." (Myers, 1986). While San Francisco's impact provisions are perhaps the most far-reaching nationally, this may well be the direction that other cities take in the future. (Excerpts from the San Francisco linkage provisions are included in Volume III, the Technical Appendix.) Shortly after San Francisco created its child-care requirements, for instance, the City of Concord, California, passed similar provisions.

The concept of "Linkage" -- that is linking approval of urban development to the provision of certain urban services and facilities -- has increasingly become standard practice. Most other cities with linkage programs usually

address a much narrower scope of issues than in the case of San Francisco. The most common linkage requirement is for affordable housing. The City of Boston has, since 1983, assessed new commercial development an affordable housing fee imposed at a rate of $5 per square foot for all square footage in excess of 100,000. These monies are placed in a Neighborhood Housing Trust Fund to be used in the creation or renovation of low and moderate income housing (Metropolitan Area Planning Council, 1986). The city has also considered imposing an additional fee to pay for the provision of job training programs. Other notable linkage programs have been established in Santa Monica and Palo Alto (CA), Chicago, and Washington, D.C. (Keating, 1986).

F. Affordable Housing

As the preceding discussion of impact fees and linkage programs indicates, there is a strong concern on the parts of many communities that urban growth should be accompanied by, and indeed should promote, affordable housing. A number of communities have been implementing inclusionary housing programs, typically as a part of their land use regulatory mechanisms. Often developers are asked to satisfy certain low and moderate income housing requirements when they seek zoning changes which would permit higher development densities. The most common type of requirements is that a certain number of units be "set-aside" for low and moderate income families. In Newton, Massachusetts, for instance, developers who seek to increase permissible residential density must either agree to set-aside 10% of their dwelling units for low income or elderly citizens, or provide for these units in some other way (i.e., through a cash payment, or provision on a different site) (Metropolitan Area Planning Council, 1986).

In Boulder, Colorado, affordable housing was originally a part of its development point system, creating an incentive for the provision of

affordable housing. This incentive has since been replaced by a mandatory performance standard that all new development must satisfy. These requirements vary depending upon when the particular land in question was annexed to the city. For residential projects proposed for land which was annexed on or after December, 1973, at least 15% of the units must be for moderate-income residents, or 7.5% for low-income residents. For projects proposed on sites which were annexed before December, 1973, the percentage requirement drops to 10% for moderate income units or 5% for low-income units.

Other examples of affordable housing provisions are also included in the case studies in Volume II. The Town of Hilton Head, South Carolina, for instance, has a special affordable housing overlay zone. These provisions allow for density bonuses for projects which incorporate low and moderate income units. The Fort Collins, Colorado, point system (also described in Volume II) provides additional density bonuses, as well, for the provision of affordable housing. The Breckenridge point system subtracts points for proposed developments which do not provide a sufficient amount of employee housing (and adds points for greater provision of such units; see Volume II). Napa County, California, as a further example, sets aside a certain number of its annual allowable development permits for affordable housing (see Volume II).

Some communities have been concerned about the loss of affordable housing through the conversion of rental units to condominiums. The City of Eugene, Oregon, has enacted a fairly stringent ordinance placing restrictions on such conversions. A would-be condominium converter is required, among other things, to find the tenant comparable housing elsewhere (or provide a lifetime tenancy), and to provide certain moving expenses. This ordinance is described

in the Eugene case study contained in Volume II, and the text of the ordinance is included in the Technical Appendix.

G. Sharing in the Profits of Growth and Development

While not in wide use, some localities have sought to tap into the profits of growth-related development through equity sharing agreements. This may well be a new fiscal trend in the growth management area. Communities in California, in particular, have been experimenting with this form of growth management. Cities such as Fontana, Fairfield, Monrovia and Duarte have entered into equity agreements with private developers which secure for the communities a certain agreed-upon percentage of the resulting net profits. The City of Monrovia, for instance, has become a partner in the development of a shopping center. Through the Monrovia Redevelopment Agency the city acquired and prepared the land for development. The land on which the shopping site was sold to the developer, and the parking lot land leased to the developer for a thirty-year period. In exchange the city will receive 17% of the shopping centers annual net income for the life of the project. The City of Duarte, on the other hand, is involved in the development of a five-story commercial condominium building, while Fairfield is also involved in the development of a shopping center.

III. New Approaches to Citizen Involvement in Growth Management/ New Decision Processes

John Naisbitt in his book Megatrends argues that the U.S. is experiencing a "massive shift from a representative to a participatory democracy" (1982, p. 160). One indication of this shift is the tremendous increase in the use of "ballot box measures," that is citizen initiatives and public referenda, to decide a wide range of public issues. Growth issues are increasingly being

decided at the local level through such approaches. Ormon (1984), for instance, has counted some fifty growth management related ballot box measures in California in the last decade, and predicts their use will increase. Using such measures, a host of growth management objectives have been pursued from the setting of annual rates of growth for a locality, to establishing minimum lot sizes for agricultural lands.

Several recent ballot box measures are illustrative of ways this direct-democracy technique is being used to effect growth management outcomes. In November 1985, the voters in San Diego passed "Proposition A", placing some 52,000 acres of farmland on the city's northern fringe in a "future urbanizing" zone and restricting for a ten-year period the ability of the city to modify the zoning to allow more extensive development than the low-density permitted. Rezoning of these lands to permit more intensive development will require voter approval (Colburn, 1986; Stein, 1986). One of the most extensive growth management programs created through ballot box measures is Santa Cruz County's (CA), created through "Measure J," approved by voters in 1978 (Stein, 1986). It placed a 2% annual cap on population growth and required 15% of the new housing in the county to be affordable (see below). As mentioned earlier, "Proposition M", passed by San Francisco residents in November, 1986, is another example. Here citizens and slow-growth advocates found the annual cap placed on office development established in the new downtown plan as too permissive -- The proposition reduces this cap from 950,000 square feet per year to 450,000 square feet per year. Residents of Portland, Maine, passed a referendum restricting the types of development permitted along its shoreline.

The recent passage of "Proposition U" in Los Angeles -- the so-called "slow-growth initiative" -- is a further example. This proposition, carrying

a 2 to 1 margin of victory, places substantial restrictions on the intensity of commercial development permitted in that city. Specifically, the initiative cuts in half the size of buildings on some 70% of the land in the city zoned for commercial or industrial uses. Supporters of the proposition have heralded the victory as an example of citizens' unhappy with the way their city was growing, and the side effects of that growth, wresting control away from the powers that be. As one councilman who co-authored the measure noted following the victory, "People no longer want the destiny of their city to be determined by large developers and their paid lobbyists." (Connell, 1986)

There are mixed reactions to the increasing use of ballot box measures to decide growth policy. While many argue that this is a healthy trend, placing many growth-related decisions back in the hands of those that are really affected then, others are more apprehensive about the benefits of such a trend. Some argue that many growth issues are simply too complex to be decided through a direct vote -- rather, careful thought and deliberation is required and that these decisions should remain with elected representatives. Others argue that such ballot box measures can result in the expenditure of large sums of money. It has been reported, for instance, that supporters of Proposition U in Los Angeles spent some $300,000 in campaigning for the measure. Others fear that the rights and interests of minorities and the poor will be trampled over in this pursuit of popular government.

Nevertheless, it appears that ballot-box growth management is a trend that will be with us for some time. While the examples above call for specific actions, some localities have created legislative arrangements where virtually all growth issues, or certain categories of growth issues, must be put before the public. The City of Corvallis, Oregon is an example. Here, as

a result itself of a referendum, all future annexations in the city must be approved by popular vote. Because virtually any new growth in the city must be annexed (i.e., to obtain public facilities) this provides the public with relatively complete popular control over development. The requirement has amounted to a project-by-project public vote, with relatively small projects gaining easy approval, and larger projects being suspect. This arrangement has not prevented the city's growth, but appears to discourage large increments of growth (personal interview, April, 1987).

Another aspect in this trend of citizen involvement involves the creation of new processes by which citizens are actively involved in the preparation of a comprehensive plan or growth management program. Austin, Texas has embarked on a massive community participation program in which citizens and community leaders have actually been given the bulk of the responsibility, aided by planning staff, for developing the city's new plan. The process, called "Austinplan," is overseen by an 87-member steering committee. In appointing citizens to the steering committee, a conscious attempt was made to ensure representation of different interests in the community. Representatives were selected from real estate and land development, environmental groups, different neighborhoods in the city, business and finance, and ethnic minorities, among others. The intent was both to create a representative body and one which would impart substantial political credibility to the final plan and implementing program. In addition to the steering committee, fourteen task groups have been formed to address a wide range of substantive planning and growth-related issues from transportation to the environment to health services. Planning for specific geographical areas in the city is also taking place concurrently through Austinplan's sectoral plans. Through these participating mechanisms extraordinary dialogue has occurred on growth issues.

Consensus is the explicit guiding principle in the process, with volunteer facilitators assisting. Together these citizen units are moving toward the preparation of a final plan for the city, and a set of development ordinances and other strategies to implement it. A deadline of February 22, 1988 has been established for submittal of Austinplan to the City Council. Austinplan is described in greater detail in a case study contained in Volume II.

Similar democraticized citizen processes are occurring in other localities, including San Antonio, Texas and Charlotte, North Carolina. In Charlotte (Charlotte-Mecklenberg), a series of public workshops, and a day-long mini-conference on "Planning for a Livable Community," were held to promote citizen involvement. A twelve-member citizens task force was also appointed to oversee development of their new comprehensive plan and to provide a forum for citizen discussion of planning and growth issues (Crompton and Morris, 1986). Extensive citizen review preceded adoption of Charlotte's 2005 plan. The Charlotte experience is also described in detail in a case study in Volume II.

The City of Williamsburg, James City/County and York County, Virginia, in collaboration with the Williamsburg Foundation and Busch Properties (Anheiser-Busch) have recently completed a similar citizen involvement program. An initial series of growth forums were held in the fall of 1986, eliciting citizen participation through newspaper advertisements. These forums in turn led to the formation of "idea groups" addressing four different growth-related topic areas: Housing and Balanced Development, Public Service Capacity, Visual Quality and Urban Design, and Environmental and Historic Resources. These citizen groups then met for several months elaborating on and promoting their concerns in these areas. In March of 1987 a conference entitled "Perspectives on Growth" was held at the College of William and Mary in

Williamsburg at which time the idea groups presented their conclusions and recommendations for future actions. Following the conference a 21-member commission has been established to further pursue the recommendations and ideas presented. The Commission is comprised of both public officials and private citizens, an equal number from each of the three local jurisdictions. A major part of the success of this participatory process was the active role played by the Institute of Environmental Negotiation, at the University of Virginia, which both designed and staffed the meetings.

IV. Some Important Growth Guidance Strategies

A. Controlling the Rate of Growth

A number of localities around the country continue to follow the early Petaluma model of regulating the amount of urban growth that can occur in a given year. As already noted, the County of Santa Cruz, California, passed a county referendum which places a one percent annual growth rate cap on new development. A number of other California communities have adopted similar provisions, including the City of Davis and the County of Napa. The Napa Program is described in greater detail in Volume II, the case studies report. Also created by citizen referendum (Measure A), it restricts its annual growth rate to what the regional growth rate is. Their annual cap limits only residential growth, but allocates permits across four categories of residential including an "affordable" category. Unlike other annual permit caps, such as Petaluma's, there is no elaborate point system for judging between applicants. Rather, permits are issued on a first-come, first-serve basis (and the Board of County Supervisors can shift permits around between the four categories -- except that "affordable" units cannot be reduced). Where demand for development permits exceeds the supply in any given year a lottery system is employed.

Hilton Head, a resort island off the South Carolina coast, has enacted a similar annual permit restriction. Article VII of its Land Management Ordinance (LMO) establishes a development permit phasing program, establishing permit limits for a five year period (through the year 1991). The ordinance sets at 4,250 the total allocation for this five year period, of which 2,050 are to be reserved for single family units and 800 for hotel/motel units. An allocation schedule is established for each year, with priority given to single family units (when the allocation for single family units is exhausted, units from other categories can be used). The Hilton Head LMO clearly states that this allocation scheme is only meant to be temporary, and a direct function of the island's limited infrastructure capacity.

Several Colorado localities have for many years operated similar annual caps, the most notable perhaps being the City of Boulder. Boulder adopted in November, 1976, the so called "Danish Plan" which placed a maximum two percent per year cap on building permits. It also contained a detailed point system for prioritizing between different development proposals. The Danish system went out of existence in 1982 because of a sunset clause and has been replaced with several similar versions of the annual development cap. Currently, the city uses a proportional allocation system which seeks to provide development permits in proportion to the entire number of permits requested during any one allocation period. For instance, if there are only 100 permits available, and 200 are requested, then each applicant gets that proportion of the total permit pool which his or her represents with respect to the number requested. If an applicant requests 50 permits (of the 200) then he or she is entitled to one-fourth of the total pool available, or 25 development permits. Planning staff feel this represents a more equitable arrangement. The elaborate point

system that existed under the Danish plan has essentially been replaced by a series of performance standards which all projects must satisfy.

B. Urban Growth Boundaries and Delineation of Preferred Growth Areas

Many localities have taken efforts to identify areas where growth is preferred or permitted and areas where the reverse is the case. These efforts vary in their level of sophistication and the specific legal measures to implement these designations. Under the requirements of Senate Bill 100, for instance, all Oregon municipalities must establish Urban Growth Boundaries (ugb). These UGBs have the effect of sharply separating urban and "urbanizable" lands (land not yet developed but which could be developed for urban uses) from resource and rural uses. This strategy has had substantial success both in promoting more efficient patterns of growth and in preserving valuable farm and forestland (Beatley, 1987). While Oregon planning is distinct in that all municipalities must establish these urban growth parameters, there is room as well for local creativity and innovation. The City of Salem, for example, has established a phasing system within the UGB which encourages growth in those areas where it is less-costly to service it. Land within the UGB has been delineated into two broad zones: a Current Developed Area (CDA) and an Urban Growth Area (UGA). Special development provisions exist in the UGA, including requirements that development construct public facilities (streets, sewers, drainage) to "link" it with the current developed area. Also a part of the growth strategy is the provision of at least a ten-year supply of serviced land in or contiguous to the CDA. This is obviously an example as well of an attempt to shift some of the costs of growth to new development, particularly where the costs are greater because of inefficient development patterns. (The Salem program is described in the case studies report, Volume II.)

Boulder, Colorado, is employing similar growth-phasing techniques (see Volume II). The Boulder Valley Comprehensive Plan, based on a fifteen-year planning period, delineates three broad development zones. These zones are to indicate whether the city expects adequate public facilities to exist in the future and thus where urban development can occur. These zones then serve to guide the annexation and capital facilities decisions of the city. The city has defined very precisely what the level of public facilities to be considered "adequate" for urban growth, including such things as fire and police response times, and sewer and water flow standards.

Montgomery County, Maryland, a suburb of Washington, D.C., represents another example. Here, the county implements a comprehensive plan which is sometimes referred to as the "wedges and corridors" plan because it seeks to preserve open space wedges between the county's growth corridors (Christeller, 1986). A key strategy in Montgomery County is to concentrate growth in the lower part of the county, closest to Washington. Severe development restrictions are placed on farmland and open space with the ability to transfer unused development rights to designated growth areas.. While this strategy has come under recent political and legal attack in the county, it has in the past been relatively effective in protecting the county's open space areas.

C. Performance Controls and Point Systems

Over the year it has become common for localities to search for new and innovative alternatives to conventional Euclidean Zoning. These innovations often serve as the center piece of a growth management program, and become important in achieving a range of local objectives. The concept of performance controls is an increasingly popular alternative to conventional

zoning, originally exposed by Lane Kendig (1980). Largo, Florida, has adopted such a performance based land development system, replacing many of its traditional use-restrictions. The focus of the new system is largely on intensity, as Easley (1984, p. 25) describes it:

> Intensity of development is controlled through standards for floor-area ratios and impervious-surface ratios. Gone are most arbitrary side- and rear- yard setbacks, along with height limits and minimum lot dimension. Nearly 20 zoning districts were eliminated in favor of eleven land use categories on the Land Use Plan Map, five of which are residential, differing only by maximum density. Four performance districts allow the establishment of different performance standards for each district (downtown, redevelopment, management and environmental conservation.

Some localities have developed growth management systems which rely entirely or heavily on point systems to determine whether a proposed development is permissible. Ft. Collins and Breckenridge, Colorado, were two of the first communities to develop and extensively use such a system. The Ft. Collins Land Development Guidance System was enacted in 1982, and combines both performance standards and a point system. Development, depending upon the category or type (e.g. residential, industrial uses, neighborhood service center), is subject both to absolute and variable project and performance criteria. Absolute criteria are those by which the development is judged either to have satisfied them or not to have satisfied them. A project will not be approved if these standards are not satisfied. For instance, one yes-no standard applied to all development is whether all vehicular use areas, pedestrian circulation paths and exterior portions of buildings are provided with adequate security lighting (City of Ft. Collins, 1982, p. 7). The point system uses the variable criteria. For each criterion (the criteria are different for different categories of use) one to three points are assigned and then multiplied by a number expressing the local priority of that particular factor. Projects can proceed if they secure a certain percentage

(usually 50%) of the maximum points available. For residential uses there is a special density chart which establishes, based again on a point system (presented in terms of earned credit), what the permissible density of the project will be. Greater points (earned credits) are provided for projects which are, for instance, contiguous to existing development, are close to a neighborhood shopping center, close to transit stops or schools, and so on. The Fort Collins system is further described in Volume II.

The Breckenridge, Colorado, guidance system is very similar to Ft. Collins' (and indeed precedes it). (It is also described in Volume II.) It, as well, incorporates both absolute and relative performance standards. Unlike Ft. Collins, general use zones and density levels are established in advance through the land use plan, although some density bonus provisions do exist. Under the Breckenridge point system (the relative criteria) minus points can be assigned, as well as positive points, and a proposed development must obtain a final net positive score (or at least a zero score) to proceed. This allows a developer to compensate for a negative score on one criterion by doing well on other criterion and obtaining positive points (e.g., by adding certain amenities). The Ft. Collins and Breckenridge systems differ somewhat in the substantive content of the performance standards. The Breckenridge System, for instance, given its location and economy, has provisions which deal with snow removal and employee housing, which Ft. Collins system does not contain.

Hardin County, Kentucky, adopted its point system (called the "Development Guidance System or DGS) in January, 1984 (see Harned, 1984). The system replaces the numerous use categories found in typical zoning ordinances with a unified evaluation scheme. Virtually all proposed development must obtain a special use permit and is assigned points based on a number of

factors pertaining to the site (e.g., productivity of soils, access to roads, types of surrounding development) (Gordon, 1984). Automatic approval of a proposal requires the accumulation of at least 150 out of 325 possible points. Denial is automatic if a project receives fewer than 90 points, and projects receiving between 90 and 150 points are sent to the county planning commission for further review. Following approval under the point system a project must still undergo a compatibility assessment and review of its detailed development plans. The Harden County point system is included in Volume III, the Technical Appendix.

D. Functional and Geographic Refinement

Many communities are making strong efforts to translate and implement their city-wide growth management plans and strategies through various forms of "refinement." This refinement can occur geographically through neighborhood or sectoral planning, as well as functionally, through plans and planning activities which deal with particular types of facilities or development activities. Our review of local growth management efforts indicates that a number of communities are following similar refinement strategies. It is quite common for communities in Oregon to have active neighborhood planning programs, and for these neighborhood and area plans to be integrated into the larger community planning framework. The City of Eugene, for example, has a very active neighborhood planning program, and the city contains some twenty chartered neighborhood groups. Formal procedures exist in that city for informing and consulting these groups on planning and development matters. The City of Austin, Texas, also with a strong history of neighborhoods is engaged in a extensive process of area of "sectoral" planning as part of Austinplan. There are currently twenty-two sectoral councils

(which may encompass several neighborhoods) which will all eventually prepare a plan to be integrated into the larger plan being prepared for the city as a whole (see Volume II). We have found similar area planning efforts in King County, Washington, and in Snohomish County, Washington, the official county plan is in fact the combination of all area or sector plans.

Functional planning is not new, but can be of considerable importance to local growth management efforts. Cities like Eugene have developed a range of functional plans, which have substantial influence on implementation of an overall growth management strategy or plan. Included among them, for instance, are a bikeways master plan, a culture/leisure master plan, an entrance beautification study (in progress), an airport master plan, a parks and recreation master plan, a fire and emergency services plan, and a downtown housing plan, among others. King County provides similar examples.

A form of refinement planning that we have found a number of examples of are specific resource area plans. Martin County, Florida, for instance has adopted special planning and regulatory provisions for its barrier islands. Even relatively conservative Accomack County, Virginia, has recently enacted a special barrier island ordinance restricting the types of development which can occur on its barrier islands, and which places restrictions on the ways in which the natural environment can be modified (e.g. prohibits the use of snow fences). The City of Boise, Idaho, has adopted special plan and regulatory provisions governing future development along the Boise River. This plan, among other things, calls for the establishment of a continuous public greenbelt along the river (City of Boise, 1985). Similar special regulations have been adopted for Boises' hillside and foothill areas. (City of Boise, 1981).

E. Regional Approaches

In recent years, substantial attempts have been made to bring growth management to the regional level. This is often the case where the primary objective is protecting a sensitive environmental resource--a resource which has natural boundaries which exceed those of individual local jurisdictions. Recent examples are numerous. The State of Florida has implemented, since the passage of the Land and Water Management Act of 1972, it's Areas of Critical State Concern (ACSC) program. Since its inception, four Areas of Critical State Concern have been established: Big Cypress, Green Swamp, Florida Keys and Appalachicola Bay. Special management plans and land use regulations must be prepared for these areas. In addition, special resource planning and management programs (short of state designation) have been established for other sensitive regional environmental resources. Many regional programs have resulted from federal programs or legislation. The Coastal Zone Management Act of 1972, for instance, is largely responsible for North Carolina's Coastal Area Management Act (CAMA). Other examples of regional growth management includes the San Francisco Bay Conservation and Development Commission, the Maryland Chesapeake Bay Critical Areas Commission, the Columbia River Estuary Study Task Groups, the Tahoe Regional Planning Agency, The N. J. Pinelands Commission, the Puget Sound Water Quality Authority, the Connecticut River Gateway Conservation Zone, among others.

These regional growth management efforts vary substantially in their specific objectives and operational features. Some are formed voluntarily (e.g. CREST) while others are legislatively mandated (e.g. Pinelands Commission). Some have substantial direct regulatory powers (e.g. Tahoe Regional Planning Agency) while others have only advisory or coordinating authorities (e.g. Puget Sound Water Quality Authority). These regional programs vary, as well, in the geographical range of their authority, and the actual management tools explored (e.g. use of transfer of development rights, land acquisition, etc.).

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Volume II

Case Studies of Innovative Local Growth Management Programs

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Table of Contents

A. Salem, Oregon
(urban growth boundary, urban expansion and service policies)

Introduction

The City of Salem, Oregon's state capital, is located in the fertile Willamette Valley. In 1985 it contained a population of about 95,000, with some 258,000 in the Salem Metropolitan statistical area. Salem, as with the most of the state of Oregon, is highly dependent on national economic patterns and trends, particularly those which influence the lumber and woods product industry. Since the late 1970's the entire state's economy has experienced a downturn, and Salem has not been insulated. While the city has in the past experienced tremendous population growth pressures, growth in recent years has been modest. Between 1980 and 1985, for instance, the city's population grew by only about 6%, or a little over 1% per year. In the mid to late 1970s, Salem experienced rapid growth. By way of comparison, the city issued building permits for 2,153 single family and duplex units in 1977, while in 1985 it issued only permits for 212 units (single family and multi-family) (City of Salem, 1986; City of Salem, 1979). In the three year period from 1975 to 1978, the city grew by 14,000 people, or by about 18%.

Salem's strong concern with growth management developed in the earlier years of high growth. City officials describe the Salem growth management program as a good one, but one which has not been fully utilized given recent development trends. Salem was one of the first localities to embark on the Oregon-style growth management approach. It, in fact, adopted and implemented an urban growth boundary before one was actually required under the provisions of Senate Bill 100.

Components of the Growth Management System

The Salem Area Comprehensive Plan, last updated in January of 1987, provides the broad policy framework in which the growth management program operates. This document was prepared jointly by the city and Marion and Polk counties in which Salem is located. All more detailed plans must be consistent with the city's comprehensive plan. Among other things, the plan (and its land use map) establish general use and density restrictions for the city.

The comprehensive plan contains a strong goal in support of growth management. It is the goal of the city:

> To manage growth in the Salem area through cooperative efforts of the City of Salem and Marion and Polk Counties, to insure the quality of life of present and future residents of the area, and to contain urban development and to preserve adjacent farmlands by:
>
> a. Establishing and periodically reviewing an urban growth boundary to identify and separate urbanizable land from rural land while insuring sufficient amounts of urbanizable land to accommodate the population needs for the year 2000.
>
> b. Planning and developing a timely, orderly and efficient arrangement of public facilities, and services to serve as a framework for urban development. (City of Salem, 1982, p. 35.)

These goals are further elaborated upon in the plan through an extensive set of growth management policies. Among other things, these policies establish conditions under which the urban growth boundary may be changed and procedures for its periodic review. The policies state that urban development shall be encouraged first in those areas of the city where adequate public services and facilities already exist. Where new development creates substantial new service and facility costs, this development is to be required to assume an increasingly larger portion of these costs. The policies state that extension of public services must be in conformance with an adopted urban growth management program.

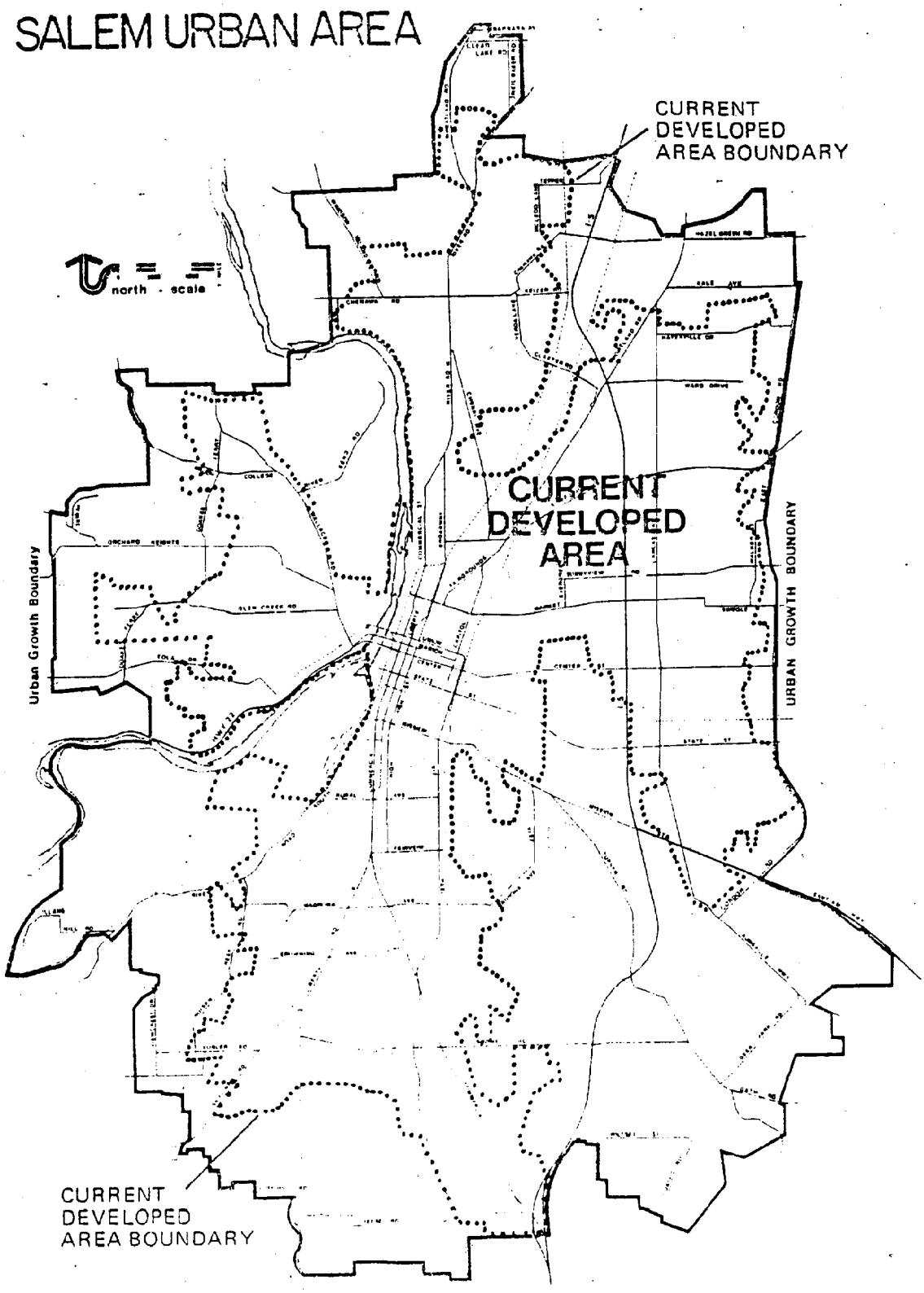

Diagram A-1

CURRENT DEVELOPED AREA (CDA)
As revised and adopted July 23, 1979, by the Salem City Council

Current Development Areas and Urban Growth Areas

Salem began developing this growth management component in 1978, again at the height of the city's development boom. The Urban Growth Management Program was formally adopted by the City Council in 1979, and later revised in 1983. The program has as its focus the encouragement of growth in areas where public services and facilities already exist. As in all Oregon municipalities the Urban Growth Boundary (UGB) plays an essential role in separating "urban" (already developed areas) and "unbanizable" (land not yet developed but which can be developed) from resource and rural lands which lie outside the UGB.

Within the UGB the city seeks to guide growth through an important distinction between areas designated as Current Developed Areas (CDA) and Urban Growth Areas (UGA). Current developed areas are defined in the Urban Growth Management Report (1979) as "...that part of the Salem urban area within which residential and commercial development essentially is complete, contiguous and in reasonably compact form..." This area includes most of the land in the corporate limits of the city (see Diagram A-1). The Urban Growth Area includes those lands outside the CDA, but within the Urban Growth Boundary. Special planning requirements are imposed on projects that are proposed in Urban Growth Areas, and a special UGA development permit must be obtained. The process for review of a UGA permit precedes subdivision review, rezoning review, and the issuance of building permits. An initial step in the process is annexation, if the parcel is not already within the city (see Diagram A-2). Industrial use are exempt from these special UGA provisions.

A number of special facility standards apply to development within the UGA, specifically dealing with street improvements, sewer and water improvements and drainage improvements. The standards for street improvements require a developer to make those street improvements necessary to "link" the

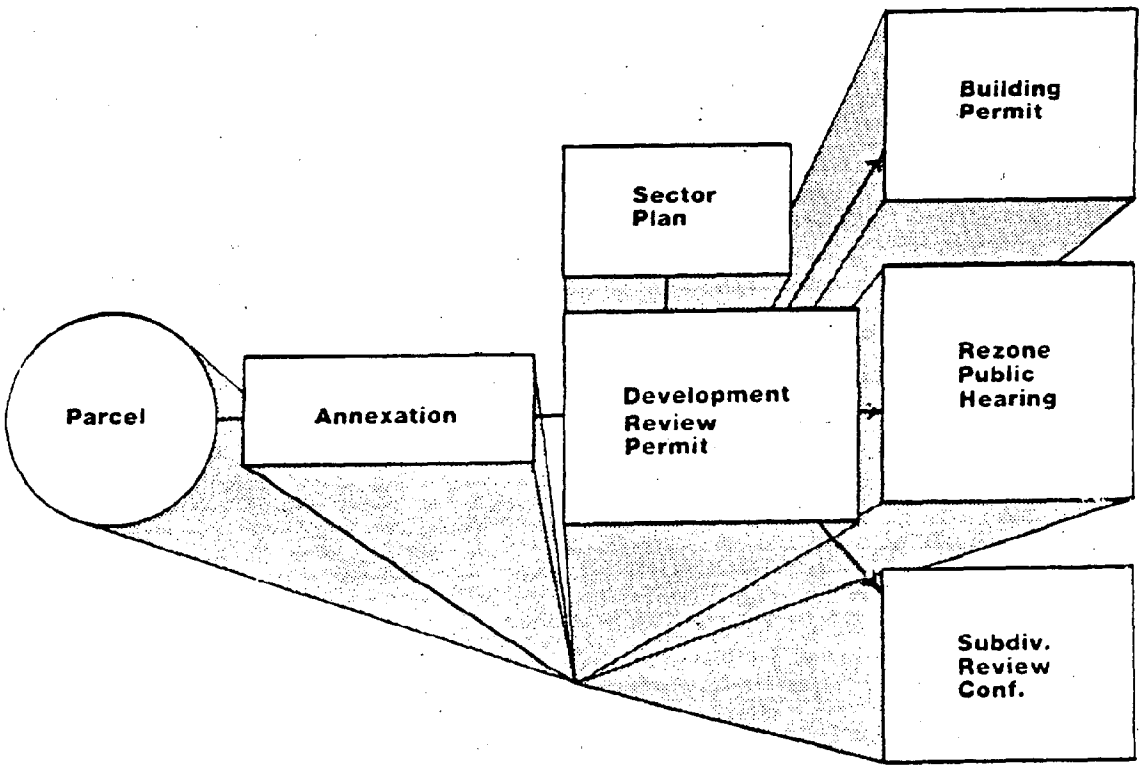

Diagram A-2

DEVELOPMENT REVIEW FOR THE URBAN GROWTH AREA

development to the CDA (see Diagram A-3). Streets must be constructed which either connect to streets at the CDA boundary or major streets which have been extended beyond the CDA boundary. Specific provisions are included in the city code which define more precisely the linking requirements. Sewer improvement standards also call for the development to be linked to the CDA. Temporary sewer facilities, such as lift stations and temporary water pump stations and reservoirs, are permitted if approved by the public works director, but must include all facilities necessary for transition to permanent facilities. Similar linking improvements are also required for water system improvements and drainage improvements.

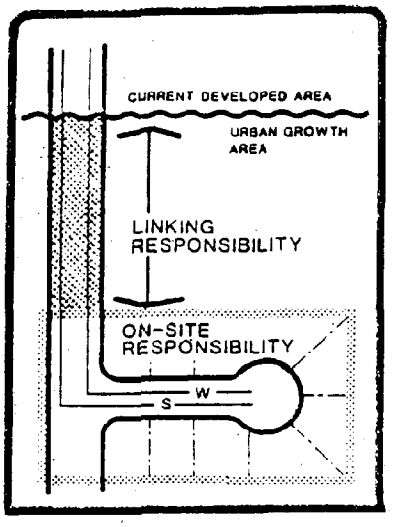

Diagram A-3

DEVELOPER RESPONSIBILITIES IN UGA

It is the developer's responsibility to pay for these linking facilities, although subsequent developments that benefit from "oversized" facility improvements are charged for their proportional share of the costs and the original developer is reimbursed. This subsequent development must occur within ten years of these investments. The recapture is usually accomplished through the use of a "prior facility charge" collected by the city. The developer is also eligible for reimbursement for projects included in the city's five-year capital improvements program. Reimbursement is only permitted in the year for which the improvement was scheduled, however.

The improvements which developers are required to make in UGA's must be consistent both with city functional plans (e.g., water distribution master plan) as well as individual sector plans. Sector plans are basically facility plans which have been prepared for different geographical segments of the UGA. These plans indicate the facilities and improvements necessary to meet the area's needs when it reaches full growth. Sector plans must be consistent with, but are more detailed than, the city's comprehensive plan and growth management program.

> The Sector plan shows the preplanned location and size, to full city standards, of major streets, sewers and water facilities, and where specific sites are known, the location of parks and fire stations. The geographical area of a sector is large enough to show a functional system of all facilities. It also shows the necessary linkages to either Currently Developed Areas (CDA) or existing facilities that accommodate operation to city standards. (City of Salem, February 1986, p. 2)

One of the key concepts of the Salem Urban Growth Management Program is to provide at least a ten-year supply of sewered, developable land at all times. Consequently, the Urban Growth Management Plan sought to identify areas generally contiguous to the CDA where future urban facility expansion would be most efficient. Considering the costs of expansion of public facilities and various natural constraints several preferred areas were

identified. Specifically, areas in the west and northeast were identified as priority expansion areas. An additional priority expansion area in south Salem has been identified as a result of several subsequent public improvements making facility extension into this area more feasible.

Other Growth Management Tools

Salem collects funds for capital improvements through the imposition of a "development tax." All development within the city is subject to the tax, which has two components: one based on the value of new structures, and a square footage-based tax on land. For all new construction in the city, the following tax is assessed, based on building permit value (Salem Statutes Chapter 41):

> One percent of the valuation for $1.00 to $999,999: two-thirds of one percent of the additional valuation from $1,000,000 to $10,000,000 and one-third of one percent of the additional value over $10,000,000.

The second component of the tax is on the size of the land parcel involved. This is computed in the following way:

> Five cents per square foot of gross land area which composes the total development site upon which development is to occur, provided that on single family residential sites the tax shall be applied only on the first one-half acre.

As well, owners of mobile home developments are required to pay a $300 per lot charge. The development tax is due at the time the building permit(s) is issued, although the developer can request deferral of payment until the building(s) is ready to receive occupancy authorization. Reconstruction of damaged structures (e.g., following a fire or flood) is exempt from the tax.

The provisions of the development tax stipulate that the proceeds can only be used for "the cost of extra capacity facilities scheduled for construction or installation as shall be provided for in the city's duly approved Capital Improvements Program, provided said revenues may be pledged

and used toward payment of principal and interest on bonds issued for the purpose of financing the extra capacity facilities" (Salem Code 41.060). These funds are placed in a special "Extra Capacity Facilities Tax Fund." Extra capacity facilities are defined in the Salem Code (41.020) as improvements which "provide increased capacity to serve new or expanded development as distinguished from replacement or restoration of facilities that have or may become worn or obsolete." The Salem City Council adopted a policy in June, 1986 which establishes several specific criteria which facilities must meet to satisfy the extra capacities requirement (City of Salem, August, 1986, p. 147):

> 1. Design should only be considered as a legitimate part of the cost of providing extra capacity if the design is part of a scheduled construction activity.
>
> 2. The construction tax/development charge improvement project can correct undersize conditions but the conditions should not be those that are easily corrected by maintenances or for safety reasons, or may otherwise be required through the development process.
>
> 3. The construction tax/development charge improvement project opens vacant land or supports development of vacant land outside the currently developed area.

There are other elements of Salem's management program which have not been discussed here. Basic land use regulations are included in the city's zoning and subdivision regulations. Additional functional plans exist but have not been described. These include the city's bicycle plan, airport master plan, and parks and recreation study, among others. As well, more specific refinement plans have been prepared for Salem's neighborhoods.

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B. King County, Washington
(Farmland and open space preservation through purchase of development rights)

Introduction

King County, located in western Washington State, and containing the City of Seattle, had a population of approximately 1.3 million in 1985. The county contains 29 municipalities, with Seattle the largest (about 490,000 in 1985). Historically, the county has relied heavily upon its resource base, specifically farming and forestry. As the county's population and the Seattle metropolitan areas have expanded, both the economic viability and scenic benefits of its farmlands have been placed in jeopardy. Since 1970, 3/4 of the population growth in the county have occurred in unincorporated areas (King County, 1986, p. 5). In 1985 alone, more than 50% of all new housing units in the county occurred in unincorporated areas. The county has been actively involved in protecting particularly important lands since the late 1970's, through what is perhaps the most successful and extensive use of the technique of purchase of development rights or "PDR."

Protecting Farmland Through Purchase of Development Rights (PDR)

King County initiated its efforts at acquiring farmland in 1978 when it sought passage of a ballot measure to issue $35 million to acquire farmland and open space. While the measure did win a simple majority it failed to gain the 60% necessary for passage. Following this defeat a citizens study was formed to "review the 1978 ballot measure, examine charged conditions and available alternatives, and present a written recommendation on the best means of preserving farmland and open space." (Farmlands Study Committee, 1978, p. 1). The study, financed by private contributions from citizens and businesses, was completed and a final ordinance recommended and forwarded to

the County Executive and County Council in May of 1979. Among other things, the study committee reviewed the efforts of Suffolk County, New York, one of the first jurisdictions to employ the PDR technique.

The study committee's report recommended putting to the vote a $50 million bond package to finance a PDR program. The study group, identified the most important farmlands in the county, placing them in their priority categories. Based on the experiences of Suffolk County, they assumed that about 50% of the owners of land would voluntarily participate in the program. Based on this estimate, $50 million would be a sufficient bond issue to cover the costs of the between 10,000 and 15,000 areas that were expected to be offered in an open selection process. An ordinance was adopted by the council in June 1979, which authorized the bond referendum and set forth the mechanical procedures for acquiring the development rights (provisions of this ordinance were further modified in an additional ordinance adopted in July of the same year).

The ordinance, largely following the recommendations of the study committee, established a three-tier priority system. First, second and third priority areas were defined (a copy of this ordinance is included in Volume III, the technical appendix) and specific maps showing delineated areas are referred to in the ordinance and attached as appendices to the ordinance. About 33,000 acres were identified in advance as being eligible for acquisition (King County, undated). First priority lands were those most threatened by urban development. The ordinance permits the county to secure both fee-simple and less-than-fee-simple interests in land. The county can acquire first priority lands using either technique, but can only acquire less-than-fee interests in second and third priority lands. Where full ownership was purchased, however, the ordinance requires the county to resell

their agricultural rights as soon as practical. Land can only be purchased which is offered voluntarily by the owner, and the county cannot pay more for the land than what it was officially appraised for. The county was authorized to make payment either in the form of a lump sum or through contract installments. Once a landowner's development right has been purchased he or she must sign a deed restriction which acts to legally restrict the use of the land to agricultural and open space uses. A copy of this deed restriction is included in the appendix.

A seven member selection committee was formed to advise the county council of acquisition decisions. Two members were to be selected from the farming community (were to have at least five years experience in the operation and management of commercial farms), two from the construction and real estate trades, and three lay persons from different parts of the county. The ordinance provided detailed directions concerning how farmlands were to be related. The county was to engage in a yearly "selection round" for a period of six years or until the bond proceeds were exhausted. Certain stipulations were placed on which lands were eligible in which selection rounds. In rounds one and two, for instance, only priority-one lands were eligible for selection.

Selection rounds were advertised in local newspapers, inviting owners of eligible lands to apply. For qualifying lands, two appraisals of the value of the development rights were required -- one appraisal of the value of full ownership of the land (without the buildings) and one appraisal just of the value of the development rights. Where funds in any given round are (were) not sufficient to purchase all lands in a given priority ranking, the following criteria were to be used in deciding which offers to accept:

1. An offer which is below appraisal shall be favored over an offer which is at appraisal;

2. An offer of development rights in land shall be favored over an offer of full ownership;

3. An offer of farmland producing in the twelve months preceding application shall be favored over an offer of land which lies fallow;

4. An offer of land which is more threatened by urban development shall be favored over an offer of land which is less threatened;

5. An offer of land which will form a contiguous farming area with other offered or acquired eligible land shall be favored over an offer of land which is separated;

6. An offer of land which will serve the dual purpose of urban separation and agricultural production shall be favored over an offer of land which will serve only one of such purposes;

7. An offer of farmlands in commercial production shall be favored over an offer of non-commercial farmlands.

Development rights purchased by the county must be held in perpetuity.

Program Success

The bond referendum passed on November 6, 1979 by 63% of the voters. Table 1 presents a summary of the land acquisition activities under the PDR program as of January 1, 1987. As the table indicates, interest in some 12,658 acres has been purchased, quite consistent with the original objective of obtaining development rights for between 10,000 and 15,000 acres. The total cost of obtaining these interests was $53.8 million, thus with an average cost of about $4,200 per acre of development rights purchased.

King County officials feel after having just completed the programs acquisition that critical masses of farmland have been protected. While initially acquisition was scattered and unconcentrated, subsequent rounds of acquisition has had the effect of filling in these areas. County officials are confident that the program has managed to protect economically viable farming areas.

Table B-1

Agriculture Program
Farmlands Preservation Program

Activities Summary
(as of January 9, 1987)

AREA	ACRES PURCHASED	NO. OF PARCELS	VALUE
ROUND 1:			
Lower Green	319.62	3	3,075,620
Upper Green	305.55	7	999,483
Sammammish	21.46	2	194,909
TOTAL	646.63	12	$ 4,270.012
ROUND 2			
Lower Green	401.14	10	5,089,423
Upper Green	330.35	12	1,185,645
Sammamish	561.87	5	7,072,172
Food Producing	165.42	4	916,393
TOTAL	1,458.78	31	$14,263,633
ROUND 3			
Lower Green	258.84	8	3,871,709
Upper Green	261.61	8	1,097,402
Sammamish	149.72	6	1,921,938
Food Producing	94.03	2	459,491
Snoqualmie	4,661.41	42	6,086,191
Enumclaw	1,902.14	43	7,232,030
County Wide	3,224.98	35	14,645,911
TOTAL	10,552.73	144	$35,314,672
PROGRAM TOTALS	12,658.14	187	$53,848,317

Source: King County Agricultural Program

References

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King County Farmlands Study Committee. 1978. Saving Farmlands and Open Space, report to the Executive and Council of King County, revised July 9, 1979.

C. Eugene, Springfield and Lane County, Oregon (Regional Growth Management)

Introduction

The planning approach of the governments in the Eugene metropolitan area is interesting in the context of the Oregon Land Use Program. As with all Oregon localities there are certain fundamental commonalities -- such as the designation of an urban growth boundary, required under Senate Bill 100.

The Eugene planning program is somewhat unique in its regional focus. The metropolitan area encompasses three distinct governmental units: the cities of Eugene and Springfield, and Lane County, each with its own powers and authorities. The metropolitan area includes a population of approximately 200,000 people, with the largest number of people residing within the boundaries of Eugene proper.

Focus on a Regional Approach to Planning and Growth Management: The Metro Plan

The regional planning focus evident in Eugene has a long history, and in fact precedes Senate Bill 100. While regional planning efforts date back to the 1950's, 1972 marks an especially important year, when the three jurisdictions joined together to adopt the "1990 regional plan," a major accomplishment to coordinate and manage the direction of development on a regional level. Later, following the establishment of the Oregon Land Use System, an update of this regional plan was initiated which ultimately resulted in the joint adoption in 1982 of the Eugene-Springfield Metropolitan Area General Plan (City of Eugene, 1986). This was the culmination of extensive work over a five-year period (1977-1982) and the result of some 250 public meetings.

Initially (1980), Eugene and Springfield adopted identical metropolitan plans, but a different version of the plan was adopted by the county. Both versions were submitted to LCDC for acknowledgement, and in 1981 LCDC identified steps that would need to be taken for the plans to be consistent with the statewide goals (Lane Council of Governments, 1982). In late 1981 and early 1982, a coordinated effort to modify the plan was made by the three jurisdictions. This function was performed primarily by the Elected Officials Coordinating Committee, consisting of two elected officials and one planning commission member (as a non-voting member) from each of the jurisdictions. The Lane Council of Governments also provided technical assistance. The City of Eugene and Lane County adopted the resulting modified Metro Plan in February of 1982, and the City of Springfield adopted the plan in March of the same year. The common plan was again submitted to LCDC and was acknowledged (for the area within the UGB) in August, 1982.

The metro plan's stated purpose is to "set forth general planning policies and land use allocations and serve as the basis for the coordinated development of programs concerning the use and conservation of physical resources, furtherance of assets, and development or redevelopment of the metropolitan area." (Lane COG 1982, p. I-1) As required under Senate Bill 100, the plan establishes an Urban Growth Boundary (UGB) -- in this case a regional UGB -- to accommodate population growth to the year 2000 (projected to be 293,700). Key components of the plan include: a fundamental principles section (putting forth the "basic concepts of the plan, including geographical growth management and a compact urban service area); specific elements (e.g., residential land use and housing, environmental resources, etc.); and a component outlying specific procedures for updating and amending the plan, as well as resolving conflicts where they may arise. In addition to the text,

the plan includes a plan diagram delineating, among other things, the urban growth boundary, different land use categories and major transportation corridors.

Chapter II of the metro plan, "Fundamental Principles," sets forth, among other things, a list of metropolitan goals and extensive policies for managing regional growth. This section of the plan makes a strong statement in support of a compact and contiguous pattern of regional growth, siting the benefits of protecting important resource lands and the greater efficiency of public services and facilities. Its regional growth strategy is stated clearly in the following passage:

> To effectively control the potential for urban sprawl and scattered urbanization, compact growth and the urban service area concepts are, and will remain, the primary growth management techniques for directing geographic patterns of urbanization in the community. In general, this means the filling in of vacant and underutilized lands, as well as redevelopment inside the urban growth boundary.
>
> Outward expansion of the projected urban service area, as defined in the glossary, will occur only when it is proven necessary according to the policies set forth in the Plan, particularly in this element (Lane COG, 1982, p. II-B-1).

Consistent with the Oregon planning framework, its policies are defended through the listing of a series of findings of fact.

More specific policy statements elaborate on this growth management approach and provide greater policy direction. The plan states the policy that urbanizable land within the urban service area will only be permitted to convert to urban uses following annexation and when it is found that a minimum level of certain key public services and facilities (e.g., public sewer, police and fire protection) can be provided "in an orderly and efficient manner." The policies in this section also identify desirable metropolitan wide density levels, and areas where additional planning studies are needed in

the future. One policy states that subsequent refinement and functional plans must be consistent with the metro plan.

The regional plan also emphasizes the importance of maintaining an adequate surplus of available undeveloped land within the UGB. This is to be accomplished through timely annexation of "urbanizable" lands and the provision of accompanying facilities. The plan suggests that the cities should strive to maintain a 6- to 10- year surplus of land (land available for development, as a subset of "urbanizable" lands). This concept is illustrated by Diagram C-1, found in the metro plan. The Santa Clara and River Road areas are specifically identified in the metro plan as efficient areas to accommodate future urban growth. One plan finding states, for instance, that "Because of the substantial public investments already made in both

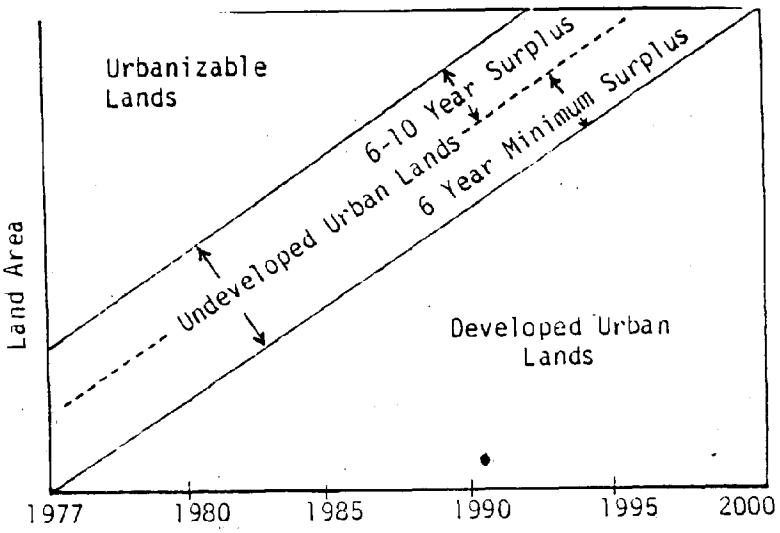


Diagram C-1

URBAN GROWTH BOUNDARY

neighborhoods, it is most cost-effective to achieve urban densities in River Road and Santa Clara prior to accommodating new development needs in totally undeveloped areas." (Lane COG, 1982, p. II-D-5) The plan states the intent of Eugene to extend public sewer lines and other services into these areas and to proceed incrementally with annexation.

A general classification of desired land uses in the region is provided in the plan diagram, categorizing areas into residential, commercial, industrial, natural resource uses, etc. Each use is discussed and defined in the plan text. Median density residential, for instance, is considered to mean residential densities of between 10 and 20 dwelling units per gross acre. More specific and detailed policies are also provided in separate sections of the plan dealing with: residential land use and housing; economy; environmental resources; the Willamette River Greenway, river corridors and waterways; environmental design; transportation; public utilities, services and facilities; parks and recreation facilities; historic preservation; energy; and citizen involvement.

Included also in the plan are procedures for amending and updating the plan. Any of the three jurisdictions can initiate a plan amendment, with the process for agreeing and mutually adopting the amendment to be established on a case-by-case basis. Citizens can also initiate amendments at specified times during the year. The Metro Plan (as amended) contains specific information concerning the procedures to be followed when considering the amendments, including procedural steps to be taken in resolving disagreement by the three jurisdictions concerning proposed amendments.

The plan has been amended since its initial acknowledgement, the majority of these amendments generated through the Plan's two and a half year mid-period review. These amendments have been made both to the text (e.g.,

fundamental principles, policies) and to the plan diagram. The amendments do not appear to have modified in any substantial way the general growth management strategy as outlined above. Rather, they address a range of specific land use and growth issues, often simply clarifying the existing plan test. The amendments range, for instance, from delineating new criteria for establishing new service districts within the metropolitan area, to the division of service responsibilities between Eugene and Springfield, to the modification of density and use restrictions for rural lands in the region.

Refinements to the Metro Plan: Functional and Neighborhood/Special Area Plans

The Metro Plan is the official LCDC-recognized plan for controlling and guiding development and growth in the Eugene/Springfield area. Yet, it's policies apply at a relatively large geographical scale. Moreover, the plan does not deal in detail with a host of important functional areas from transportation to industrial lands. Consequently, a number of "refinement plans" have been prepared by the jurisdictions to expand upon and give greater meaning and direction to the Metro Plan. The Metro Plan itself states the importance of these refinement efforts:

> While the Metropolitan Plan is the basic guiding land use document, it is not the only such document; it can be augmented and implemented by more detailed refinement plans and regulatory measures. Refinements are necessary in certain geographical portions of the community where there is a great deal of development pressure or for certain special purposes. All refinement plans and regulatory measures must be consistent with the Metropolitan Plan; and should inconsistencies occur, the Metropolitan Plan is the prevailing policy document. (Metro Area General Plan Amendments, 1986)

A procedure has been established for obtaining coordination and consensus on refinement plans. According to this procedure, the jurisdiction preparing the refinement plan must submit the plan for review by the other jurisdictions. The respective planning directors in the other jurisdictions

review the proposed plan for consistency with the Metro Plan and report findings of fact to the planning commission of the initiating jurisdiction. The findings are to include, as well, changes that could be made to make the refinement plan consistent. The planning commission of the initiating jurisdiction then holds a public meeting and makes appropriate recommendations to the initiating governing body. If the governing body chooses to adopt the plan the decision must be accompanied by findings of fact that such a plan or program is indeed consistent with the Metro Area Plan.

A number of refinement plans have been prepared by each jurisdiction. The City of Eugene has adopted by far the greatest number of these refinement plans, and several of the more important of these are described below. In addition, each jurisdiction has its own set of regulatory (e.g., zoning and subdivision regulations) and other ordinances with implement and must also be consistent with the Metro Area Plan under Oregon law.

Regional Refinement

Refinement plans or studies have been prepared to provide more detailed planning direction for specific functional or geographical areas. Included among these are a regional public facilities plan (currently in progress) which will address the provision of sewer, water and other facilities on a region-wide level; a plan for Alton Baker Park; and TransPlan, the metro area transportation plan. Each of these refinement plans are to be consistent with the Metro Plan.

Several multi-jurisdictional plans and studies have also been prepared for special areas of regional significance. The River Road-Santa Clara Urban Facilities Plan (in progress), for instance, is intended to provide agreement between Lane County and Eugene and Springfield upon how this area will grow, which jurisdiction will have responsibility for providing services, and so on.

One of the most recent and interesting of the functional regional planning efforts has been the preparation of the Alternative Industrial Growth Areas Study (1986). This study grew out of a concern that there were insufficient industrial sites in the Eugene-Springfield area to accommodate desired industrial growth and to achieve the economic diversification desired by the region. The study concludes, among other things, that the existing industrial land designations contained in the Metro Plan are adequate to meet likely industrial demands for the area (high-tech industrial uses), but probably not adequate to accommodate the needs of a heavy, large lot or industrial park-oriented industry. If these are to accommodated, the study identifies two specific sites that should be designated for such uses. (designated by a new large heavy industrial category in the Metro Plan). The study recommends holding these sites only for large industrial development, preventing smaller, less-intensive industrial uses which could be accommodated on existing industrial sites. No actions have yet been taken on these study recommendations.

Refinement in the City of Eugene

While both Lane County and the City of Springfield have taken numerous actions to refine and implement the Metro Plan, for the sake of space, I will focus on Eugene's efforts. Moreover, the refinement efforts here have been the most extensive and in many ways the more interesting. Several of the primary components of Eugene's attempts at refinement are described below. This is by no means a complete listing, but identifies the more important elements of the Eugene planning program. Diagram C-2 depicts the vertical heirarchy and integration of the different components of Eugene's planning program.

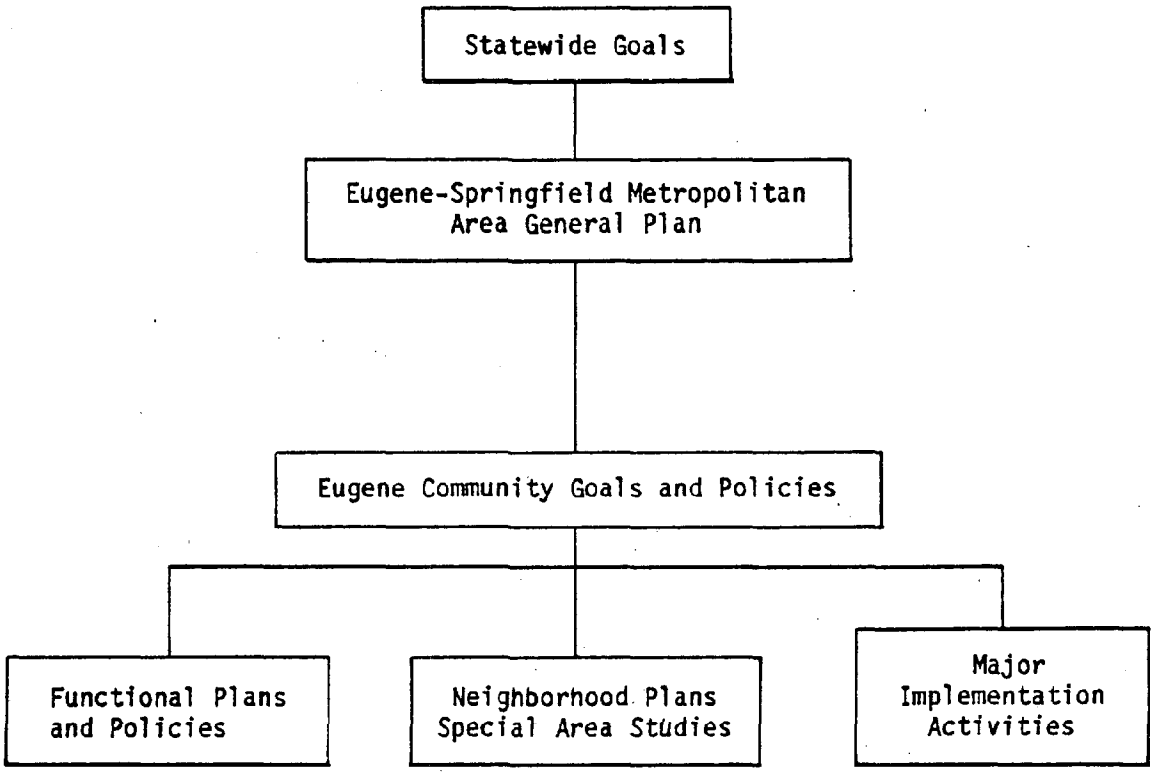


Diagram C-2

EUGENE PLANNING PROGRAM

1984 Eugene Community Goals and Policies. This document is a supplement to the Metro Plan, and were initially adopted in 1967, with major updates in 1974, 1979, and 1984. These goals and policies represent "the vision of Eugene citizens for their city" (City of Eugene, 1986, p. III-2). Contained here are policies intended to guide growth and development in Eugene, and in turn constrain and provide further direction to other elements of the Eugene planning program (see Diagram C-2).

Neighborhood Plans. Eugene is well known around the country as a city strongly concerned with extending extensive land use and planning powers to its neighborhoods. This happens through several means. Foremost is the central position occupied by the city's neighborhood plans. The most recent of these plans is the Westside Neighborhood Plan, adopted in January of 1987. These plans generally set forth goals for the area, and more specific policies to implement them, usually contained within a land use element.

The Westside Neighborhood Plan (1987), for example, in its land use element states the following policies:

1. Prevent erosion of the neighborhood's residential character.
2. Support improving existing housing and reducing the number of substandard units.
3. Encourage the concentration of commercial activities within the core of downtown and prevent the conversion of residentially zoned properties to non-residential zoning districts within the Westside neighborhood.
4. Recognize the diversity of uses currently allowed in the residential, commercial, and mixed use zoning districts that exist in the Westside neighborhood.
5. Recognize the important role neighborhood-oriented commercial uses play in meeting the needs of those living and working in the area (p. 3-2).

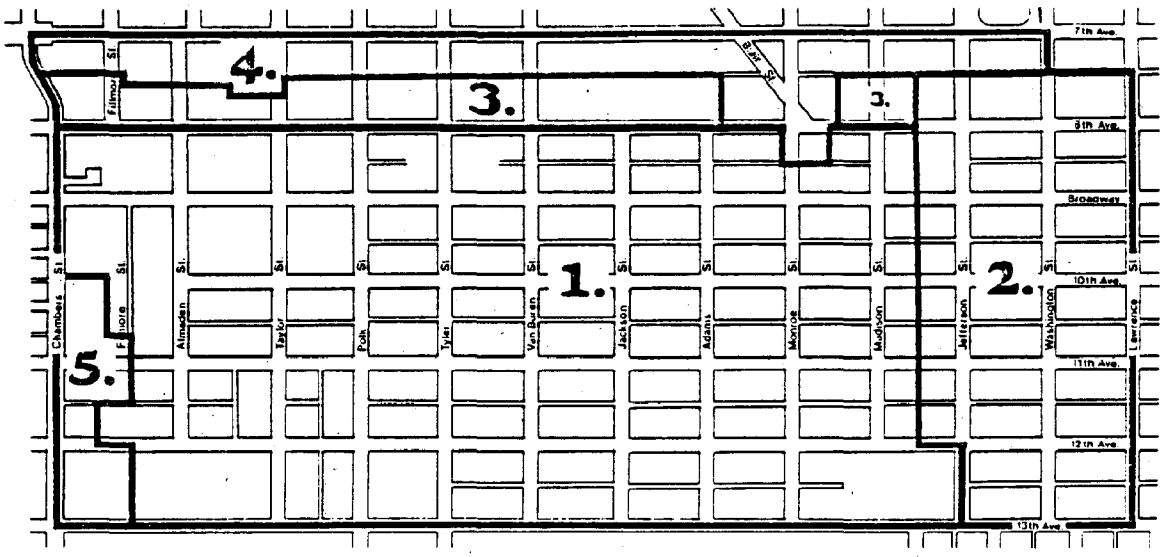
Also contained in the land use element is a plan diagram for the neighborhood, and specific discussions and policies for each separate plan diagram zone (see Diagram C-3). Also contained in the plan are transportation and traffic elements, public facilities and services elements, and neighborhood character and design elements. Plan implementation strategies and priorities are also discussed. Ideally, this type of refinement plan is intended to "... guide the provision of public facilities and services, such as streets and recreational facilities, and serve as a basis for evaluating private development proposals such as those involving requests for changes in zoning designations. It will also provide a common framework for those engaged in conservation and redevelopment of the area." (City of Eugene, 1987, p. 1-1)

The City also contains some twenty chartered neighborhood groups, and formal procedures exist for informing and consulting these groups about city planning and development matters.

Other Refinement Plans. There are a number of other refinement plans developed and used by the City of Eugene. These include a culture/leisure plan, an airport master plan (outlying improvements and development of Mahlon Sweet Airport), an entrance beautification study (in progress), a bikeways master plan, a parks and recreation master plan, a fire and emergency services plan, a downtown housing plan.

Major Implementation Measures

The City of Eugene uses a number of techniques and programs to implement its plans and policies, as well as the Metro Plan and other regional planning documents. Several of the more important implementation measures are identified and briefly described below. This listing is necessarily selective but does capture many of the specific components of Eugene's planning program.



Land Use Diagram

1. Central Residential Area
2. Eastern Residential/Mixed Use Area
3. Northern Residential Area
4. West 7th Avenue Commercial Area
5. Chambers Street Commercial Area

Diagram C-3

WESTSIDE PLAN

- Land Division Ordinance. This is the city's ordinance which regulates the subdivision of land (including minor partitions, major partitions and subdivisions) as well an annexations.

- Comprehensive Zoning Ordinance. One of the primary land use tools, regulating the types of uses and buildings permitted, as well as regulations concerning building height, density, and setback. The City is divided into eighteen zoning districts. There are a number of interesting provisions including efforts to promote mixed uses, provisions to allow shared housing and accessory housing units, and provisions to protect solar access (see below), among others.

- Capital Improvement Program. This is a ten-year CIP program revised and adopted on a yearly basis. Two types or categories of projects are identified in the program: (1) those relating to the budget process (projects to be funded in the next three years) and (2) those relating to larger-term planning needs (to be funded in the latter seven years). The projects listed in the first year in the CIP are forwarded to the City's budget committee to be included in that year's budget. A common way by which projects are included in the CIP is through identification in functional or neighborhood plans.

> Generally, the review process for the CIP is as follows: The Draft CIP is printed and widely distributed in the early fall of each year. The Planning Commission holds a public hearing on the document in November or December and forwards a recommendation to the City Council. The Council also holds a public hearing in January, then forwards the adopted document to the Budget Committee for preparation of the annual budget. (City of Eugene, 1986, p. IV-2)

- Historic Preservation Program. The City is quite concerned with protecting its historic buildings and resources. The City has an Historic Review Board which regulates landmarks and construction within historic

districts. The Board also conducts a public information and involvement program.

- Economic Diversification Program. Eugene has adopted a program of actions designed to strengthen the local economy and to shield it somewhat from the erratic fluctuations of national economic trends (e.g., and particularly the effects of the state's lumber and wood products industry). The economic diversification program involves six points: site and infrastructure development; business assistance; marketing and recruitment; downtown development; destination point development; and public and private partnerships. These objectives are implemented through city policies, and a 1985 Action Plan which, among other things, identifies a number of needed projects and tasks, and outlines ways to accomplish them.

- Bikes and Bikeways. An immediate impression of visitors to Eugene is the emphasis given to bikes. In Eugene, unlike few other American cities, bicycles truly represent an alternative form of transportation to the automobile. The city, as already mentioned, has a bikeways master plan and a history of public improvements designed to encourage and facilitate bike use. There are many miles of protected bike lanes and paths throughout the city as well as extensive bike facilities (e.g., bike racks).

- Solar Access Ordinance. In 1986 the city adopted a fairly stringent solar access ordinance, the text of which is included in the Technical Appendix (Volume III). The ordinance, among other things, places restrictions on the planting of certain types of trees and vegetation, and specific solar design standards which apply in certain zoning districts (e.g., orientation of subdivision lots, building sites to minimize shading, solar setback requirements, etc.).

• Condominium Conversion Bill. This act is illustrative of some of the innovation Eugene has shown in its planning activities. The condominium conversion issue became important in Eugene in the late seventies. Specifically, two downtown highrise apartment buildings -- primarily occupied by elderly residents -- were slated for conversion. (See Eugene Department of Planning, 1986, p. 1.) An ordinance establishing a moratorium on conversion was enacted in 1979, and remained in force until the current condominium conversion was enacted by the City Council in June of 1980. This bill requires a developer to obtain a conversion permit from the city prior to the conversion of a rental unit into a condominium or cooperative housing unit. Before issuance of such a permit, the developer must show that certain key conditions will be satisfied. This permit will generally not be issued before a 180 day period has passed (except in certain circumstances). Each conversion applicant is required to prepare a tenant assistance plan (TAP) which stipulates that the applicant will take certain actions to mitigate the impact of the conversion on tenants. Included among these provisions are: (1) a requirement that applicant pay moving expenses for elderly and low-income tenants, (2) a requirement that the applicant find comparable housing for the tenant elsewhere or provide the tenant with a lifetime tenancy, and (3) places certain restrictions on evictions and rent increases. Comparable housing is defined quite specifically in the bill and refers to a unit which, among other things, rents for no more than 120% of the rent in the unit being converted.

The condominium law has not been without controversy, however, and recent efforts have been made to loosen its requirements. In response, a state legislator has recently introduced a bill into the Oregon legislature which would have made the current Eugene standards apply statewide (Detzel, 1987).

The full text of the Eugene Condominium Conversion Ordinance is included in Volume III, the Technical Appendix.

Implementation Experiences

While the Eugene/Springfield experience is fundamentally similar to other Oregon localities attempting to satisfy the requirements of Senate Bill 100, it is unique in its explicit regional approach. The notion of embracing a single comprehensive plan, adopted by each of the three jurisdictions involved, is in the Oregon context quite unique. The efforts in Eugene/Springfield to coordinate growth and development on a regional level, and the processes and mechanisms put in place to permit this coordination and consensus, are impressive.

As with the other Oregon localities examined, the Urban Growth Boundary is quite important. Generally, local planning officials feel they have been successful at protecting the integrity of the UGB, and in concert with annexation and public facilities extension policies have been successful at promoting a more efficient pattern of compact and contiguous growth.

Individual jurisdictions, especially Eugene, have also managed to undertake a progressive city planning program, with an extensive neighborhood planning focus, and the passage of such innovative planning laws as a tough condominium conversion ordinance.

Efforts at promoting contiguous growth patterns have been assisted in recent months by the completion of EPA-funded sewer trunk lines in the River Road-Santa Clara area. As a result, officials indicate that much of the area's future growth will likely be funneled there to take advantage of the existence of these facilities and to prevent inefficient extension of similar facilities in other areas.

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D. Martin County, Florida
(Beach Impact Fee, Special Barrier Island Regulation)

Introduction

Martin County is located on the Atlantic Coast of Florida, some twenty miles north of West Palm Beach. It is bounded to the west by Lake Okeechobee and includes an extensive network of barrier islands along the coast. In recent years the county has been experiencing, along with the State of Florida as a whole, substantial growth pressures.

The county has adopted a number of interesting growth management provisions. Its Comprehensive Plan, for instance, includes a series of fairly detailed performance standards which regulate, among other things, overall density limits, development in wetland areas, open space requirements, surface water management, delineation of lands for parks and recreation, transportation impact analysis, potable water requirements, wastewater services, soil erosion and sedimentation control, parking and street access, appearance and nuisances and fire services (Martin County, 1982). These standards are included in the technical appendix, Volume III. As well, the county has adopted a special landscaping provision which, among other things, prohibits the planting of certain damaging non-indigenous vegetation and prohibits land clearance without an approval landscape plan. The Martin County landscape Ordinance is also included in the Technical Appendix (Volume III). The County is also currently in the process of developing several different impact fee ordinances, including a road impact fee ordinance, an impact fee for public capital improvements, and a park improvements impact fee.

Beach Impact Fee

Two components of Martin County's efforts to manage growth deserve particular attention: the County's Beach Impact Fee provisions and its Barrier Islands Ordinance. The Beach Impact Fee provisions were adopted as a resolution in July, 1985 by the County's Beach Acquisition Committee. While the requirements were never formally adopted as an ordinance, the county attorney indicates that they have become the county's clear policy and have not been challenged by developers. The provisions are described by the county attorney as a "negotiating tool" in PUD approvals. Developers agree to pay the fee in exchange for the more flexible development restrictions provided under the PUD provisions.

The precise impact fee contribution asked of PUD developments is computed from several formulas included in the Beach Impact Fee Resolution (Beach Acquisition Committee, 1983). The computation of the fee is first based on certain assumptions about how much demand for recreational beach lands is created by new residents. Based on the State of Florida Recreational Planning Standards, and adjusting for the fact that beaches will be in greater demand during certain peak times of the year, it is assumed that the beach land required by each new resident is .0211 linear feet. Assuming that the cost of a linear foot of beachland is $3,000, a per capita fee of $63.30 is computed. This in turn is translated into a dwelling unit fee based on assumptions about the average household size for different types of dwelling units. The Beach Impact Fee for a single family dwelling unit in a PUD is computed to be $183.57 (assuming 2.9 individuals per household). County officials indicate that these funds have been used to acquire new beachlands, to maintain existing beach properties and to service a 1982 beach acquisition bond issue.

(The Beach Impact Fee Resolution is included in the Technical Appendix, Volume III.)

Under the Beach Impact Fee provisions, a rebate is available for subsequent property taxes which are used to retire the 1982 bond issue. The methodology for computing the rebate is included in Appendix A of the Beach Impact Fee Resolution. A credit is also available to PUD projects which provide their own beach land for use by new residents. The extent of the credit is not fixed but "shall be determined by the Board of Commissioners after recommendation by the Community Development Department."

Barrier Island Ordinance

In September of 1985 the Board of County Commissioners for Martin County enacted its Barrier Island Ordinance (Ordinance No. 271). The stated intention of the ordinance is the implementation of those components of the County Comprehensive Plan which relate to barrier island development and the recommendations contained in the Hutchinson Island Resource and Management Plan (under the provisions of the states' areas of Critical State Concern Program) adopted by the Florida Governor and Cabinet. Among other things, the ordinance establishes a dune preservation zone where development is prohibited (50 feet west of the State Coastal Construction Control Line). The ordinance restricts mechanical beach cleaning during the nesting season of the sea turtle (May to October), and specifies practices to be followed during those periods where such activities are permitted. Provisions restricting the type and nature of lighting along the beach are also provided.

Detailed site plan design standards are also included in the ordinance. These standards specify open space requirements, buffer yard requirements, minimum building separations, maximum permissible height of structures (4

stories or 40 feet), setback requirements, park and recreation requirements, transportation requirements, public safety requirements (including a requirement that certain structures incorporate sprinkler systems), and stormwater requirements. The Barrier Island Ordinance is included in the Technical Appendix.

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E. Hilton Head, South Carolina
(annual dwelling unit allocation; roadway corridor and waterfront overlays; density, bonuses and performance standards)

Introduction

Hilton Head is an island off the South Carolina coast which has been developed since the 1950's as a resort community. Substantial growth has occurred in recent years, growing from a permanent population of 6,511 in 1975 to an estimated 17,000 in 1985. The island incorporated as a town in 1983 and hired John Rahenkamp and Associates to prepare a comprehensive plan and a set of land use controls for the island (Rahenkamp, 1986). Prior to its incorporation, land use management on the island had been the responsibility of the county. The land use plan was adopted by the Town in November, 1985. This plan sets forth a set of specific policy statements to guide future growth and development on the island.

The Land Management Ordinance (LMO)

The main mechanism for implementing the comprehensive plan and for managing growth on Hilton Head is the Town's Land Management Ordinance (LMO) (Chapter 7 of Title 17 of the Municipal Code). Adopted in 1986, this ordinance substantially modifies the regulatory provisions proposed by Rahenkamp and Associates. In addition to conventional use districts and zoning maps, the Town's LMO has a number of innovative features. For each use category specific site restrictions, including maximum impervious coverage, minimum open space requirements, minimum lot sizes and maximum structure heights. In a number of the districts, bonus density is given when certain design conditions are satisfied. As Table E-1 indicates, in the Central Forest Beach district, for instance, density bonuses are available for several

Table E-1

Density Bonuses for Central Forest Beach District

	Maximum Units or Rooms Per Net Acre		
	Over 8 Units	Over 25 Hotel Rooms	Over 20 Motel Rooms
Improvement of neighborhood drainage systems	2	4	3
Dune and beach preservation	1	2	1
Additional parking	2	3	2
Public beach access beyond site users	2	4	3
Provision of pathways for pedestrian which facilitate movement among different parcels	1	2	1
MAXIMUM POSSIBLE	8	15	10

project design features, including public beach access and dune and beach preservation.

The Hilton Head ordinance makes extensive use of overlay zones, and employs them in fairly innovative ways. Specifically, the following special overlay zones are included in the LMO: an airport hazard overlay district, a road corridor overlay district, a waterfront corridor overlay district and an affordable housing overlay. (The full text of these overlay provisions is included in the Technical Appendix, Volume III.) For each of these overlay districts special development standards apply. The airport hazard overlay, geographically delineated by a certain noise zone (curve) permits residential development, for instance, but only if it satisfies certain requirements (e.g., window glazing requiring to cut down on glare problems for pilots, solid core exterior doors, prohibition of single plank roof construction,

etc.). As well, additional restrictions apply in more hazardous subdistricts. Residential development is prohibited, for instance, inside the LDNGS noise area, and high assembly uses (e.g., schools, churches) are prohibited within approach paths. Detailed height restrictions also apply.

The Road Corridor Overlay district creates special requirements for development along major roadways. The stated intention of these regulations is "to encourage and better articulate positive visual experiences along the island's major existing and proposed highways and to provide for the continued safe and efficient utilization of these roadways." (Sec. 16-7-480) The overlay zone includes all lands within 500 feet of the centerline of six existing or proposed major roadways on the island. Development proposed within this zone must be reviewed by a Special Corridor Review Committee (CRC). Among other things, development in the zone must satisfy stringent visual buffers, vegetation and tree protection requirements, and must satisfy stringent architectural and signage standards.

The Waterfront Overlay district extends 500 feet landward from the Coastal Council Critical Line. As in Road Corridor Districts, development here is also subject to review by the Corridor Review Committee. Similar development standards apply, including minimum visual buffers and extensive architectural standards. One of the architectural review standards states, for instance, that proposed development...

> shall be located and configured in a visually harmonious manner with the terrain and vegetation of the parcel and surrounding parcels. Structures shall impede, as little as reasonably practical, scenic views from the beach and waterfront or from existing structures and the natural environment. Structures shall not dominate any general development or natural landscape in an incompatible manner. (Sec. 16-7-489)

The objective of the affordable housing overlay zone is to encourage the construction of low and moderate income housing on the island ("low" and

"moderate" incomes are specifically defined in the LMO). This overlay zone is not attached in advance to a specific geographical area of the island. It provides certain bonus densities in existing zones for low and moderate income units. These proposals are also reviewed by the Corridor Review Committee.

Managing the Rate of Growth

A major component of Hilton Head's growth policy is found in Article VII of the LMO -- Rate of Growth and Impact Documentation. This portion of the LMO establishes a development permit phasing program which restricts the absolute number of dwelling units the Town will permit in a given year (established for a five year period, through the year 1991). The total dwelling units to be issued during this five-year period is established in the LMO at 4,250, of which 2,050 are reserved for single family units and 800 for hotel/motel units. An allocation schedule is established with the 850 dwelling units permitted in the first year (the base allocation). Allocations are on a first-come-first-serve basis, with priority given to single family units. (If the number of single family units is reached, remaining units in other categories can then be tapped.) The LMO clearly states that this allocation scheme is meant to be temporary, and a direct function of local infrastructure capacity.

> It is not the intent of this ordinance to deny to any person a reasonable opportunity to develop his land in a beneficial manner, but rather is intended to guide the rate of growth within the town during the stated temporary period, during which time further long-range planning will be completed and a capital improvements program providing for the enhancement of transportation and other infrastructure capacities, in cooperation with other governmental entities, is being implemented. (Section 16-7-700)

Impact Assessment and Performance Standards

Requirements for impact assessment are also included in the LMO. All proposed development, with the exception of a proposed single-family dwelling unit, must submit the following: a traffic impact assessment, emergency preparedness impact assessment and plan (which is submitted to the Beaufort County Emergency Preparedness Department for review), a water and sewer impact assessment, and a school impact assessment.

A major component of the LMO, and a major approach used by the Town to influence the quality and impact of growth in the community, are the detailed performance standards. Detailed design and performance standards are provided for the following: open space, streets, bikeways and pedestrianways, stormwater drainage management, landscaping, flood and fire safety, among others. Article IX -- Natural Resources Protection -- contains a number of performance standards relating to local environmental resources. These standards establish, among other things, required setbacks from wetlands, beach and dune protection requirements, and standards protecting trees. Bonus densities are given for projects which provide greater public beach access, and for projects which provide dune restoration and stabilization. Earlier provisions also existed which gave density bonuses for additional ocean setbacks, but these provisions have since been repealed. Diagram E-1 illustrates how this provision was to have worked. This provision was apparently scrapped by the Town because some local leaders were concerned about the awarding of density bonuses at the same time the town was placing limits on the amount of annual growth.

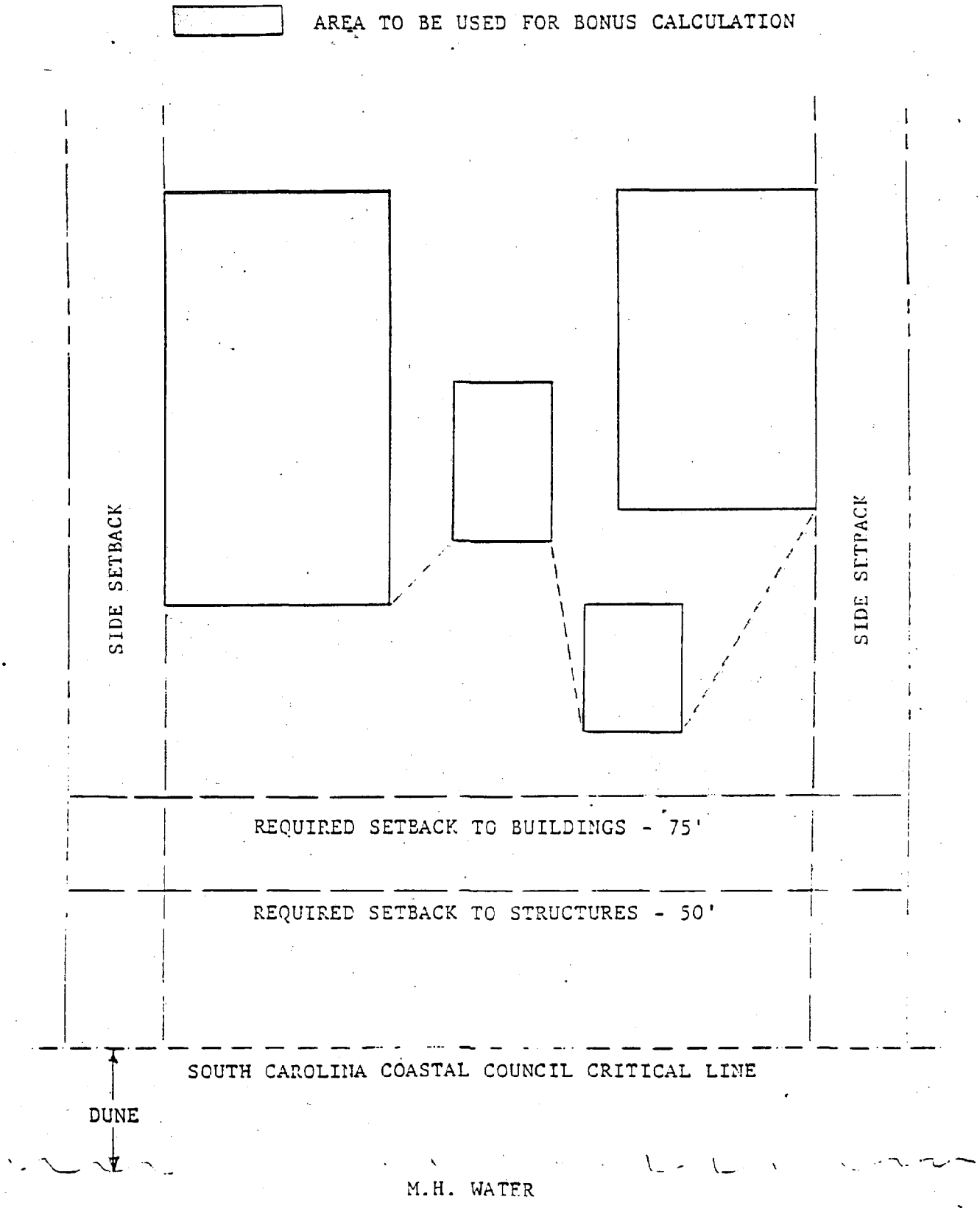

Diagram E-1

ILLUSTRATION OF BONUS INCENTIVE CALCULATION AS PER 16-7-927

Another interesting provision of the Hilton Head CDA is that which allows noncontiguous Planned Unit Developments (PUD's). This allows a developer, where lands are under common ownership, to use the flexibility of PUD provisions to creatively develop noncontiguous parcels. The LMO sets forth several explicit objectives that would justify use of the non-urban PUD provisions.

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F. Medford Township, New Jersey
(Ecologically-based Growth Management and Land Regulation; Environmental Performance Standards)

Introduction

Medford Township is located in the southwest portion of New Jersey (Burlington County), approximately twenty miles east of Philadelphia. The Township was originally settled in the mid 1600s by Quakers. The Township has experienced substantial growth pressures, doubling its population since 1970 (Medford Township, 1986), and there has been great concern about preserving its rural and historic heritage. The Township comprises approximately forty square miles of land, much of it still open and undeveloped.

The Medford Ecological Study

The Townships triannual report talks about the town's commitment to development of "high environmental and aesthetic qualities." This commitment began in earnest, and was aided tremendously, through an Ecological Planning Study of Township prepared by a group of faculty and students from the Department of Landscape Architecture and Regional Planning at the University of Pennsylvania. Ian McHarg, noted ecological planner, was the principle investigator, and the study largely reflects the "McHargian" planning methodology, as it has come to be known. It was the premise of this study that "... by rational planning, founded on knowledge of the ecosystems of the Township and the opportunities and constraints they afford, man's use of the land can be accommodated to nature's delicate balance and beauty without detriment to the health and welfare of the community." (Juneja, 1974, p. 6) The resulting study is an exhaustive review and analysis of the natural processes at work in the Township. Among the specific natural and ecological variables examined in the Medford Report were the areas of geology, hydrology,

soils, and vegetation. Detailed maps of these different environmental factors were prepared for the township as well as performance requirements which correspond to them. A final section of the report synthesizes the findings of this ecological analysis through the preparation of a series of suitability maps for different types of land uses (e.g., agricultural production, recreation, urban development).

Implementing the Medford Study

This study and its recommendations in turn led to local regulatory changes and continues to this day to set the stage for planning and growth guidance efforts in the Township. The Township's subdivision ordinance was the first to be modified to take into account the study's recommendations. A master plan and zoning ordinance based on the McHargian analysis were adopted in 1978, and 1979 respectively (and documented in Palmer's 1981 book). The plan was updated in 1982, partly in order to bring it into conformance with the requirements of the New Jersey Pineland Commission's Comprehensive Management Plan. The Township's plan divides the Township into different use zones, consistent with the environmental constraints identified in the Medford Report. Specifically, land is classified into four use categories: residential growth, environmental management, trade, and village. A number of sub-categories are provided within these general categories, as under a traditional zoning scheme.

The Medford study is repeatedly cited (even quoted at length) in the Township's plan and has clearly been important to the designation of these different use zones. The major mechanism for implementing the Medford plan, and the findings of the Medford Report, is the Township's Land Development Code (Chapter 160). The code specifically requires that officials consider

the Medford study when reviewing plats for major subdivisions. The preliminary plat submitted must include, among other things, a composite environmental constraints map utilizing the Medford Ecological Study, and a detailed environmental impact statement. This environmental impact statement must include maps of the proposed subdivision as displayed on each of the Medford ecological study maps, and must identify whether or not each of the specific environmental factors identified in the Medford report are applicable.

Performance Standards

Article VI of the Medford Development Ordinance sets forth a set of design and performance standards which all development in the Township must satisfy. At a general level Article VI states that all future development must preserve whenever possible the natural features identified in the Medford study. It is also stated that no extensions of the public sewer system will be permitted outside the Village, Trade and Growth District, Growth Management North and Growth Management South Districts.

Specific performance standards are included which deal with: drainage; floodplain protection; stormwater management; fire management; forestry harvesting and management; landscaping and erosion control; resource extraction; scenic and buffer standards; storage and waste disposal; endangered plants, trees and clearing standards; water quality; wetlands protection; and open space requirements.

The scenic and visual buffer standards (Section 160-50) reflect the Township's concern about maintaining the natural beauty of the area, again as identified and documented in the Medford report. As part of these standards the ordinance identifies zones in the Township where scenic road corridors are

to be located and where special development standards to protect visual resources are necessary. Specifically, development along scenic corridors must be set back a distance of at least 200 feet from the centerline of a corridor. The ordinance also requires extensive buffers along roadways, screening for utility lines and facilities and places substantial restrictions on the erection of signs. Billboards or billboard-type signs are prohibited in the Township as are most off-premise signs.

As a further example of these performance standards, the wetlands provisions (Sec. 160-57) prohibit all forms of development in or on any wetlands, as well as development within 300 feet of wetlands if one or more of the following negative consequences is likely to occur:

(a) An increase in surface water runoff discharging into a wetland.

(b) A change in the normal seasonal flow patterns in the wetland.

(c) An alteration of the water table in the wetland.

(d) An increase in erosion resulting in increased sedimentation in the wetland.

(e) A change in the natural chemistry of the ground or surface water in the wetland.

(f) A loss of wetland habitat.

(g) A reduction in wetland habitat diversity.

(h) A change in wetlands species composition.

(i) A significant disturbance of areas used by indigenous and migratory wildlife for breeding, nesting or feeding."

Other activities are permitted in wetlands, but again subject to conditions. Special standards are provided for "infill wetlands," or wetlands located in designated growth areas (as well as having other characteristics).

The Landscape and Clearing Standards (Section 160-54) provide an additional example of the ordinance's performance standards. Clearance of

1,500 square feet or greater of vegetation requires approval of the Township and will be approved only if certain conditions are met (such as the need to remove vegetation for fire management). Developers are required to plant trees along streets, and to ensure that the front yard of each residential lot has at least three deciduous shade trees in it.

Environmentally-based Zoning

The Medford Development Ordinance also accomplishes many of the objectives of the Medford study through the use of conventional zoning restrictions, including standard restrictions on use and density. Permissible densities are substantially higher in the residential zones, with the bulk of the future growth to be absorbed in the Growth Management North, Growth Management South, Growth District and Reserve Growth District Zones. These are areas which have already been substantially developed or are contiguous to developed areas (e.g., Medford Village). Permissible density in the Growth Management North Zone, for instance, may reach 3.5 dwelling units per acre when developed as multifamily. In contrast, permitted densities are substantially lower in the Environmental Management Zone, which includes several districts (e.g., agricultural retention, forest, preservation and park). The stated purpose of the Environmental Management Zone is to "permit development only where the natural resource inventory, soils maps and ecological planning study indicates development can occur without serious advance environmental impact." (Sec. 180-87) For example, in the preservation zone an individual can build one unit on a 3.2 acre lot, but only under the following conditions:

(a) The dwelling will be the applicants principal place of residence.

(b) The applicant has not developed a dwelling unit under this section within the previous five (5) years.

(c) The applicant can demonstrate a cultural, social or economic link to the essential character of the Pinelands... (several alternative tests are offered as ways of satisfying this last standard).

Transfer of Development Rights (TDR)

An additional interesting element of the Medford ordinance is the use of Transfer of Development Rights (TDR). Several different types of development credits are created. Development credits are available to lands located in Preservation Area Districts, Agricultural Production Area Districts and Special Agricultural Production Area Districts as designated by the Pinelands Comprehensive Management Plan (State of New Jersey). Called "Pinelands Development Credits," they can be used to obtain density bonuses in the Growth Management South and Growth District Zones. "Agricultural Development Credits" are available for land located in the Agriculture Retention District and can be used to obtain density bonuses in the Growth Management North Zone. Finally, "Recreation Development Credits" are available to non-profit corporations for lands devoted to recreational uses of at least 50 acres in size. These credits can be used to obtain density bonuses in the Growth Management North District Zone. The Development Ordinance includes several different "ratios" for allocating the rights. For example, Pinelands Development Credits for upland areas within preservation areas are assigned at a ratio of one per 39 acres. When used to obtain a density bonus in the Growth Management South or Growth District this results in a bonus of four dwelling units per credit. Agricultural Development Credits are assigned at a rate of one per four acres of land. When they are applied to development in the Growth Management North Zone they yield a bonus of one dwelling unit per credit. This arrangement results in a two-tier schedule of permissible densities in these "receiving" zones -- a normal density limit and a density limit assuming the use of bonus credits.

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G. Austin, Texas
(Innovative Citizen Participation in Growth Management)

Introduction

Austin, the capitol of Texas and the home of the main campus of the University of Texas, has a history of an active citizenry. It is said that everything in Austin is done by committee. It is not surprising then that Austin's current attempt to prepare a new comprehensive plan for the city -- known as "Austinplan" -- is characterized by its emphasis on community and citizen involvement. In Austinplan, the planners, technical experts, and full-time politicians, have taken a back seat to the community and citizen participation.

Austinplan

Austinplan saw its beginnings in the charter Amendment passed by referendum in January, 1985. The City was given the charge of developing and enacting a comprehensive plan and implementing ordinances to be presented to the City Council for action no later than February 22, 1988. According to the mission statement adopted by the Austin City Council February 20, 1986, the product is to be a legally binding document which does at least the following things (DPGM, 1986, p. 7):

- Describes one community's vision of the future - where we hope to be in the year 2020;
- establishes the policy direction needed to reach that future;
- specifies the tools for implementing those policies; and
- evaluates the costs of carrying out the Plan.

The process by which Austinplan is to be developed has received a great deal of emphasis, and is in many ways as important if not more important than

the product itself. According to the City Council Mission Statement the process is to be based on the active participation of all segments of the community, is to rely on consensus in decisionmaking, is oriented to action, and starts an on-going process of plan review and refinement.

The plan, according to the mission statement, is to include, among other things, "a description of the qualities which characterize the Austin of 2020," "a statement of goals and major policies to guide the City toward that desired future," "an evaluation of the fiscal and economic implications of these goals and policies," and "an analysis of the dimensions of growth and change which are critical to the future character of the City" (Austinplan Steering Committee, 1986).

The Austinplan Steering Committee

An 87-member Steering Committee was appointed by the City Council to oversee the preparation of the plan. This committee is both distinctive in its size and its composition. A conscious attempt was made when appointing members to ensure that all factions and interest groups in the community were duly represented. It is commonly believed that the failure of an earlier citywide planning effort, called AustinTomorrow, was due in large part because certain influential political interests were excluded from the process (see Beatley, 1987). Austinplan was explicitly designed with this earlier experience in mind. In appointing members to the committee nine specific community interest groups were to be represented. Table G-1 presents these groups and the member of individuals appointed in each.

Table G-1

Representation on the Steering Committee
(as originally formed in February, 1986)

Group/Faction	Number of Members
Business and Finance	6
Community at-large	21
Cultural affairs	6
Environmentalists	5
Ethnic minorities	5
Human services	7
Neighborhoods (sectors and neighborhoods)	20
Public institutions	6
Real estate and development	10

*The number and distribution of steering committee members has changed over time.

Source: Austin Department of Planning and Growth Management

Austinplan Task Groups

Thirteen substantive areas were originally identified in the mission statement as important elements in the plan. The original thirteen were expanded to fourteen with the later addition of cultural affairs. These are listed in Table G-2 and include such things as transportation and the environment. Each of these elements were to "identify the key issues affecting future growth, should contain objectives and policies to accomplish City goals, should include a program of implementation techniques to carry out these policies, and should include a fiscal assessment of the implementation techniques." Moreover, each component was to be "specific enough to be used in the evaluation of development projects and proposals for capital improvements." (DPGM, 1986, p.8). Specific task groups were formed to deal with each of these substantive components. Much of the actual work in preparing the plan has so far been done by these substantive task groups. Each member of the steering committee is also on one or more of the task groups, along with other citizens. Typically each task group is comprised, as well, of a number of resource people, or individuals who have some particular experience or expertise in the subject area at hand (e.g., health services, transportation, environment, etc.) It is estimated that about 250 citizens are actually involved in either the steering committee or task groups. The task groups, as well as the entire process, are staffed by the City's Department of Planning and Growth Management.

The bulk of the work in Austinplan so far has focused on the preparation of a series of "milestone reports" in each of the task groups. Each task group will eventually complete three milestone reports: Milestone 1, a "context for evaluation" report (assessing existing conditions and trends, identification of important values and critical issues); Milestone 2, a

Table G-2

Substantive Task Groups

Land use

Economic development

Housing

Environment

Transportation

Water/wastewater

Health/Human services

Urban design

Recreation/open space

Public services/facilities

Public buildings/facilities

Energy

Land development code

Cultural affairs

Source: Austin Department of Planning and Growth Management

"strategy for action" report (providing a statement of goals, objectives and policies and discussion of how this substantive policy area interrelates with other areas); and Milestone 3, a "plan for implementation" (relevant criteria and standards, plans, maps, ordinances, etc.). These three milestone reports will then be used by the Task Groups to prepare a recommended plan element, which will be integrated with other elements into the final Austinplan. A technical document describing in greater detail the Austinplan process is provided in Volume III, the Technical Appendix.

Sectoral Planning

Another important feature of Austinplan is the sectoral planning program. While the Task Groups deal goals and policies in a particular substantive area (e.g., transportation, urban design, energy) that would apply to the City at-large, the sectoral planning is an attempt to plan for the development and growth of sub-local areas. The sectoral planning program has its beginnings prior to Austinplan, and the City has for many years had an active group of neighborhood associations. The City is divided into 22 different sectors, typically including multiple neighborhoods in each particular sector. Each sector has its own sector council and bylaws for making decisions (each set of sector bylaws is somewhat unique). The sectors have no substantive legal powers or authority and have served essentially in an advisory role to the City Council. According to the Council Mission Statement the sectoral plans developed under the Austinplan process are to contain the following:

A. A map showing planned land uses and/or intensities for each part of the sector.

B. Text addressing issues specific to that sector (for example, unique environmental features or localized service provision problems).

C. Text identifying the contributions of this sector to reaching the citywide goals contained in Austinplan. (DPGM, 1986, p. 8)

The Council Mission Statement also states that Austinplan is to devise a "system of land use designations which define the uses and/or intensities of development which the City encourages at particular locations," as well plan for making necessary capital facilities and services investments. In addition, a key component of Austinplan is the development of a land development code. A specific task group was assigned the responsibility of developing this code, with the input of the other task groups. Incorporating the code as a key element was at least in major part a response to the perceived failure of the AustinTomorrow effort. Many believed AustinTomorrow was a failure largely because of its lack of an explicit implementation element. A land use intensity system has been proposed as a key regulatory tool by which to implement the plans goals and policies.

Functioning of the Austinplan Process

The Austinplan process is a relatively bold attempt to put in the hands of citizens a complex planning process. It remains to be seen whether the process will result in a workable plan and implementing program. Both positive and negative aspects of the process can be cited so far. On the positive side, participants in the process have generally been able to keep up with the frenzied pace of the program, and the task groups have accomplished much. A number of task groups have completed their second milestone report and appear to be on schedule. While there have been numerous points of contention along the way, these have been overcome and the process has moved steadily forward. Once the plan is put forward to the City Council for review and adoption, and once adopted, it is hoped that the process will have created a political credibility and support group that has not existed in the past. As one task group chair recently commented, "We're in it for whatever time it

takes for completion of the plan. We will lobby for it and once accomplished, will monitor it to keep the gains in place."

Difficulties are also apparent in this type of participatory planning. The time and energy commitments required of participants are tremendous and a number of individuals have dropped out of Austinplan because of them. Loss of minority representation, and increasingly representatives of the business community, may spell future political difficulties for the resulting plan. For many participants it is difficult to visualize the product of their tremendous efforts and this has been frustrating. A major element of uncertainty is how all the different pieces of plan will be meshed together to create a unified direction for the city. Despite these difficulties and uncertainties the Austinplan process has already accomplished much and represents one of the most ambitious experiments in democratic growth management ever to have been embarked upon.

In addition to the Austinplan process, Austin has developed a number of smaller-scope growth management programs. Included among these are its comprehensive watershed protection ordinance and its capitol View Protection Overlay Zones which has been discussed briefly in Volume I (the trends report). The full text of these two ordinances are included in Volume III, the Technical Appendix.

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H. Napa County, California
(annual development cap, agricultural zoning)

Introduction

Napa County is located north of San Francisco Bay and is within commuting distance of Oakland and other bay area centers. Because of this close proximity the county has received substantial growth pressures in recent years, pressures which have threatened the county's rural flavor and its productive agricultural resource lands, including the famous Napa Valley Vineyards.

Measure A: Controlling the Annual Growth Rate

When it looked as though a pro-development Board of Supervisors was about to gain election in 1980, a groundswell of public support land to the enactment of Measure A. The text of Measure A stated the following finding:

> The people of the County of Napa find that mismanaged and unlimited residential growth causes conditions harmful to the public, safety and general welfare and results in substantial increase in the cost of government services, loss of irreplaceable agricultural land, inadequate police and fire protection, increased traffic congestion, inadequate parks and recreation facilities, loss of open space, increased air pollution, deterioration of older urban areas, general urban sprawl, increased crime rate and overcrowded schools.

Modelled after Santa Cruz County's Measure I, the Napa measure specifically required the Napa Board of Supervisors to restrict the annual issuance of building permits in the unincorporated areas so that this number was consistent with (did not exceed) the growth rate of the nine counties in the San Francisco Bay area, and not to exceed one percent. The measure specified that at least 15% of the annual permits were to be for affordable housing units. The measure directed the Board of Supervisors to amend the county comprehensive plan within nine months of passage to carry out the

provisions of the measure. Specifically, the Board was to adopt a growth management system "and such ordinances as are required to implement the intent of this ordinance, to regulate the character, location, amount, and timing of future residential development..." If the board did not adopt the necessary program a prohibition on the issuance of all building permits would go into effect. Ironically, the new Board of County Commissioners were forced to put into place precisely the kinds of development restrictions they campaigned against.

The regional growth rate was determined to be 1.13%, and thus one percent was adopted as the growth rate restriction for the county. This has translated into an annual allocation of 132 dwelling units (to remain in effect until the next U.S. Census is taken). The annual development cap restricts residential development only; industrial and commercial uses are not affected. Other exceptions include: replacement housing (to replace a unit which has been removed, demolished or burned within the past year); relocation of existing units; additions and renovations; guest cottages; and certain vested development projects. In cases where the unit allocation is not expended in one year, the balance may be carried over into the next year.

The annual allocation is distributed across four categories of residential units: owner-occupied, small-scale builder, large-scale builder and "affordable home." These are described as follows:

A. Category 1 is single dwelling built by or for a permit holder (owner-builder or his contractor) who is building only one dwelling unit per year.

B. Category 2 is any type of dwelling which requires no discretionary review, but the permit holder is building more than one dwelling unit per year. A good example would be the small scale builder using existing lots.

C. Category 3 is any type of residential project for 2 or more dwelling units which requires discretionary review (e.g., subdivision, parcel map, use permit). A large-scale housing project would be a good example.

D. Category 4 is housing which is affordable to persons with average or below average income. This category would require a development agreement signed by the developer and the County; the development agreement shall contain guarantees that the dwelling units would be affordable to persons of average or below average income.

Table H-1 presents the breakdown of annual building permits between these four categories. Permits are issued on a first-come, first-serve basis, available January 1 of each year. There is also a provision which allows the Board of County Supervisors to redistribute unused units in one of the first three categories to any of the other categories (in June and December of each year). The Board can add units to the affordable housing category, but cannot take any units out of that category. When demand for permits exceeds the annual supply permits are to be allocated through the use of a lottery. Applicants who lose out on the lottery are given first-claim on the following year's allocation of permits.

Success of the Annual Cap

Staff at the Napa County Department of Conservation, Development and Planning, the implementing agency, have indicated that the system has so far operated smoothly. In no case has an applicant been completely denied a permit under the allocation system; rather, applicants have had to wait for subsequent allocations of permits, resulting only in delays in the timing of development. The county has yet to have to use the lottery system. Staff believes, however, that the net effect of the program has been to discourage large tract subdivisions and other large-scale forms of development in unincorporated areas of the county. The program has shifted this type of

Table H-1

Residential Building Permit Categories, Shares of Annual Allocation, Building Permit Availability Dates

Category	Share of Annual Allocation	Building Permit Availability Dates January 1	June 1
1. Owner-occupied	80 D.U.	40 D.U.	40 D.U.
2. Small-scale builder	16 D.U.	16 D.U.	
3. Large-scale builder	16 D.U.	16 D.U.	
4. "Affordable" house	20 D.U.	20 D.U.	
Total	132 D.U.		

Source: Growth Management System, Napa General Plan, 1983.

growth, consistent with the county's goals, into incorporated and more urban areas in the county where such permit limitations do not exist. The allocation system has been relatively free of controversy, partly staff believe because the county, unlike other jurisdictions with similar systems, has not attempted to construct a complex system for prioritizing the permit allocation. There is a general sense that the first-come, first-serve system is a very equitable and sensible one. Moreover, the strategy of establishing a single quantitative restriction ("growth management by the numbers") has the advantage of being very easy to understand by the public.

County staff have described the main thrusts of the Napa County planning program as directing growth into already urbanized areas and protecting important farmland resources. In pursuit of the later objective the county has enacted strong agricultural zoning provisions. In the Napa Valley area, for instance, minimum lot sizes have been set at forty acres. While these restrictions were very controversial when first enacted in the late 1960's (20 acre minimums originally), there is strong support for them now. The support for and effectiveness of these restrictions, however, are largely a function of the economic importance of the Napa Valley vineyards--The restrictions are strongly justified from an economic point of view. The provisions of California's Williamson Act, which permit the state to enter into contracts with farmland owners to maintain farm uses, have also been used in the county. Another important factor helping to preserve Napa farmland are the decisions of the county's Local Agency Formation Commission, which must approve all annexations to municipalities and utility and other districts. Its policy has been to prohibit the annexation of farmland areas.

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I. Charlotte, North Carolina
(innovative process for citizen involvement in growth management)

Introduction

Located among the gently rolling hills that form the dividing line between the Carolinas, Charlotte and Mecklenburg County, North Carolina have benefitted from the sunbelt growth of the past decade. The area has witnessed steady population growth fueled by the location and expansion of business and industry. While the economy of Mecklenburg County is bolstered by a diverse group of business concerns, the City of Charlotte has gained a national reputation as a leader in banking and other financial services. Economic vitality may be the primary attraction for newcomers to the area, but closely related and equally important is the perceived high quality of life in Charlotte-Mecklenburg County.

With full recognition of the importance of these two assets -- livability and economic vitality -- community leaders have sought to determine the implications of future growth in an effort to protect and strengthen the area's most cherished qualities. Their work has resulted in an innovative and effective growth management program. Of particular interest, aside from the tools used to guide growth, is the exemplary process through which city and county officials were able to reach community consensus on the desired pattern of future growth and development in Charlotte-Mecklenburg County.

Charlotte's Urban Growth

Population figures for Charlotte-Mecklenburg County document the area's steady growth. There were approximately 416,700 residents in the city and county in 1980 (RTKL Associates, Inc. et al, 1980, p. 10). The population estimate rose to 445,479 by 1985, with year 2005 projections of 573,866

(Charlotte-Mecklenburg Planning Commission, November, 1985, p. 14). The joint planning commission reported that this growth would bring about 136,058 new jobs and require the construction of approximately 68,190 additional homes. These estimates were partially responsible for convincing area leaders that effective land use planning was necessary to accommodate the rapidly changing pattern of growth and development in Charlotte-Mecklenburg County.

While helpful for planning purposes, Charlotte-area residents did not need access to population and development figures in order to realize that the city-county area was becoming an increasingly urban place. In a 1985 assessment of the growth situation, The Generalized Land Plan 2005 included the following observations.

> It is clear from these prospects, as well as from development patterns of recent years, that we are well on our way to becoming an *urban community*. We are literally becoming more urban each day. It can be said of Charlotte-Mecklenburg that we are now:
>
> - A community of increasing urban character, yet wishing to retain its unique neighborhood assets and natural and historic features;
> - a community growing in regional interdependence, yet wanting to maintain its special economic, social, and cultural identity; and
> - a community striving vigorously to integrate into an economic structure of national and international character, while still needing to ensure a distinctive quality of life for residents at all income levels (Charlotte-Mecklenburg Planning Commission, November, 1985, p. 5).

With these community preferences and growth pressures in mind, local leaders determined that involvement by city and county residents would be crucial for the success of any growth management effort. Already experienced in building effective citizen participation programs, the planning commission accepted the challenge of establishing a workable process of citizen involvement.

A Process Emerges

Long before the 1985 adoption of the 2005 plan, Charlotte-Mecklenburg officials were involved in efforts to include the public in programs designed to guide future growth. In 1979, The Charlotte News claimed that "The issue most crying out for planning commission advice and leadership....is 'growth management.' And it is to this hot and divisive issue that the commission will first direct its new-found energies" (Bradbury, 1979). The "new-found energies" included the appointment of a new planning director and an increase in the level of participation among planning commission members.

One of the first priorities of the newly hired director was to establish a consensus among local residents on the preferred pace and direction of growth. In 1979 and 1980, he periodically served as a guest columnist for local newspapers, keeping planning and growth management issues alive with articles such as "Cooperation Needed as We Face Growth," and "Planning as Consensus Building" (Cramton, November, 1979; February, 1980). The first article stated that "an open forum for discussion of growth and change is required among neighborhoods, civic, business, education, service, and general public interests... It is expected that the Charlotte Mecklenburg Planning Commission will promote such discussion in the months to come." Within two months, the Charlotte City Council and Mecklenburg Board of County Commissioners had established a panel of five citizen study groups with a total of 65 members. The ten weekly meetings of these groups culminated in the communitywide Urban Symposium Conference held at the Charlotte Civic Center in April 1980.

Over 2,500 area residents attended the series of keynote addresses and discussion forums and recorded their viewpoints on individual questionnaires. Sixteen additional public meetings were hosted by the planning commission

between May and September, 1980 to consider the issues raised by the study groups, other symposium participants, and an appointed citizens advisory committee. The results of this citizen participation process led to the planning commission's recommendations for updating many planning policies and provided a planned, cooperative, and coordinated approach to the urban change occurring in the city and county (Charlotte-Mecklenburg Planning Commission, August, 1983, pp. 6-11).

Planning for Urban Change

In the early 1980s, Charlotte and Mecklenburg County were changing more rapidly than local officials had anticipated. The lure of a healthy economy brought growth, and along with it, immediate problems such as water shortages, traffic congestion, and inadequate open space. According to one observer, "The ominous prospect emerged of a weakened economy over the long run, because of the spilling over of jobs, households, and tax revenues into adjacent jurisdictions (Cramton and Morris, April, 1986, p. 3).

Attempting to shift policy toward existing trends in urban growth and development, the planning commission released its "Urban Policy Program" (August, 1983) and "1990 Transportation and Land Development Policy" (December, 1983). Heavily influenced by citizen input, the first document maintains as a central theme that a public and private partnership should exist in planning and development. It "highlights the consensus building approach and content of Charlotte-Mecklenburg's planning for urban change" and emphasizes that "the notion of a community working together is being followed in Charlotte-Mecklenburg" (Charlotte-Mecklenburg Planning Commission, August, 1983).

The second document relied upon the results of a citizen survey conducted by the Urban Institute at the University of North Carolina at Charlotte

(Charlotte-Mecklenburg Planning Commission, December, 1983, p. 6). This survey on housing and transportation issues among Charlotte-Mecklenburg residents was widely used by planners who formulated recommendations on land use strategies. However, it was realized that the strategic gains provided by this work, along with the policy achievements of the citizen participatory urban symposium process, still fell short in terms of the community's eventual need for a comprehensive plan that would take into consideration Charlotte-Mecklenburg's increasingly urban characteristics. Accordingly, the planning commission was charged in early 1984 with the task of preparing a new land use plan for Charlotte and Mecklenburg County.

Maintaining Citizen Involvement

Local officials remained firm in their conviction that the key to the planning process is consensus building through public participation. An elaborate process of citizen involvement gradually ensued. In February 1984, the planning commission released a document that clarified the current official position on growth issues. This compilation of objectives, policies, and strategies formed a starting point for discussion. By the following month, over 700 citizens had met to review this working document. An "Issues Report," released in April 1984, summarized the reviewers' comments and emphasized the issues of greatest concern (Cramton and Morris, April, 1986).

Public participation continued in a formal manner on May 1, 1984, as the Charlotte-Mecklenburg Planning Commission sponsored a conference entitled, "Urban Renaissance: Planning for a Livable Community" (Charlotte-Mecklenburg Planning Commission, May, 1984). Tracing its roots to the 1980 Urban Symposium, the conference attracted over 600 registrants for an open discussion of growth and development issues in Charlotte-Mecklenburg.

In December of 1984, a consultant hired by the City and County released projections regarding the relative strength or weakness of Charlotte/Mecklenburg's seven planning districts. These growth assumptions served as a point of discussion for local officials as well as for those from neighboring town and county governments. This process provided an understanding of the potential effect of development in the wider region of Charlotte-Mecklenburg County and also established among area governments a working rapport for future planning efforts (Cramton and Morris, April, 1986).

Between March and June of 1985, public meetings were held in each of the seven planning districts to review and modify a working draft document that included statements of the community's growth assumptions, objectives, policies, and tools. The purpose of these meetings was also to determine the general attitudes toward growth in each district. This process led to the development of broad land use strategies and infrastructure policies. Growth accommodation was emphasized in strong market areas, while weak markets were targeted for growth inducing strategies that would increase the population and employment bases.

Subsequent citizen input allowed for the identification of critical issues generated by the assumptions of future growth trends. These were addressed in the 2005 plan and served as the basis for Charlotte-Mecklenburg's growth management activities.

Growth Management in Charlotte-Mecklenburg

Charlotte-Mecklenburg has taken an unconventional approach to growth management. According to the planning director, many growth management programs are biased toward the urban edge, with insufficient attention paid to the inner city and existing suburban areas. Rather than concentrate its energies on new development on the urban edge, the planning staff sought growth management objectives for the entire city-county area. Public hearings that were part of the 2005 land planning process made it clear that the community supported a more balanced growth pattern, an increasingly urban land use pattern, and a stronger urban design consciousness (Charlotte-Mecklenburg Planning Commission, November, 1985, p. 6). To achieve these goals, a three part action plan was devised. This included an emphasis on continued land planning, appropriate public investment through capital budgeting, and effective use of regulatory powers and the legislative process (Cramton, July, 1987).

Charlotte-Mecklenburg officials evaluated a variety of tools in implementing its growth management program. Under the strategy of continued land planning, development enterprise areas have been established in order to redirect growth toward weak market areas. These were believed to be necessary, according to the planning commission, "to alleviate the present development imbalance that is causing overcrowded roads and over-used services in the south and east and bringing on school closings and deterioration elsewhere" (Charlotte-Mecklenburg Planning Commission, June, 1986, p. 2). The planning commission defines development enterprise zones as intensive employment and housing centers that serve as magnets to attract growth to less intensively developed areas. Area plans are also completed for defined regions where growth and development problems exist.

In terms of capital budgeting activities, growth management is facilitated through the city-county public investment program, covering five- and ten-year periods. This involves the 10-year capital needs inventory and the five-year capital improvement program. For example, priority growth areas may receive infrastructure funding in order to stimulate additional private sector investment. The local business community has supported this sort of incentive as a means of achieving balanced growth; their primary concerns have stemmed from what they perceived to be development disincentives, such as impact fees (Charlotte-Mecklenburg Planning Commission, June 4, 1986, p.5.).

The use of regulatory provisions is probably the most important aspect of Charlotte-Mecklenburg's growth management effort. Heavily relied upon are the recently revised codes for zoning, subdivisions, and sign control. Revision of these regulations became necessary when local leaders realized that these land use guidelines, written in the 1960s, reflected a suburban, low density bias that was inconsistent with the area's increasingly urban flavor. At the beginning of the ordinance revision workshop, held in June, 1986, Charlotte's mayor emphasizes that the existing codes were inadequate to guide growth in a manner compatible with the community vision expressed in the 2005 plan (Charlotte-Mecklenburg Planning Commission, June 4, 1986, p. 4).

Design standards were built into the revised ordinances and the approval of rezoning applications was tied to the availability of infrastructure. In this manner, the burden is placed upon the applicant to prove that the proposal will not stimulate or compound infrastructure problems. Policy guidelines also exist for farmland preservation and stormwater management.

Charlotte-Mecklenburg has sought equitable ways to distribute the costs of services between the public and private sectors. Since continued growth is likely in the strongest market areas, funds for road improvements, parks, and

water and sewer projects are necessary for growth accommodation. Impact fees and development taxes, which can be levied to assist a community in paying for a variety of capital improvements, are therefore being studied as additional growth management tools. Exactions, which are agreements between private developers and local government concerning improvements to be made either on or off site by the developers, are also being evaluated (Charlotte-Mecklenburg Planning Commission, March, 1987, p. 25).

Conclusion

In Charlotte-Mecklenburg County, growth management is an ongoing, dynamic process. Through the use of continued land planning, the regulatory framework, and capital budgeting, the program has the potential for yielding a response that is in the best interest of the community with regard to the specific growth issue being considered. Local officials believe that the key to effectiveness is determining the scope and direction of growth favored by the community's residents. Accordingly, growth management in Charlotte-Mecklenburg is characterized by its citizen participatory process of consensus building.

A second characteristic of growth management in Charlotte-Mecklenburg is the emphasis on continued planning and growth accommodation in the entire city-county area. Rather than focusing on limiting the successive rings of new development at the urban edge, local planners are working to ensure that growth can be adequately accommodated, particularly in the inner city and existing suburban development zones.

Finally, planners and other officials in Charlotte-Mecklenburg realized that the city-county area was becoming increasingly urban and that their low density, suburban oriented ordinances were inadequate for guiding growth as

they desired. Therefore, a third characteristic of growth management in Charlotte-Mecklenburg is the effort at targeting the regulatory framework toward existing development trends and the community's vision of the future.

As the city, county, and region continue to grow, planners will continue to face new challenges. Economic prosperity may be accompanied by continued urban change, possibly creating problems for residents currently accustomed to a more rural lifestyle. These individuals, as well as others in the inner city or suburban areas, may feel that the area's economic vitality will ultimately threaten the quality of life in the community. However, effective growth management has been shown to be a strategy that holds the promise of allowing these two qualities to exist simultaneously in Charlotte-Mecklenburg.

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J. Manteo, North Carolina
(focus on protecting image, identity and visual appearance)

Introduction

Manteo, North Carolina is located on Roanoke Island in coastal Dare County. Dating back to 1584, this historic area is the site of the first English settlement in North America. Today Manteo is home to slightly more than 1,000 residents.

The case of Manteo is an interesting yet atypical example of growth management as it is commonly perceived. In particular, Manteo's involvement with growth management, which began in 1980, was not triggered by growth and development but was instead part of the community's planning for the 400th anniversary of the original Roanoke colonies. In addition, rather than seeking to limit or balance growth, Manteo's actions were aimed at the preservation of the community's historic image and identity.

This study focuses on that uncommon land use planning effort that occurred in Manteo between 1980 and 1981. Three primary goals of the community are discussed in this case study. These illustrate most clearly Manteo's unusual form of planning and growth management. Three additional goals included improving community services, developing a more economically viable community and providing recreational opportunities for all residents.

Manteo's Past

Offering protected harbors and easy ocean access, Manteo was once the region's leading center of commerce. But with the development of major highways, including the widespread construction of bridges from the mainland to the far banks, Manteo gradually lost most of its economic significance. By

1979 the town was commonly perceived as little more than a place to get caught between traffic lights as one traveled to the beaches of the Outer Banks (Creef, 1987).

With the flow of tourists heading to and from the beaches, Highway 64, the main east/west route, became a crowded corridor of strip commercial development. Downtown Manteo contained a small number of thriving businesses, but their number was matched by empty storefronts, vacant lots, and deteriorated structures. The traditional commercial and cultural center, the historic Manteo waterfront, was being displaced in terms of social and economic importance. As stated by the Mayor, "the Highway 64 corridor, with its billboards and fast food restaurants, could exist anywhere in the world, but the downtown was distinctively Manteo" (Wilson, 1987). The community's planning process sought to lay the framework for the 400th anniversary of the Roanoke Colonies, but also to return central Manteo, including the waterfront, to its original place of importance.

The Planning Process

North Carolina's Coastal Area Management Act (CAMA) requires coastal communities to develop and implement land use plans in order to ensure the orderly development of the state's coastal resources. These plans, which are updated every five years, are subject to the approval of the local governing body as well as the state's Coastal Resources Commission.

Realizing that the CAMA land planning process would occur simultaneously with planning for the state and local celebration of the original colonies, Manteo's Board of Commissioners sought to establish a process that would combine these two tasks. As stated in a working document prepared during the planning process," It seemed fitting that the town develop a plan to celebrate

the quadricentennial and at the same time prepare a plan for the town's future... The goal was to prepare a community development process, a roadmap to the future, that would celebrate the highest ideals of the townspeople, protect the most valued aspects of the town, address the most serious problems, share the dreams embodied in the past and recent history of Roanoke Island, and create a healthier community" (N.C. State University, 1980).

In order to identify, develop, and institute this desired process, the town's mayor suggested the idea of offering the community as a laboratory for students in the School of Design at North Carolina State University in Raleigh. As an architect and an alumni, the Mayor was familiar with similar community development efforts the school had completed in the past. After approval of the Board of Commissioners, a university planning team moved to Manteo in July, 1980 and began the process of "slowly evolving a plan with the townspeople, listening, taking the community's pulse, checking its vital signs, introducing the town to itself through the eyes of outside professionals, providing technical assistance, and getting people involved in a process to design their own future" (NCSU, 1980, p. 1). The town also hired its first professional planner.

Manteo's planning process was begun in the fall of 1980 with a survey of local residents, combined with a series of 150 local interviews; these efforts were found to be the most effective means of informing and involving the community. According to the university planning team, "To develop a plan for the future that would celebrate the highest ideals of the townspeople, protect the most valued aspects of the town, and address the most serious problems requires that those ideals, valued aspects, and problems be clearly articulated not by just a few citizens, but by a broad cross-section of the community. One way to do that is to interview a randomly chosen sample of

people who will represent the feelings of the entire town" (NCSU, 1980, p. III). This process established the community goals that served as the basis for the 1981 CAMA land use plan and for planning the quadricentennial celebration.

Community Goals

Recognizing that the historic function of downtown Manteo as a mercantile center was no longer an economically viable use, the community set a goal of developing a new purpose for the area. Specific objectives included the development of an historically based, low-key tourism program designed to attract day visitors from the beaches. According to the survey of local residents, 65% favored the development of a tourist attraction in the downtown, with a majority also supporting historically based attractions in order to capture the past and present character of the town.

Planning for the community's future at the same time as planning for the 400th anniversary of the Roanoke Colonies allowed the community to build an overall tourist strategy into its 1981 land use plan. This objective was found to be compatible with the goal of establishing a new purpose for the downtown. The tourism plan was based on the anniversary celebration and included downtown projects such as the development of a fifty room inn, shops where traditional craftwork of the area would be demonstrated, and a large Elizabethan ship that would serve as an attraction on the Manteo waterfront.

Another aspect of the tourism plan was the development of a theme for the area. As explained by the planning team, "The people of Manteo need to understand what the town is, how it got to be the way it is, what it is likely to become, and what their aspirations are both for themselves and their community. That understanding will provide a theme for the future...The theme

'come sit on our front porch, let us tell you of the dreams we keep,' emerged as the appropriate catchphrase, the appropriate expression of the people and place, past and present, to guide the next phase of development in Manteo."

This theme was intended to describe the essence of Manteo, highlighting its distinguished character. However, it was also designed to help residents realize that Manteo and particularly the downtown, had changed significantly over time and that its future would include many more changes. Although the downtown had retained its attractive pedestrian scale, including several buildings with architectural styles modeled after European villages, it was obvious to the community that the area would not likely become the primary shopping area it once was. "Although townspeople remember the mercantile past fondly, most acknowledge that downtown Manteo must become something different, that the past is a memory and the future a new dream to be realized (NCSU, 1980, p.3). The community envisioned the new downtown as one that combined governmental services and housing with a significant tourist attraction related to the history of Roanoke Island. "The downtown, in short, needs to become a place where residents share their island's history and their waterfront with visitors" (NCSU, 1980, p. 4).

Image, Identity, and Visual Appearance

Preservation and enhancement of the character of Manteo was the second goal established by the community. Developed through a group process that included the local citizenry, the Town Board of Commissioners, the Planning Board, and the University Planning Team, the chosen strategy for achieving this goal included an emphasis on visual resources as a means of improving the town's image and identity.

Influenced by the mayor's architectural background and the choice of a design-oriented planning team, the process included public forums where

residents were asked questions such as, "How do you want your town to look and feel in the next ten years and twenty years?" (Wilson, 1987) Eleven different objectives were ultimately agreed upon in order to achieve this goal. Most essential to the town was upgrading the appearance of the waterfront. Realizing that its strongest natural asset was its connection to the water, a variety of proposals were submitted for strengthening this connection. The development of a boardwalk and marina facilities were most commonly advocated, along with public facilities such as an exhibition hall, an interpretive center, a visitor center, parking, a location for the Elizabethan ship, and a boat building center. It was assumed that these investments would attract mixed commercial and residential development.

A variety of other objectives were closely related to the improvement of the waterfront's appearance as a means of preserving and enhancing the character of Manteo. These included protecting residential neighborhoods from commercial encroachment, minimizing the automobile's impact on the downtown, encouraging public participation in planning, protecting local lifestyles from impacts of tourism, maintaining the friendly small town atmosphere and preserving natural resources and rural areas.

The Quadricentennial Celebration

In 1980 when the planning process was originally undertaken, Manteo faced the challenge of preparing for the 400th anniversary of the Roanoke Colonies, a statewide observance that would last from 1984 through 1987. The challenge existed in terms of finding an appropriate yet affordable style of festivities.

After numerous proposals made by local residents, the town determined that it would encourage the building and docking of a replica of a Roanoke

voyage ship, the Elizabeth II, in Manteo. The town would also host key historical commemorations and would cooperate with the State Department of Cultural Resources in establishing an annual Anglo-American folk festival in Manteo.

As stated earlier, these projects were compatible with the plan's first goal, that of discovering a new use for the downtown. Community leaders realized that long after the quadricentennial celebration ended, the Elizabeth II would remain on the Manteo waterfront, attracting an estimated 100,000 additional visitors each year. This supported the strategy of establishing low-key tourism as a new use for the downtown. In turn, each of these goals serves to preserve and enhance the character of Manteo, which was stated as another community goal.

Implementation

The work of the university planners resulted in six public documents, a model of what the community could look like in ten to twenty years, and a series of conceptual drawings. The community had made bold plans, but had few resources with which to implement them.

Community leaders later decided to evaluate Manteo's financial condition in order to determine whether the town could afford to hire a consultant to provide technical assistance regarding implementation of the plan. At about this time, the planning board discovered that James Rouse, the well known specialist on waterfront development projects, was a friend and college roommate of one of the residents of Roanoke Island. After a telephone conversation between Rouse and his former roommate, Manteo's Mayor and other officials had an invitation to visit Rouse's company and discuss Manteo's plans.

According to the Mayor, Rouse's critique of the plan was invaluable to the success of later implementation efforts. Moreover, Rouse became intrigued by the prospect of working for a small community and instructed his subsidiary organization, American City Corporation, to assist Manteo's leaders with planning and implementation strategies. The town's association with American City Corporation is ongoing and, although some projects have not been implemented, the plan is beginning to take shape in downtown Manteo. The Elizabeth II rests in the harbor, a new waterfront retail and residential complex is two-thirds occupied, new marina and boardwalk facilities exist, and ground-breaking for the new inn has been announced. The participation of a nationally recognized development firm was instrumental in "selling the town to developers, encouraging the new development that has been observed" (Wilson, 1987).

A final aspect of project implementation involved the town's zoning ordinance. Throughout the planning process amendments were made to restrict the size of advertising signs, eliminate billboards, and provide buffer areas between land uses. These actions were motivated by the town's orientation toward strengthening community character through visual resources.

A special district was also created in order to maintain the community's image of what downtown Manteo should be. Called the "Village Business District" (Section 7.04), this district "is established to provide for a centrally located commercial and service area and governmental center for the town and region. These regulations are designed to encourage the continued use of land for commercial and governmental purposes, to insure continued local use and historic tourism, to maintain the village character and to permit a concentrated mixed use development of the Village Business District..." (Town of Manteo, 1982). The ordinance continues to specify

permitted uses and other requirements of this district, such as lot size and height limitations.

Conclusion

Manteo's planning efforts served the town well. Taking an unconventional approach allowed the community to plan for a major celebration of historic significance at the same time that it reassessed its growth and development strategies.

Particularly significant was Manteo's emphasis on visual resources as a means of achieving its goals of developing a new use for the downtown, preserving and enhancing Manteo's character, and celebrating the anniversary of the Roanoke Colonies. In addition, the town managed to receive a significant amount of services with limited resources. The use of University planners served to trim expenses while at the same time it vastly improved the level of citizen participation. Finally, allying itself with a major development corporation, Manteo was able to substantially improve developer confidence in the downtown. The results of the collective acts involved in this process can now be seen in an improved Manteo.

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K. Nags Head, North Carolina
(carrying capacity-based comprehensive plan, hurricane hazard mitigation, environmental zoning, water tap ordinance)

Introduction

A coastal community with approximately 2,200 permanent residents, Nags Head experienced an explosive 146% growth rate between 1970 and 1980. Compounding the problems of managing this rapid growth is the town's continually increasing popularity as a summer vacation spot. Estimates indicate that Nags Head swells with up to 35,000 residents during the peak season as vacationers swarm the beaches of North Carolina's Outer Banks (Bryan et al., 1987). Local planners, however, believe that such extraordinary conditions call for extraordinary measures. These include Nags Head's innovative growth management effort which serves as the focus of this case study.

Growth Pressures

A variety of factors are responsible for attracting growth to Nags Head. According to the 1985 land use plan, several characteristics make the community an attractive place to live and vacation. "Among them are its proximity to water and beaches, its abundance of open spaces, its generally low density of development, and the overall quality of its natural environment" (Town of Nags Head, 1986, p. 1).

Composed primarily of single family cottages and a small number of motels, Nags Head is often described as a quaint village. And although a small shopping mall has opened on the main highway, including many nationally franchised establishments, the commercial center remains dominated by family operated businesses and cottage courts. These features reinforce one's perception of Nags Head as a slow-paced, village community.

Growth and development have been slower in coming to Nags Head than to many other vacation areas along the east coast, but the community has still experienced steady growth throughout the past decade. In fact, in 1985 it was claimed that "the forces of growth and change are being seen in Nags Head as they have never been seen before, and ... these forces will have tremendous implications for everything from water quality to hurricane evacuation..." (Town of Nags Head, 1986, p. 4). This statement reflected growth concerns that began to surface in Nags Head in the early 1970s. It wasn't until 1981, however, that the town hired its first professional planner.

Part of the motivation for land use planning in Nags Head was provided by projections which indicated that the town would reach a permanent population of 6,000 residents by the year 2000 -- a growth rate of 488% over a 20-year period (Lewis, 1987, p. 15). Local officials realized, however, that permanent population growth did not represent the community's greatest growth pressure. Instead, the dramatic increase in seasonal population was recognized as being Nags Head's leading challenge, including planning for the residential and commercial development that would be produced to accommodate it.

The town's planning efforts concentrated on these two issues - managing the steady growth in the number of permanent residents and accommodating the dramatic increase of the summertime population. Incorporated into Nags Head's planning process was the preparation of a carrying capacity study, a hurricane hazard mitigation and post-storm reconstruction plan, a water allocation ordinance, and a special zoning district designated to protect one of its greatest natural assets. These will be discussed in the sections that follow. Other growth management techniques instituted or evaluated for use in Nags

Head were planned unit development regulations, large-lot zoning provisions, modified height and bulk restrictions, and a variety of impact fee systems.

Carrying Capacity

Facing the prospect of long-term continued growth, Nags Head officials decided to explore the extent to which the island community's natural and manmade systems could support increased population and development. As stated by the city manager, "preparing a study of carrying capacity was the next logical step. We needed to find out what was the most limiting factor" (Bryan et al., 1987).

Located on a barrier island, a wide range of environmental growth constraints were quickly identified. Nags Head officials realized that land area presented the most significant obstacle to the expansion of the community. With a total of 4,600 acres, it became obvious that Nags Head was more likely to be reduced in area through beach erosion and inlet formation than to experience any increase in size. Having determined the extent of land area with which to work, planners turned their attention to identifying the most substantial growth limiting factors.

The strategy selected for the carrying capacity process involved a comparison of future population scenarios with the community's capacity for growth. In order to determine realistic growth projections, the analysts estimated future residential buildout scenarios under two different density levels.

The first scenario involved residential buildout using the state mandated standard of 15,000 square foot lots with septic systems. Compared to this was a scenario that projected residential buildout at densities allowed under the current zoning ordinance and with packaged treatment plants. This scenario resulted in 2,930 more dwelling units.

The study included an assessment of how future development would affect the community's provision of all public services. It was determined that Nags Head's most significant growth constraints were water supply, water quality, sewage disposal, and the potential hazards of a major hurricane. These issues assumed a high priority among Nags Head's elected and appointed officials.

Allocating the Water Supply

Nags Head drains its water from the Roanoke Island aquifer and operates its own storage, pumping, and distribution facilities. Although the aquifer has an estimated capacity of 15 million gallons per day, of which 5 million gallon are drawn, Nags Head only receives an allocation of 2.3 million gallon per day because it shares this water source with other Dare County towns. This limited allocation, along with concerns over the capacity of the pumping and distribution systems, motivated the development of Nags Head's water consumption ordinance.

This ordinance established a process for distributing Nags Head's allocation from the county water system to preferred development projects, over intervals of time. No more than 214 water consumption units (WCUs) of 400 gallons per day may be allocated each year to new developments. The essence of the regulation is that applicants for building permits or site plan approval must obtain a water tap permit for the amount of WCUs the proposed project requires before poceeding. This is based on a formula of one WCU per dwelling unit, or the equivalent.

According to the ordinance, proposed projects are divided among categories: Category I, single-family and duplex; Category II, hotel and multi-family; and Category III, commercial and office. Category I applicants may be allocated up to 132 WCUs per year or eleven per month through a monthly

first-come, first-serve procedure. A lottery is held if there are more than eleven applicants in a given month. Categories II and III applicants, by contrast, must undergo a complex biennial application, ranking, and permitting process. These applicants must file a conceptual site plan which is ranked on a point system based on non-water-related growth management goals and objectives. These include fire safety, location, water quality impacts, land use compatibility, transportation issues, aesthetic concerns, and recreation and open space. For example, the maximum of eight points is awarded for a recycled greywater system, and six points is given for tertiary sewage package plants, fire sprinkler systems, densities less than 25 percent of the maximum allowed, and the dedication of beach access or open space. All Category II and III site plans received in a six-month period are then ranked according to their point totals, and the Board of Commissioners allocates available WCUs and water tap permits in order of rank.

Tied to the water allocation ordinance is a $2,000 water impact fee that is due when an applicant receives the required water tap permit. Half of this money is earmarked for improvement of the water distribution facilities and the rest is added to the fund for source improvements. Clearly, the allocation of a limited water supply in Nags Head is used to achieve growth management objectives and to promote an integrated, comprehensive approach. (The water consumption ordinance is included in Volume III, the Technical Appendix).

Hurricane Hazard Mitigation

Recognizing the need to plan for hurricanes and severe coastal storms, the State of North Carolina requires through its Coastal Area Management Act (CAMA) that local land use plans explicitly consider and plan for these

events. In particular, coastal communities such as Nags Head are required to include storm mitigation and post-disaster recovery and reconstruction components which are consistent with CAMA guidelines in their land use plans (Brower et al., 1984, p. 1).

Having already identified the potential hazards of a major hurricane to be among the most significant factors limiting Nags Head's future growth, town leaders sought guidance for managing recovery and reconstruction following a storm, and also for actions and policies it could implement in advance to mitigate the severity of storm impacts. With this in mind, the town hired a consulting company well known for its growth management approach to coastal planning and hurricane hazard mitigation.

The Hurricane Hazard Mitigation and Post-Storm Reconstruction Plan promoted the general policies of redirecting new development away from high hazard areas through regulation, public facilities control, and land acquisition. It also stressed the wisdom of integrating hazard management into other growth management goals. In general, these strategies addressed methods of encouraging new development to locate outside of areas vulnerable to hurricane and storm damage or of decreasing the density allowed in these areas.

The consultants' study included an extensive analysis of the nature and location of physical hazards as well as estimations of the extent to which people and property in Nags Head were exposed to these forces. Detailed information was provided regarding total amount and value of real property located in various hazard zones, value of real property at-risk in incipient inlets, and public investment vulnerable to storm damage. Also included was a discussion of mitigation options, such as structural programs, provisions to strengthen buildings and facilities, and management of land development. The

plan concluded with a description of the town's storm hazard reduction goals, pre-storm mitigation objectives and tasks, and finally, the post-storm reconstruction objectives and tasks.

Like the need to cautiously allocate a limited water supply, hurricane hazards provide indisputable evidence of the virtues of growth management. Equally important is planning in advance for post-storm reconstruction in order to avoid the panic and shortsightedness that can occur within local government immediately after a major storm or other disaster. Hazard mitigation strategies and post-storm reconstruction plans, such as those prepared for Nags Head, should help to promote effective emergency response activities and permit orderly reconstruction with a more responsible pattern of development.

Environmental Zoning

Occupying the northwestern portion of Nags Head on Roanoke Sound is an irreplaceable, maritime forest known as Nags Head Woods. One of North Carolina's remaining maritime forests, and the most diverse on the east coast in terms of its variety of flora and fauna, the Woods consist of ecologically important marshland, pine hammocks, bay forest, hardwoods, ponds, and dunes. Due to the significance and rarity of this resource, town officials determined that land management was needed to protect its natural, cultural, recreational and scenic features.

The 1985 land use plan stated that existing land use in the area was limited to one farm and a small number of residences. In 1987, however, new homes were being constructed there and the town began to realize that greater development pressures would eventually mount, threatening this cherished natural area. The marshes were already protected through an Area of

Environmental Concern (AEC) permit with the state, but development was thought to be likely on another 650 acres of buildable property. The existing zoning regulations allowed one dwelling unit per approximately one acre, and for years private owners had resisted zoning changes that would increase the minimum acreage for building sites (Lewis, 1987, p. 17).

With the support of a 1984 citizen survey in which 85 percent of the respondents said that preservation of open spaces, forests, and vegetation was important or very important, town officials began work on a special environmental district for the Woods (Brown et al., 1984). In order to prevent any legal charges that the community did not have the authority to manage the property in this manner, four Dare County communities petitioned the State General Assembly to ratify a bill giving them explicit authority. On May 14, 1987, N.C. House Bill 765 became a law "to permit regulation of maritime forests by Kitty Hawk, Kill Devel Hills, Nags Head, and Southern Shores" (North Carolina General Assembly, 1987). The new Special Environmental District doubled the lot size necessary for construction and added requirements regarding permitted uses, the building site, forest canopy, groundwater recharge area and tree removal. (The text of the new district is included in the Technical Appendix.)

Considered by the Mayor as a major victory for Nags Head's growth management effort, the preservation of Nags Head Woods through more restrictive zoning was an example of the community's attempt "to put more teeth into the ordinances" (Bryan, 1987). With the previous success of planning and growth management, it appeared that the community was well on its way to achieving that goal.

Conclusion

An aggressive planning process is evident in Nags Head. For a community of its relatively small size, local planners have experimented with a surprising number of the newer and often more complex growth management techniques. Their experiments have generally ended with success.

In January, 1986, a workshop was held during which members of the joint Board of Commissioners and Planning Board evaluated town policies and ranked them as to priority. Through implementation of action strategies in the 1985 land use plan and activities associated with the subsequent preparation of the water allocation ordinance, the Hurricane Hazard Mitigation and Post Storm Reconstruction Plan, and the Special Environmental District, all of the items of highest priority had been addressed within the first year. The challenge remains to insure a vigorous and ongoing process.

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L. City of Denver, Colorado
(Mountain View Protection Program)

Introduction

Denver, Colorado, has a popular image of a city in the mountains -- i.e., the "Mile High City." The Rocky Mountains have historically played an important cultural and economic role in the city's development. As the city grew vertically, as well as horizontally, concerns about the ability to maintain a visual connectedness with the Rockies emerged. Denver's view protection ordinance grew out of these concerns, originally enacted in 1968. The ordinance, part of the City's building code (Chapter 10, Building and Building Regulations) and not its zoning ordinance, delineates certain geographical zones where height limitations are imposed to prevent obstructions of views of the Rockies to the west.

The View Protection Program

There are currently eight designated view protection zones, with three new districts added by amendment since 1982. One of these new areas -- that protecting views from the Southmoor Park -- lead to a court challenge which was decided in favor of the city and which strongly supports the legal foundation of the city's program. This court case is described in greater detail below.

Generally, the view protection zones are intended to protect views of the Rockies from historically important points in the city, essentially city parks. Specifically, view protection areas have been established around the following locations: Cranmer Park, Cheesman Park-Botanic Gardens, City Park, Washington Park, State Home Park, Ruby Hill Park, Southmoor Park and the State Capitol. Together these view protection zones emcompass some fourteen square

miles, or about 12.5% of the city's total area (Denver Office of Planning, 1985). The Ruby Hill Park district is the largest of the zones, including 3.5 square miles.

The specific provisions of the law are included in Article 14, Chapter 10 of the City Code -- "Restrictions on Structures Within Areas Necessary to Preserve Mountain Views." It sets forth a set of findings establishing the purpose behind the restrictions:

> (1) That the protection and perpetuation of certain panoramic mountain views from various parks and public places within the city is required in the interests of the prosperity, civic pride and general welfare of the people;
>
> (2) That it is desirable to designate, preserve and perpetuate certain existing panoramic mountain views for the enjoyment and environmental enrichment of the citizens of the community and visitors hereto;
>
> (3) That the preservation of such views will strengthen and preserve the municipality's unique environmental heritage and attributes as a city of the plains at the foot of the Rocky Mountains;
>
> (4) That the preservation of such views will foster civic pride in the beauty of the city;
>
> (5) That the preservation of such views will stabilize and enhance the aesthetic and economic vitality and values of the surrounding areas within which such views are preserved;
>
> (6) That the preservation of such views will protect and enhance the city's attraction to tourists and visitors;
>
> (7) That the preservation of such views will promote good urban design;
>
> (8) That regular specified areas constituting panoramic views should be established by protecting such panoramic views from encroachment and physical obstruction.

As diagram L-1 indicates, the particular dimensions of each district are somewhat different. In each case, a zone is fashioned by establishing a reference point (usually in a public park) and projecting a zone in a fanlike manner to the west. For each district a map is adopted and a specific set of

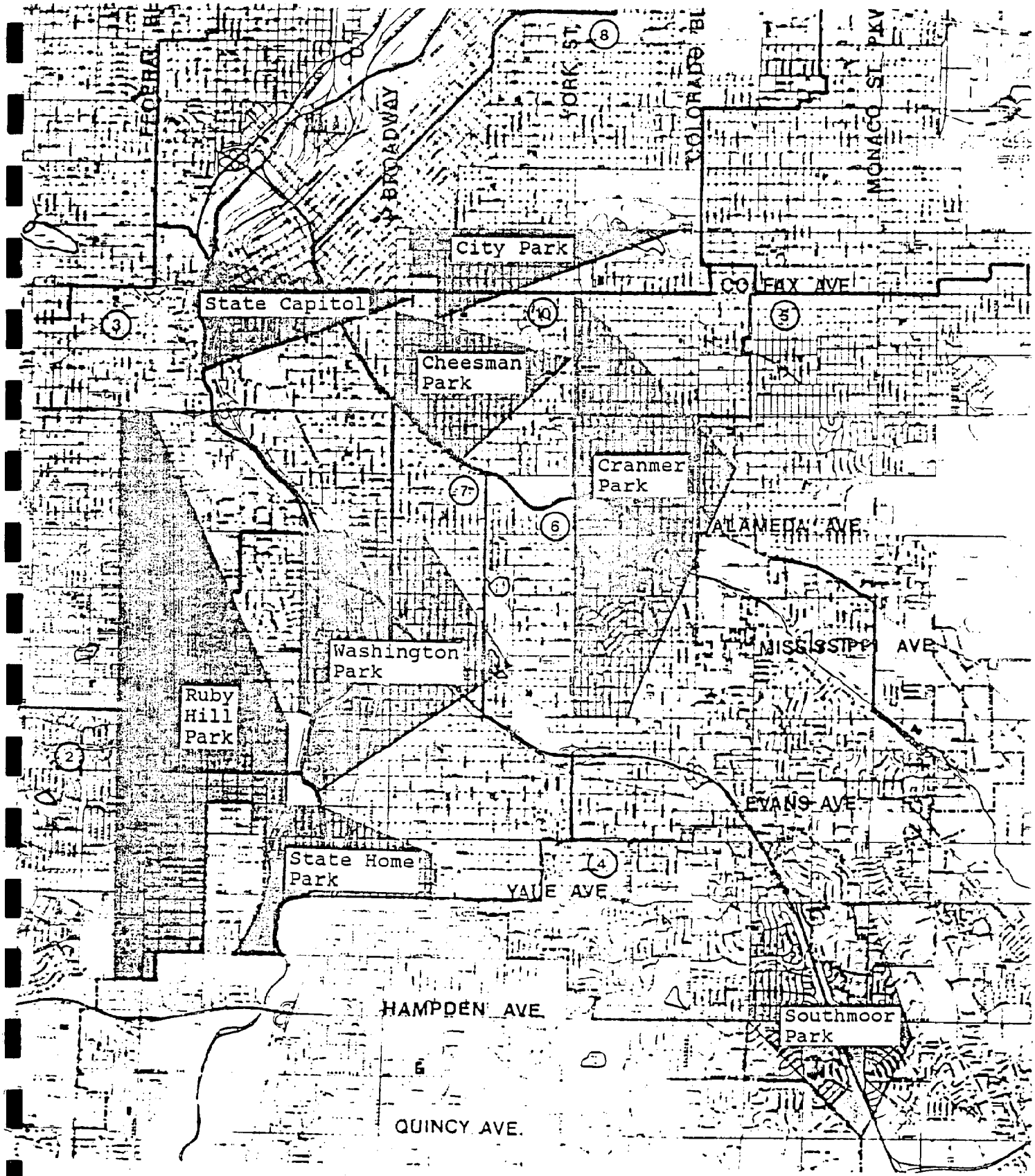

Diagram L-1
MAP 1
MOUNTAIN VIEW AREAS

building height restrictions within this zone are established. Permissible heights in the zone are established by projecting a line of sight plane from the reference point to the mountain with actual permissible building heights depending upon proximity to the reference point. For example, in the Cranmer Park View Protection Zone the following restrictions are placed on construction:

> No part of a structure within the area on the attached map indicated by shading or cross-matching shall exceed an elevation of five thousand four hundred thirty-four (5,434) feet above mean sea level plus one foot for each one hundred (100) feet that the part of a structure is horizontally distant from the reference point. Wherever a structure lies partially outside and partially inside of the area on the attached map indicated by shading and cross-hatching, the provisions of this section shall apply only to that part of the structure that lies within the area indicated on the map by shading or cross-hatching.

Thus, areas which are located in close proximity to the reference point (which is actually a brass plug placed in the ground indicating elevation above sea level), will have lower permissible building heights than those located in the outer areas of the view plane. The lateral or side dimensions of the view corridor have been established based on the location of good views and the presence of existing structures obstructing views of the mountains.

Because of renewed interest in the View Protection Program in the early 1980's, the Denver Planning Staff developed a set of four criteria to be used in judging the appropriateness of new view protection districts. These criteria were: (1) the major characteristics of the park/public place in which the reference viewpoint is located, (2) the general quality of the view as determined by provisions of the ordinance and by measurement of the existing views, (3) the relative permanence of the view as determined by the extent to which views established by ordinance could be violated by foliage outside the park/public place, and (4) the relative extent to which restrictions on building heights are imposed by the Ordinance (Denver

Planning Office, 1982). While these criteria were never formally adopted by the City Council, they are currently used by the city's planning staff to conduct internal reviews of view protection proposals and in formulating recommendations. The criteria were essentially an attempt by the planning staff to identify those aspects of existing zones which made them particularly workable or appropriate. When the criteria were developed, the staff compared the existing view protection districts (then only five districts designated) and concluded, among other things, that new areas should generally have topography which is level with or downsloping away from the reference point, should be at least 25 acres in size, and should be a park or public place of at least citywide significance. Using these criteria, in fact, the city planning staff recommended against adoption of the Southmoor Park View Protection District, as did the Denver Planning Board. Part of the concern was a result of topographical features of the park; the fact that it lies in a low area and does not allow for a sufficient "runway." The staff's recommendation and the Planning Board's opinion were not needed and the City Council adopted the Southmoor Park View Protection District.

Legal and Constitutional Challenges

Of all the view protection districts to be challenged in court, the planning staff felt the Southmoor Park was the weakest and thus were very concerned about the implications the decision would hold for the entire view protection program. The case, Landmark Land Company, Inc. v. the City and County of Denver, involved challenges made to the legality and constitutionality of the City ordinance by owners of land near the park, which would be restricted under the district's height limitations. The View Protection Zone would restrict the development of this land to buildings

substantially lower than the twenty-one stories they wished to build, although a special amendment to the view protection law for commercial areas would have ensured the developer at least a forty-foot structure (or the height allowed by the viewplane, whichever is higher). The trial court found the ordinance to be valid, and the case was directly appealed to the Colorado Supreme Court.

The developers proposal to build a twenty-one story office building was vehemently opposed by the Southmoor Park East Homeowners Association, Inc. (SPEHA) which attempted to obtain rezoning and downzoning actions to prevent the project. A councilman, at the request of SPEHA, proposed the extension of view protection status to the area and, despite the staff and planning board recommendations to the contrary, the City Council adopted the new district in July, 1982. An appeal to the Colorado Supreme Court the landowners claimed the ordinance was unconstitutional based upon several grounds, including that the view protection provision amounted to "special legislation," that the provisions are "neither rationally nor reasonably related to a legitimate public purpose," that even if the provisions are related to a legitimate public purpose this must be accomplished through a rezoning, and finally that the view protection provisions constituted a taking of private property without just compensation. The court refuted each of these challenges. Concerning the question of whether the ordinance is reasonably related to a legitimate public purpose, the court made a strong statement in support of view protection:

> It has been well established that protection of aesthetics is a legitimate function of a legislature ... Especially in the context of Denver -- a City whose civic identity if associated with its connection with the mountains -- preservation of the view of the mountains from a city park is within the city's police power.
>
> Appellants argue that SPEHA's reason for promoting the amendment was to protect the property values of its members' homes, not to protect the

mountain view. Assuming that this is true, it does not affect the validity of the City Council's action. The Council enacted an amendment that is clearly directly related to preserving the mountain view -- indeed, the gradations in allowable height based on distance from the sighting point are tailored to nothing else.

Lessons Learned

This relatively strong legal decision has given the city additional confidence in pursuing its view protection and aesthetic objectives. Nonetheless the Southmoor Park case presents to some a troubling contrast between the original intent of the program and how it has been used in recent years. Initially the establishment of view protection areas was an attempt to maintain public views from relatively large, established city parks or civic areas. The impetus came from civic-minded public officials. The Southmoor Park case represents the trend of view protection restrictions being initiated by elected official at the request of neighborhood groups. Here, as in the Southmoor case, the issue is not so much concern about preserving "public" views from large, established public parks, but rather of using the restrictions as a way to prevent high-rise construction which is undesirable from a neighborhood point-of-view. Concern about protecting views of the Rockies is still clearly important, but it loses much of the "public" dimension evident in, say, the "City Park" (which includes the Zoo and Denver Museum of Natural History) or the State Capital. There are numerous neighborhood parks throughout the city of Denver where technically the city council could place similar view protection provisions. Perhaps a future strategy for neighborhoods wishing to combat highrise development will be to first secure a neighborhood park, and then to secure view protection status for it. This is an issue which the city must confront in the future.

A problem of a somewhat more technical nature is that the view protection restrictions do not address trees and vegetation. While substantial height

restrictions are placed on buildings, these benefits may end up being vitiated because of tall trees or other vegetation that gets in the way of views. As Bob Werner of the City's Planning Office notes, it has been difficult to get some developers and landowners to consider the visual impacts of planting tall species of trees and other obstructive vegetation.

Despite these concerns, the city's view protection program is highly successful. A tour of the view protection sights is convincing in that it is clear that impressive panoramic view corridors have been protected. The incredible views from, say, Cheesman Park, must significantly enhance the recreational value and experience of this park. It is, in fact, hard to imagine the functioning of this park without its free visual access to the mountains.

The city has been able to strongly implement the view protection provisions. There does exist a procedure for obtaining a variance in certain cases from the City's Plan Review and Enforcement Committee, but variance approvals are rare. A typical variance request involves a situation where a lot is partially in the view district and where a developer seeks a variance in order that a more normal building design can be used. What has happened is that the city has held its ground, and builders end up designing structures around the zone boundaries.

While it is uncertain how extensive the view protection system will grow to be, additional amendments creating new protection zones will undoubtedly be adopted. In fact, the city is considering proposing that as part of a downtown redevelopment project (an area along the South Platte River) a view protection district would be included.

A major lesson learned from the Denver View Protection Program is the importance of stressing the economic rationale behind such restrictions.

According to Werner of the Denver Planning Office the program has strong public and political support because it is seen as important to maintaining the attractiveness and image of the city and is supportive of the tourism economy. Enhancing the quality of life in Denver contributes as well to the attractiveness of the city to industry and commerce. To simply argue the need to protect views from the position of beauty or aesthetics would not accomplish as much, at least not in Denver. Denver's recent efforts to clean up its air, including the mandatory use of oxidated fuels, have also been justified on similar economic grounds.

Other Scenic Regulations

Denver is conscious of aesthetics and the visual implications of its development in other ways. It recently enacted (in March, 1987), for instance, a six month moratorium on the construction of billboards while it studies the need for stronger billboard restrictions. It has also adopted a downtown plan and is using some interesting tools to implement it. One of these tools is the transfer of development rights which allows and encourages the transfer of development density from the historic district to other downtown parcels that can more appropriately accommodate higher density (transfers are permitted only in B-5 and B-7 zoning districts). The densities of receiving parcels can be increased, but only up to certain specified limits. The TDR provisions are relatively new, and to date only one downtown development (approved but not yet built) has increased its permissible density through the purchase of development rights.

As well, and similar to the Austin Texas Capitol View Protection Overlay, Denver has enacted special zoning restrictions around its capitol building. These restrictions are in addition to those created by the designation of the

Mountain View District. Specifically, three different concentric zones surround the capitol building, with greater height limitations the closer a parcel is to the building. There are sub-zones within these stepped planes, creating six different height zones in total (A through F). In the inner most zone adjacent to the state capitol building (area E primarily) "no part of a structure...shall exceed an elevation of five thousans three three hundred fifty-three (5,350) feet above sea level." Compared with the reference point of 5,286 at the state capitol, this represents a height limitation of about seventy feet. The permissible building heights rise to over two hundred feet in portions of the outer ring.

The City has also adopted special bulk plane limitations which restrict building height when adjacent to low density residential areas. Specifically, within one hundred and seventy-feet of certain protected residential zones, no buildings within certain controlled districts.....

> ...shall project up through bulk limits which are defined by planes extending up and over the zone lot at an angle of forty-five (45) degrees with respect to the horizontal and which planes start at horizontal lines which are codirectional to the district boundary lines separating the zone lot from the protected district and pass through points ten (10) feet above the midpoint of each such district boundary line...

A specific height limitation of 75 feet is also specified for construction within 175 feet of the protected district. Neither of these restrictions would apply in cases where a highrise building already exists in the protected district.

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M. City of Boulder/Boulder County, Colorado
(annual development cap and urban growth phasing; Open Space Acquisition Program; farmland protection; requirements for affordable housing; resource conservation)

Introduction

The City of Boulder is located approximately twenty-five miles northwest of Denver. Nestled in the Boulder Valley, between plateaus to the east and south, and the front range of the Rockies to the west, the city has a population of about 86,000 (Baron, 1987). Boulder city is located within the county of Boulder, with a total population of around 200,000 (and containing about 750 square miles). The county's western border follows the Continental Divide. Boulder is also the home of the University of Colorado, with a total enrollment of about 23,000. Settled in the 1850's as a pioneer mining town, Boulder has acquired the reputation of being a highly desirable place in which to live and work. Part of this attraction, which the city has worked hard to protect, is clearly related to the area's immense beauty. The attractiveness of the area has lead to high rates of growth since the 1960s. Between 1960 and 1970, the city grew by approximately 77%. While substantially lower, the city grew by about 15% between 1970 and 1980, and by about 12% between 1980 and 1987.

Efforts to manage and plan for growth are, in fact, not new in Boulder. An analysis of Boulder's settlement history documents the establishment of The Boulder City Town Company, and the development within this association of different growth factions -- the "lowers" and the "uppers." "The 'lowers' wanted to encourage men to come to the valley and settle their families on relatively cheap land. The 'uppers' felt that the company should control immigration by setting a high value on the real estate" (Smith, 1981). As it

turned out, the uppers gained control and the community began as a relatively exclusive real estate venture, with lots along Boulder Creek put up for sale at a tremendous $1,000 a piece (a great deal of money considering that homestead lands were selling at $1.25 per acre). From its early beginnings the Boulder Company placed substantial restrictions on the way the town developed. As Smith (1981:18) notes:

> Already Boulder City had 'city planners' and 'building codes' at work. The company specified that a cabin foundation must be laid in seven days; the cabin walls must measure more than eight and one-half feet to the eaves. Chimneys must be built inside the cabin. Construction must be finished within sixty days; houses must be oriented north and south. Streets were to be eighty feet wide, alleys twenty feet wide. No stoves had been built, and any goods that were available were sold from wagons.

Modern Growth Management in Boulder: The Blue Line, The Boulder Valley Comprehensive Plan and the "Danish Plan"

The City of Boulder has employed a number of techniques over the years designed to influence the rate, location and quality of its growth (see Godschalk, Brower et al. 1979). Early among these efforts was the delineation of the so-called Blue Line in 1958, strongly advocated by the citizens group PLAN-Boulder. This line, drawn along the 5,750 foot elevation, was to mark the western border of city water service. Beyond the line, the city would not extend these services. The intention of the line was essentially to prevent the loss of its western mountains to development. The city found later that the Blue Line did not ensure the protection of its mountains, and at least partly because of this initiated what has become an extensive open space acquisition program. The history and specific provisions of this program are described in detail in a subsequent section below.

A significant planning milestone was the adoption, both by the city and county, of the Boulder Valley Comprehensive Plan in 1970. This plan provided

a set of development and growth policies for the 58 square mile area called Boulder Valley, including the city of Boulder, and projected a population growth of 140,000 by the year 1990. This projection lead many citizens groups in the city to campaign for growth management measures which would place some form of cap or limit on these projected growth levels. After a failed attempt to pass a citizen-initiated population cap in 1971, a similar measure proposed by the Boulder City Council did gain approval in a later referendum. The failed referendum, advanced by a group called Zero Population Growth (ZPA), "sufficiently frightened the prevailing local establishment" that they proposed their own measure which did pass (Danish, 1986, p. 27). The measure was in the form of a policy directive, calling on the city, in cooperation with the county, to determine the "optimum population and growth rate for the Boulder Valley," and in the interim to take actions necessary to hold the growth rate below that experienced during the 1960s. This in turn led to the adoption of a set of interim growth policies, including a resolution that all new development projects incorporate low and moderate income housing.

In 1973 a study of future growth options for the city and county was prepared by the Boulder Area Growth Study Commission (BAGS) which layed the groundwork for the city's current program. A major focus of Boulder's growth management effort which grew at this period was the creation of a cap on the annual rate of growth in the city, fashioned after Petaluma's (California). Passed by referendum in November, 1976, the program -- known as the "Danish Plan" because it was the brainchild of then City Councilman Paul Danish -- placed an annual limit on building permits. Based on the intention of limiting annual growth to between 1.5 and 2.0 percent per year, this resulted in an average annual limit of 450 building permits over a five year period. These permits were issued according to a point system giving preference to

certain factors and community objectives (the so-called "merit system"). In particular, points were awarded based on the inclusion of low and moderate income housing, public facilities, environmental elements and site design (see Godschalk, Brower et al., 1979). Because of a sunset clause the ordinance went out of existence in 1982.

The New Annual Development Cap

The city has modified the original Danish Plan idea several times since 1982. The city currently maintains an annual development permit cap system, but it is substantially different from the Danish approach. The new provisions, adopted in January, 1985 are found in Chapter 6, "Residential Growth Management System," of the City's Land Use Regulations. Table M-1 presents the yearly allocation of building permits established for Boulder through 1990. The new provisions maintain the same objective of keeping annual growth to 2%, yet they replace the merit point system with a proportional allocation system. This system awards a particular applicant that number of permits which represents his or her proportion of the total pool of requested permits. That is,

> If the total number of allocations applied for in a development is more than the number which can be applied for...the applications shall be reduced pro-rata so that the total applications applied for in any such development do not exceed such number. But no application shall be reduced to less than one allocation, unless the total number of allocations within a development exceeds the number of allocations for which the development may apply...in which case a random selection will be used to reduce the allocations to the allowed number (Section 9-6-6). (See a similar explanation in Section 9-6-7).

These building permit allocations are issued at four points during the year: February 1, May 1, August 1, and November 1. The city is permitted to issue only 25% of the year allocations at each of these points, although this can be modified under certain circumstances. Applications for permits cannot

be made until the land for which the units would be used first meets all land use and zoning requirements (e.g., has obtained the necessary rezoning). While the city is usually restricted to the quantity of permits listed for each year in Table M-1, the actual permits available may differ either because there are unallocated permits carried over from the previous year, or the city (Planning Board) has chosen to borrow, which it has the power to do, from the next year's allocation. (Note: The entire text of the ordinance amending the annual permit cap and establishing the proportional allocation system is included in Volume III, the Technical Appendix.)

Certain kinds of residential development are exempt from the allocation restrictions. Specifically, the following types of development can be issued a building permit without receiving an allocation: (1) low income dwelling units and moderate income dwelling units up to a certain number when in combination with low income units; (2) detached dwelling units on single lots platted before November, 1976; (3) housing built by the University of Colorado; and (4) up to thirty exemptions per year, at the Planning Board's discretion, for development projects involving historic buildings, mixed commercial and residential uses in certain zoning districts, and group housing for a special population (Note that "exemption" refers to a single dwelling unit; thus thirty exemptions means exemptions for 30 dwelling units.)

There has been considerable debate over the local effects of this type of annual permit restriction. In recent years Boulder's growth has not been meteoric, as it was in the 1960's, and the annual permit restrictions have not caused great hardship. For critics of the program, the most frequently cited negative effect is the increase in the cost of local housing. Paul Danish, looking back on the city's permit allocation system, has questioned this conventional wisdom:

> That initial growth ordinance had four consequences worth mentioning. First, it had no lasting effect on the average price of a housing unit. Historically, Boulder housing prices have run 10 to 15 percent above those in Denver. But in the six months immediately following the enactment of the ordinance, that gap grew to about 25 to 30 percent. The gap, however, closed again almost immediately; the differential dropped back down to its normal 10 to 15 percent; and the two sets of housing prices went up almost in lockstep during the rest of the life of the ordinance.
>
> The ordinance was in affect from 1977 to 1982. And this was a period of fairly high housing inflation in the Denver/Boulder market. Although it was widely perceived that the ordinance did contribute to higher housing prices, the data - looked at closely at the end of the period of the ordinance - showed that the evidence for this perception simply was not there (1986, p. 29).

Danish identifies three other possible effects of the annual permit restrictions: downtown revitalization, demographic effects (specifically on the traditional family and income distribution) and effects on the growth rates of neighboring localities. Danish believes there is little evidence to suggest that the system had the latter two effects, though he does believe downtown revitalization has been enhanced through the system. Downtown revitalization appears to have been advanced significantly, both because of exemptions in the original ordinance for small projects on existing lots and because a large percentage of the annual permits was aside for construction in Central Boulder. (This is an incentive which, of course, no longer exists in the ordinance.)

Table M-1

Yearly Allocation of Dwelling Units in Boulder

Year	Allocations
1985	799
1986	815
1987	831
1988	847
1989	865
1990	882

Source: Boulder Land Use Regulations

Conversion of the Merit System to Mandatory Performance Standards

What was intended to be accomplished by the merit point system is now being accomplished by virtue of the fact that all development is subject to strong performance standards in many of the same substantive areas. Chapter 7 of the land use regulations, for example, establishes certain requirements for moderate income housing which are mandatory, rather than optional. Specifically, this provision requires that a certain percentage of the units in each new residential development be affordable units (i.e., for low or moderate income residents). These can be units either for sale or rent. The required percentage depends on whether the set asides are for low or moderate income units, and when the land was annexed by the city. For residential developments on land annexed on or after December 18, 1973, 15% of the units must be for moderate-income residents, or 7.5% for low income residents. For developments on land annexed to the city before December 18, 1973, the required percentage drops to 10% for moderate income units or 5% for low income units. In some circumstances this requirement can be satisfied in other ways besides the provision of actual units, such as through cash payments. Generally the units must be provided on the actual development site being proposed. If a developer provides a greater number of low or moderate income units than required, there is a provision in the land use code which would allow him or her to use these toward the affordable housing requirements in future projects. The Boulder Housing Authority has primary responsibility for administering these provisions (including how low and moderate income will be defined).

Resource conservation (i.e., energy, water) is another example of these performance standards. All new dwelling units built in Boulder must satisfy resource conservation standards. Specifically, Chapter 3 includes a point

system assigning points to developments with certain energy and resource conservation features. Each proposed project must accumulate a minimum score of twenty points to gain approval. The system allows, for example, for the awarding of two points for proposed developments where 80% or more of the new residential buildings are either "oriented within thirty degrees of true south; and ... physically and structurally capable of supporting at least seventy-five square feet of solar collectors for each dwelling unit in the building..." The system gives six points, for instance, to projects using natural gas space heating equipment, where a minimum analyzed fuel utilization efficiency of 96% is achieved. As a further example, three points would be obtained for projects which incorporate toilets with a 2.0 gallon flush maximum. (These provisions have also been included in Volume III, the Technical Appendix.) Separate minimum solar access standards must also be satisfied. Minimum performance requirements also exist for a range of other issues, including floodplain management, landscaping, and bicycle parking, among others.

Adequate Public Facilities and Urban Growth Phasing

While the rate of growth provisions contained in the Boulder Land Use Regulations establish an annual permissible quantity of growth, these provisions do not explicitly indicate where this growth should or will go. Boulder City and Boulder County have together ratified a set of policies in the Boulder Valley Comprehensive Plan (revised 1986) which are intended to govern the physical expansion of the city and which identify those locations where future growth is to be preferred. A centerpiece among these policies is the city and county agreement that new urban development should only occur where adequate urban facilities and services exist. Indeed, the presence of

adequate levels of urban services is what indicates to the city that an area can accommodate urban development. The county agrees that it is desirable and appropriate for the city, not the county, to provide these urban services.

The Boulder Valley Comprehensive specifically delineates what is meant by "adequate urban services," providing specific service levels (criteria) for the availability of public water, public sewer, urban fire and police protection, urban transportation, parks and schools. The Plan sets out for each of these service areas, detailed criteria which address adequacy in terms of responsiveness to public objectives, sufficiency of funding and operational effectiveness. The criteria range in specificity from general statements about the quality of the service or facility to specific operational objectives. In the case of fire service, for instance, an area is considered adequately serviced if it is within a six-minute response zone (among a list of other service requirements). In the case of police protection, patrol routes must be located so that development areas are within a two-minute emergency response time, twenty-four hours a day. As a further example, specific design standards are specified for adequate public sewer and water service, including minimum size, pressure and flow standards.

These adequate facility standards are thus used in identifying areas suitable for urban development. The Boulder Valley Comprehensive Plan states the important policy connection between facilities and urban growth:

> In Boulder County, and not unlike most other areas throughout the country, land use regulations have traditionally permitted urban areas and development in areas where inadequate urban facilities and services are not yet provided, coordinated or planned. If it is uniformly and universally agreed that the resulting patterns of leapfrog remote urban development are inefficient, wasteful, and seriously contrary to the public interest, health, safety and welfare. One of the most important objectives of the Boulder Valley Comprehensive Plan is the reduction, if not elimination, of this urban sprawl.
>
> The basic outlines and approach of the Plan can be concisely stated. The areas immediately surrounding the City can most efficiently and

> effectively be provided facilities and services by the City. These areas are the most logical areas for urban development. The city intends to provide, on a phased basis over the planning period, the facilities and services to accommodate this urban development. This context should be kept in mind when considering the policies and other statements that follow. (Boulder Valley Comprehensive Plan, p. 5).

The Plan divides the Boulder Valley into three zones for the purpose of managing growth, and are tied to the plan's fifteen year planning period. Area I is the existing city and contains urban services and facilities sufficient to continue to accommodate urban growth. On the other end of growth continuum, Area III, most of it under County jurisdiction, includes areas which do not have adequate services to accommodate urban growth and are not likely to have them within the next 15 years. Lands designated as Area II are expected to accommodate urban growth within the 15 year planning period, as adequate services and facilities come on line. These areas have been further divided into IIA and IIB, with the former representing areas which will be ready for urban development first (within three years), and the latter areas will be ready at a later part in the fifteen year planning period (between 3 and 15 years). This growth policy scheme is implemented primarily through annexation and the city's capital improvements program. Annexation is required by the city before adequate public facilities and services are provided. The county, as will be described in more detail below, reinforce these growth planning policies both through its land use regulations which keep to low levels the amount of permissible rural development and by clearly staying out of the business of providing urban services and facilities. The city and county have entered into an intergovernmental agreement which permits each to have a substantial say in the planning and regulatory decisions of the other (this is also described below). The city's very active open space program (also described below) has created a nearly contiguous greenbelt around the city which also reinforces these growth policies.

While this method of identifying growth areas and defining them in terms of the future availability of public facilities and services appears to work well in Boulder, the planning director indicates that to some the time periods are confusing. Some landowners and developers want to know when the fifteen year period begins, and exactly when different areas will have adequate services. As the director explains, the time periods attached to different growth areas are meant to be "design" timeframes. For many reasons, including changes in local population trends, land designated as an Area II may not have adequate facilities provided within fifteen years. Rather, these are approximate timeframes.

Another aspect of Boulders public facility policies are its impact fees. For a number of years the city has imposed sewer and water plant investment fees, and a parklands acquisition. A new proposal is currently under consideration which would create a development excise tax, which would collect funds from new development to pay for the costs of providing the following services and facilities: police, fire, library, human services, municipal offices, streets, and parks and recreation improvements. These fees would apply to both commercial and residential developments. A single excise tax would be imposed, and would be set at 79 cents for each square foot of floor area in the case of commercial development. For residential development the tax would be set at approximately $1800 for each single-unit dwelling, or $690 for each unit in a multi-unit dwelling or for each mobile home. These funds would be collected and deposited in one central fund to be used for capital improvements in the various service areas identified.

Height Restrictions and Other Land Use Regulations

Along with Boulder's more unique growth management provisions, the city also employs relatively conventional regulatory mechanisms in effective ways

to accomplish community objectives. One relatively effective conventional regulation is the city's building-height limitation. A fifty-five foot height limitation for all buildings was established through a citizen initiative. This is very helpful in terms of preventing the obstruction of views of the mountains. As well, the city conducts a special height review process for proposed building between thirty-five and fifty-five feet in height. Proposals for buildings in excess of thirty-five feet are subject to special height review standards and criteria (Section 9-4-11, Height Review). Among other things, such proposed buildings must set aside a certain percentage of its total land area as useable open space (depending upon the actual height); must adhere to special setback standards where adjacent to residential uses; must be designed and sited to minimize the effects of shadows on adjacent structures and sidewalks; must protect public view corridors and minimize visual impacts on existing structures or established districts; must be in proportion to the heights of other existing or proposed buildings in the area; must incorporate elements which provide for the safety, attractiveness and convenience of the pedestrian; must be made of materials and colors which are compatible with the surrounding area; and must be of a scale appropriate to pedestrians and which provides an attractive streetscape for motorists. Certain additional restrictions are placed on the floor area ratio of structures over thirty-five feet in height. (These height review standards are included in Volume III, the Technical Appendix).

The Boulder zoning ordinance also contains a special high density overlay zone, which includes a special review process and development criteria for high density development in these areas. The primary intent behind the zone is to deal with the special compatibility problems presented by new higher

density development in and around the downtown central business district. The city also has zoning provisions which deal with Planned Unit Developments.

The Boulder Open Space Program

One of the most important and effective features of Boulder's growth management program, and one of the most visible, is its open space program. Boulder's interest in acquiring and protecting its open space is not new. In fact its initial acquisition was in 1898 when it purchased the Chautauqua property (for a summer camp for adults) on the edge of the western range. It in fact sold bonds to pay for this acquisition, perhaps foreshadowing what was to come in the future. Shortly after the land for Chautauqua was purchased, the city bought the eastern slope of Flagstaff Mountain, amounting to about eighty acres, from the federal government (Smith 1981). Following this purchase Boulder petitioned the federal government for an additional 1800 acres in the mountains, which Congress approved as a gift in 1899. The city also acquired lands in the early 1900's to begin its park system along Boulder Creek. In 1908 landscape architect Frederick Law Olmstead Jr. was hired by the Boulder City Improvements Association to develop a plan for the city's physical development, including its parks and open spaces. Thus, Boulder has had a long, and in some ways, unique history of concern for open space and park acquisition.

As noted earlier, modern efforts to prevent the loss of open space to growth and development began with the delineation in 1959, by public referendum, of the City's Blue Line. This specifically prohibited further water service expansion, west of the city's 1959 urban boundary. The city quickly found, however, that the Blue Line would not stop development in the mountains. The city was forced to buy 155 acres of land on the Enchanted Mesa to prevent the building of a luxury hotel there.

During the 1960's public support for open space protection grew dramatically. A group called Greenbelts for Boulder lead a drive to get an open space referendum on the ballot, and in 1967 voters of Boulder approved a measure which created a 1 percent sales tax, of which 40 percent was to be specifically designated for open space acquisition (a similar measure failed in 1963). The other 60 percent was to be used for transportation improvements and some local observers have suggested that this helped the political saleability of the measure.

Since the initiation of this on-going open space acquisition program, 16,000 acres have been acquired by the city, along with 4600 acres in the Boulder Mountain Park. Thus, over roughly a twenty-five year period the city has acquired rights to over 20,000 acres of open space. The city has expended approximately $50 million over this period. The vast majority of the land is owned in fee-simple by the city, with an estimated 1000 acres of development rights acquired. City staff have indicated that because of the general proximity of open space areas to the city, most of the market value of the land is a function of its development potential and it thus makes sense to purchase the fee-simple rights in most cases. Much of the open space not in the mountain park is leased to farmers. Lease revenues have in the past generated funds sufficient to cover the costs of maintenance and protection of the open space lands (Walker 1977). In some cases the original owners have been permitted to remain on the land and to continue to use it on a lease basis.

The Boulder Open Space program is fully and completed distinct from the city's parks program. There are different staff, different sources of funds, and different plans governing acquisition. This is a reflection both of the political and programatic need to keep the programs separate, and the

fundamental differences in the purposes and objectives of these different programs. The Parks Department has the objective of providing active recreational opportunities (e.g. soccer fields, tennis courts, etc.), usually involving relatively small parcels of land. The objectives of the open space program are to provide visual amenities and environmental buffers, and to promote a compact and efficient pattern of urban growth. Where recreational opportunities are provided, such as in the case of trails, these are of a passive nature. There is a fear that if these programs were not separate, the open space program would end up getting shortchanged, either because open space areas would appear attractive locations for recreational facilities or because funds that could be used for acquisition of open spaces would be diverted to these other uses.

Most of the open space lands have been acquired through amicable negotiations between landowners and the city. Eminent domain has been used in only a few cases, although the threat of eminent domain has been more extensively used. The city's detailed open space plan and map which designates all open space lands to be eventually acquired under the program have proven to be very helpful in this regard. They are helpful both because they prevent the city from acting arbitrarily (and prevent the perception that the city is acting arbitrarily), and because they create an expectation in the minds of landowners located within open space areas that the city plans to eventually acquire their land. It prepares landowners in advance to think in terms of city acquisition.

The fact that the city has a specific and definite open space plan, originally adopted in 1974, is one reason why the results are impressive. There is clear goal and areas to be acquired are specifically delineated on a map. The Boulder open space plan as currently conceived will ultimately

create a solid greenbelt which completely surrounds the city. As the city's open space maps indicate, this has already been largely accomplished, with the largest acquisitions to the north, south and west. The greenbelt is "thinnest" and the amount of acquired open space smallest to the east of the city and this is where future acquisitions are likely to focus. Staff in the City's Real Estate Services/Open Space Department estimate that 4,000 to 5,000 additional acres are needed to complete the greenbelt program as currently conceived. There is also a good possibility that the program will be expanded in the future--that is, that additional areas will be designated for open space acquisition. The city is also currently exploring new ways to protect open space, including the possible use of transferable development rights.

The city's ability to finance its acquisitions was enhanced considerably in 1971 when a charter amendment allowing the sale of bonds, backed by future expected sales tax revenues, was passed by referendum. Two bond issues have been floated since this time, the most recent was an issuance in 1983 of $12 million. Unfortunately, sales tax revenues in recent years have been on the decline meaning that much, if not most, of these revenues must go to financing bond debt. In 1987, for example, although the sales tax generated $5 million for the open space program, this was $1 million short of the predictions. In 1987, all revenues went to paying off the bond debt, with no funds available for actual acquisition. While this indicates the negative side of issuing bonds, the open space staff generally feel that the ability to float bonds has been a highly useful tool. It permitted the early acquisition of a large amount of acreage--acreage that might have been lost or eventually acquired at a higher cost.

The option of turning the open space program into a landbank has been discussed in the past and firmly rejected; that is, an approach which would

advocate occasionally selling a public parcel and then using the resulting profits to purchase a presumably larger amount of acreage elsewhere. The citizens of Boulder appear firmly committed to the notion that lands acquired under the open space program are to remain in public hands in perpetuity. In fact, a recent referendum was passed modifying the city's charter so that any sale of lands which were acquired under the open space program must be approved by both the City Council and the Open Space Board of Trustees. This was perceived as a way to prevent future sales by councils perhaps less supportive of the program and its objectives.

The Open Space Board of Trustees is the public body which directly oversees the open space program. Created by City Council Ordinance in 1973, it consists of 5 members appointed by the city council for 5-year terms (see Technical Appendix). The Board reviews every proposed acquisition and submits its recommendations to the city council.

Because most of Boulder's open space land is located in the unincorporated county these lands are taken off the county tax rolls. Apparently this is not a concern to the county and in fact is viewed by them as favorable in the sense that it reduces the need to provide service to areas that might have been developed, albeit at very low densities, under the county's land use regulations. An area to the south of the city is a case in point. Here, because of open space acquisition by the city, the County Sheriff's Department has no need to police this area, in turn reducing service costs there. While the city does not pay property taxes on its open space lands, it does contribute fees in lieu of taxes to rural fire districts, which it does not legally have to do. The general feeling is that this is necessary and appropriate to ensure that open space areas are adequately protected from fire (they want to make sure the fire trucks show up!).

Other Management Efforts: Promoting the Downtown, Urban and Environmental Amenities

An interesting aspect of the Boulder program are its efforts to protect and enhance the viability of its downtown commercial center. The Pearl Street Mall is the centerpiece of this program, and was recently described in a Wall Street Journal article as one of only twenty successful downtown malls in the country. Part of the success of this mall, and the city's downtown commercial areas generally, is due to the city's aggressive policies discouraging suburban-type malls in outlying areas. Boulder's development and growth policies have been important in reinforcing the downtown as the center for employment, commerce, and government. It has vehemently opposed the construction of conventional-suburban type shopping malls.

Boulder has taken a host of other actions to enhance the local quality of life. Its extensive network of bikeways and trails is impressive, for example. The city continues its effort to create a continuous green corridor along Boulder Creek, which runs through the heart of the city. A bike trail exists along much of the creek, as well as a string of community parks (e.g., Central Park). The city also has a strong sign ordinance and places considerable importance on urban design.

Planning and Growth Management in Boulder County

The County of Boulder is comprised of ten other municipalities besides Boulder, although Boulder is the largest. It is difficult to fully understand the City of Boulder's growth management efforts without also understanding the county's role. The county exercises a strong growth management function in several ways. First, the county has entered into an intergovernmental agreement with the City of Boulder in 1978, formalizing the coordination of their planning activities. The county and city have jointly enacted the

Boulder Valley Comprehensive Plan (described above), and in accordance with the intergovernmental agreement the county must thus approve any amendments to the plan (specifically, the Board of County Commissioners, and the County Planning Commission). (This intergovernmental agreement is included in Volume III, the Technical Appendix). As a jointly adopted policy document, the county as well as the city is obligated to "exercise its planning, zoning, subdivision, and related functions in a manner consistent therewith and to the end of attaining the goals and objectives of the Boulder Valley Comprehensive Plan." The practical result of this agreement is that the county reviews proposed plan amendments, as well as city annexations and annual capital improvements programs put forth by the city.

Amendments to policies are expected to be modified only every five years during the five-year plan review and update. Map amendments are made on a yearly basis as part of the city's annual plan review. Detailed procedures governing this amendment process are contained in the Boulder Valley Comprehensive Plan (and included in Volume III). In addition, the city and county have established a mutual referral process by which each jurisdiction is permitted to review and comment upon land use and regulatory changes proposed by the other. The county must inform the city through the referral process of any replats, rezonings, special use review or major improvements in the unincorporated areas of the Boulder Valley. Conversely, the city provides referral to the county for proposed rezonings, annexations, capital improvements and open space acquisitions by the city.

The county exercises a strong reinforcing role in its attitude toward growth and the provision of services in non-urban areas. The County Comprehensive Plan clearly states its intention to direct growth into the municipalities and existing growth areas. (Boulder County, 1986). The

county's posture on the provision of urban services has been to squarely place the responsibility for them with municipalities. Again, heavy reliance is placed on the urban service area concept. From the county's perspective, it is up to the cities (including Boulder) to determine the appropriate level of services to be required. It is clear that that County intends never to be in competition with its municipalities for the provision of urban services. Such a county position is obviously of immense help in preventing the type of urban sprawl and disjointed urban growth found in other parts of the country.

Protecting Farmland and Open Space in Boulder County

The county implements much of this growth policy through its zoning and subdivision regulations. As recently as two years ago the county further downzoned some 25,000 acres of land outside urban service areas so that these zone designations were more consistent with the non-urban nature of these areas. Several large industrial zones in the northern portion of the county, and outside of urban service areas, for instance, were changed to a different use to prevent more intensive, urban-oriented activities.

The county imposes relatively stringent restrictions on the density of development in its farmland and resource zones, which comprise much of the county's unincorporated area. Much of the western part of the county is included in a forestry district, which permits a density of only one dwelling unit per thirty-five acres (and a maximum structure height of 35 feet). Large unincorporated portions of the county east of the rockies are included in agricultural districts, which also permit only one unit per thirty-five acres. A floodplain overlay district prohibits all development (even recreational structures) in the floodway, and requires certification of floodproofing for structures in the flood fringe.

Perhaps the most interesting and innovative zoning tool used by the county is its non-urban PUD. These provisions allow additional development density in restrictive agricultural zones (as well as other rural zones) in exchange for a clustered design and donation of open space easements. As stated in the Boulder County zoning resolution, the purpose of the non-urban PUD are the following:

> In order to preserve Boulder County's agricultural lands for the continuation of agricultural and its related uses; to discourage the conversion of agricultural lands identified within the Boulder County Comprehensive Plan as "lands of National, Statewide, and Local Importance" to urban uses and encourage continuation of agricultural or non-urban uses," to provide for the preservation of environmental resources; to provide that future urban development should be located within or adjacent to existing urban areas; to discourage the conversion of agricultural water to urban uses; to provide an incentive to the farmer to keep the major part of his land in agricultural production by allowing the conveyance of small land parcels; to provide for a variety of lifestyles in Boulder County . . . (21-201).

Under the Non-Urban PUD provisions (or "NUPUD"), the owner of a thirty-five acre parcel of land in a farm zone can obtain an additional unit in exchange for clustering the units on 25% of the parcel, and ensuring that at least 75% of the NUPUD remains committed to agriculture or open space uses. An additional dwelling unit is permitted per development where the unit "existed and was accessory or incidental to the agricultural use of the acreage prior to March 22, 1978, and which dwelling unit continues to exist on the subject property" (Boulder County, 1986, p. 89). The developer or landowner must ensure the protection of this agricultural or open space area from further subdivision or development by providing a conservation easement. Acording to Ed Tepe, Director of County Land Use, there have been approximately fifty NUPUD's approved in the county. They appear to be a relatively effective way of preserving farmland and open space. One of the UNC researchers toured several NUPUD sites and was favorably impressed. Homes

do appear to be clustered and on what appears to be considerably less than 25% of the NUPUD parcel. These development clusters do not appear to be obstructive to existing farming operations.

The county has also been very active in acquiring open space, though on a considerably smaller scale than the City of Boulder. It finances its open space acquisitions through a $1 million annual allocation from general revenue funds. Despite this fact, the county planning staff have recently developed and put forth for approval a program for purchasing development rights of farmland (see July 2, 1987 staff memorandum). The county has acquired several large tracts, including the Walker Ranch (west of Boulder's Mountain Park) and Rock Creek Farm. Consistent with the county's perspective on the provision of services, its acquisitions have generally not been meant to provide active, park-like functions, but rather as passive greenbelt open spaces. The Rock Creek Farm acquisition is a case in point. This tract is intended to provide a greenbelt buffer separating, visually and otherwise, the City of Broomfield from Louisville and Lafayette.

Geologic and Other Hazards

Consideration of geologic and other hazards is also prominent in the county's plan and land use regulations. Low minimum lot sizes (again, 35 acres) are required for most of the mountainous western portion of the county. As well, subdivision applications must be accompanied by a geology report prepared by a professional geologist. This geologist report is to identify any potential natural or manmade hazards, including snow avalanche danger, soil creep, flooding, landslides, mudslides, expansive soils, among others.

Where the development plans to use well water the report must also include a special geohydrology section. The report must discuss methods of mitigating the hazard identified and must include specific plans for undertaking such mitigative actions.

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N. Fort Collins, Colorado
(Development Point System, performance standards; density bonus provisions for open space, affordable housing)

Introduction

Fort Collins is a city of approximately 80,000 population located about forty miles due north of Denver. Named for an 1860's military outpost, the city lies just east of the front range of the Rockies. The city experienced dramatic growth in the 1960s, largely in response to the growth of Colorado State University. In 1976, the U.S. Census Bureau reported that Fort Collins was the fourth fastest growing SMSA in the country (City of Fort Collins, 1985).

The Land Development Guidance System (LDGS)

The key element of the Ft. Collins planning and growth management program is its point system used to evaluate Planned Unit Developments (PUDs). Called the "Land Development Guidance System," (or "LDGS" for short), it consists of a set of design and performance criteria against which proposed PUD projects are evaluated. The vast majority of new development occurring in the city, perhaps 95% according to the planning staff, goes through the PUD mechanism. As described by the city, the system is intended to replace conventional zoning:

> The development potential of any particular site will be evaluated on its own merits -- size, shape, location, natural features and site concept development -- rather than according to a pre-determined zoning district classification. (City of Ft. Collins, undated, p.i)

The background of the Guidance System can be found in the city's Land Use Policies Plan (1979). The land use policies plan is one of several documents which together comprise the Ft. Collins Comprehensive Plan. Included among the other documents which comprise the Comprehensive Plan are the city's Goals

and Objectives (1977), and the city's Open Space Plan (1974). The Land Use Policies Plan calls for the development of a guidance system and the specific policies contained within it are the basis for many of the design criteria employed in the guidance system. Another city document, the Energy Conservation Plan (1979) also serves as the basis for several of the guidance system criteria which address energy issues in development. The Guidance System Report (City of Ft. Collins, undated) states that the system is based on the following assumptions:

1. That any land use likely to occur in Fort Collins can in most cases be made compatible with any neighboring land use through careful design and buffering.

2. Site design, use, and, in many cases, architectural design review, are critical for all development.

3. Increasing the opportunity for higher density residential development and mixed land uses is good for the community.

4. The city should encourage the provision of low income housing, energy conservation and other important goals of the city through an incentive program.

5. The city should encourage larger scale development on the periphery of the city through an incentive program.

6. The private market is in a better position to determine the appropriate location of industrial uses and regional/community shopping centers than the City of Fort Collins.

7. The City of Fort Collins should provide guidance for the location of higher density residential and neighborhood commercial uses.

8. Higher density can be an incentive for residential developers to incorporate measures which address larger community needs, such as low income housing and energy conservation, which otherwise might be ignored.

9. The system should incorporate recognition that there are tradeoffs among quality attributes of a project and also among city objectives.

10. The system should recognize that certain policies and criteria are of more or less importance than others through the establishment of weighting factors.

11. Both the public and the development industry can benefit from a more predictable and flexible regulatory process (pp. vi-vii).

The city, with the help of a planning consultant, began reviewing alternatives to conventional zoning in 1979. As the above assumptions indicate, the development guidance system was seen as a way to overcome the inflexibility of conventional zoning. The PUD provisions are designed to permit the simultaneous consideration of land use type/intensity and site design, to encourage mixed use development, to more comprehensively consider the negative impacts of development, and to clarify for all concerned (developers, citizens, staff) the development rules of the game. The PUD provisions generally assume that any proposed development can be made compatible with existing development and surrounding neighborhoods and uses if the appropriate design and buffering requirements are applied. This assumption is generally consistent with the city's pro-development philosophy. The necessary ordinance enacting this innovative PUD system was adopted by the Ft. Collins City Council in 1981.

PUD Projects are reviewed against two types of criteria: absolute criteria (referred to as "numbered" criteria) and variable criteria (referred to as "lettered" criteria). For absolute criteria, a project is evaluated according to whether or not it satisfies the criterion (i.e., yes or no). A project must satisfy all absolute criteria to gain ultimate development approval (or receive a variance from the failed criteria). A point system is constructed through the use of the variable criteria. Here, a project may receive an evaluative rating along a 0-to-2 point range. A score of "0" indicates failure to implement the criterion; "1" indicates an adequate job of implementing the criterion and, "3" indicates an excellent job. The number assigned to a particular project for a specific criterion is also multiplied by a weighting factor which takes into account the relative priority of different community criteria. Priority weightings are from 1 to 5 with "1" of

lowest community priority and "5" of greatest priority. The relative merits of a particular proposed project are then determined by adding up the number of points assigned on these different variable criteria. A proposed project, depending upon the type of development, must receive a minimum number of points to proceed. The allowable residential density on a site is also determined by this resulting score.

Specific absolute design (numbered) criteria and variable (lettered) criteria are provided for the following "activity" categories:

A. All development
B. Neighborhood service center
C. Community/regional shopping center
D. Auto-related and roadside commercial uses
E. Business service uses
F. Industrial uses
G. Extraction, salvages, and junk yard uses
H. Residential uses
I. Downtown River Corridor

For a residential project, for example, criteria in categories A and H would need to be satisfied. The complete text of the design standards (as amended) for all activity categories is included in the Technical Appendix (Volume III). The absolute criteria for all activities (A above) include those which seek to determine whether the proposed project is compatible with neighborhood character, is consistent with the city's comprehensive plan, will be served by adequate public facilities, etc. Specific resource protection, environmental and site design standards, must also be satisfied by all proposed development. For instance, does the project preserve, to the extent practical, significant existing vegetation? (Standard A-12). Have precautions been taken to prevent damage to important natural habitats (A-14)? Will the project conform to local, state and federal air and water quality standards. (A-19, A-20)? All proposed development must satisfy these types of standards. Other absolute standards must be satisfied depending upon the activity

category in which the project falls. For instance, if the project is residential, average residential density must be at least three dwelling units per acre (on a gross acreage basis).

Once the absolute standards are met, the point system comes into play. A proposed industrial use, for example, must obtain at least 50% of the maximum point that are possible on "Point Chart F." For industrial uses, the two criteria of greatest priority to the community (given "3"s) are whether or not the proposed project is next to or a part of an existing industrial center, and whether the project reduces non-renewable energy usage. In the case of an industrial project the maximum score is sixteen points, thus to be permitted the project would need to score at least eight (i.e., at least 50% of the points available).

Density, in the case of residential projects, is also a function of the point system. The greater the point score the higher the permissible density (calculated in terms of maximum percentage credits). If a project obtains 100 or more percentage points on the density chart the permissible density is ten dwelling units or more per acre. In contrast, if the project only scores 30-40 percentage points, density is only allowed at 3-4 dwelling units per acre. The density chart contains a number of bonus factors which reward project designs containing important amenities or other features. For example, bonus points are given for expenditures on public transit facilities, for special parking accommodations, for the provision of housing for low income and handicapped and for contiguity with existing development. A maximum bonus of 30 percentage points is available for low income housing (translating to a maximum increase of 3 units per acre). A bonus is also available for projects which incorporate land devoted to recreational uses and for projects which commit to preserving off-site open space. If the project applicant provides

off-site open space in a quantity which amounts to, say, 20% of the total project acreage, this becomes the amount of the bonus (2 additional units per acre).

Other Growth Management Tools

While the CDGS is clearly the centerpiece of Ft. Collins' growth management program, there are other components which are also important. In a manner similar to that described in Boulder, the City of Ft. Collins and Larimer County have jointly established the boundaries of the Ft. Collins "Urban Growth Area." This represents an area outside of the city's existing corporate boundaries that is expected to be developed at urban densities in the future (Smith, undated). Unlike Boulder County, however, Larimer County has historically been much more tolerant of development in fringe areas and has permitted the creation of special utility districts to service it where the city has refused to. The delineation of the Urban Growth Area is an attempt to overcome these fringe development problems and represents a set of planning agreements between the city and county (similar to Boulder and Boulder County's). As Smith (undated) states:

> By defining an Urban Growth Area around the city, the city agrees to allow urban density development within the area. The county, in turn, limits urban development to the Urban Growth Area and requires all development to conform to city development codes and standards. The city is given responsibility for long-range planning in the area, including planning for land use, transportation and utilities. These agreements and responsibilities are established by formal agreements between the City Council and County Commissioners.

The delineation of the Urban Growth Area and the city-county agreements, then, constitute the drawing of an urban growth boundary, similar to those required in Oregon. (See Diagram N-1.) Note that a major impetus for these types of city-county agreements is that cities in Colorado do not have any form of extra-territorial planning or land use powers.

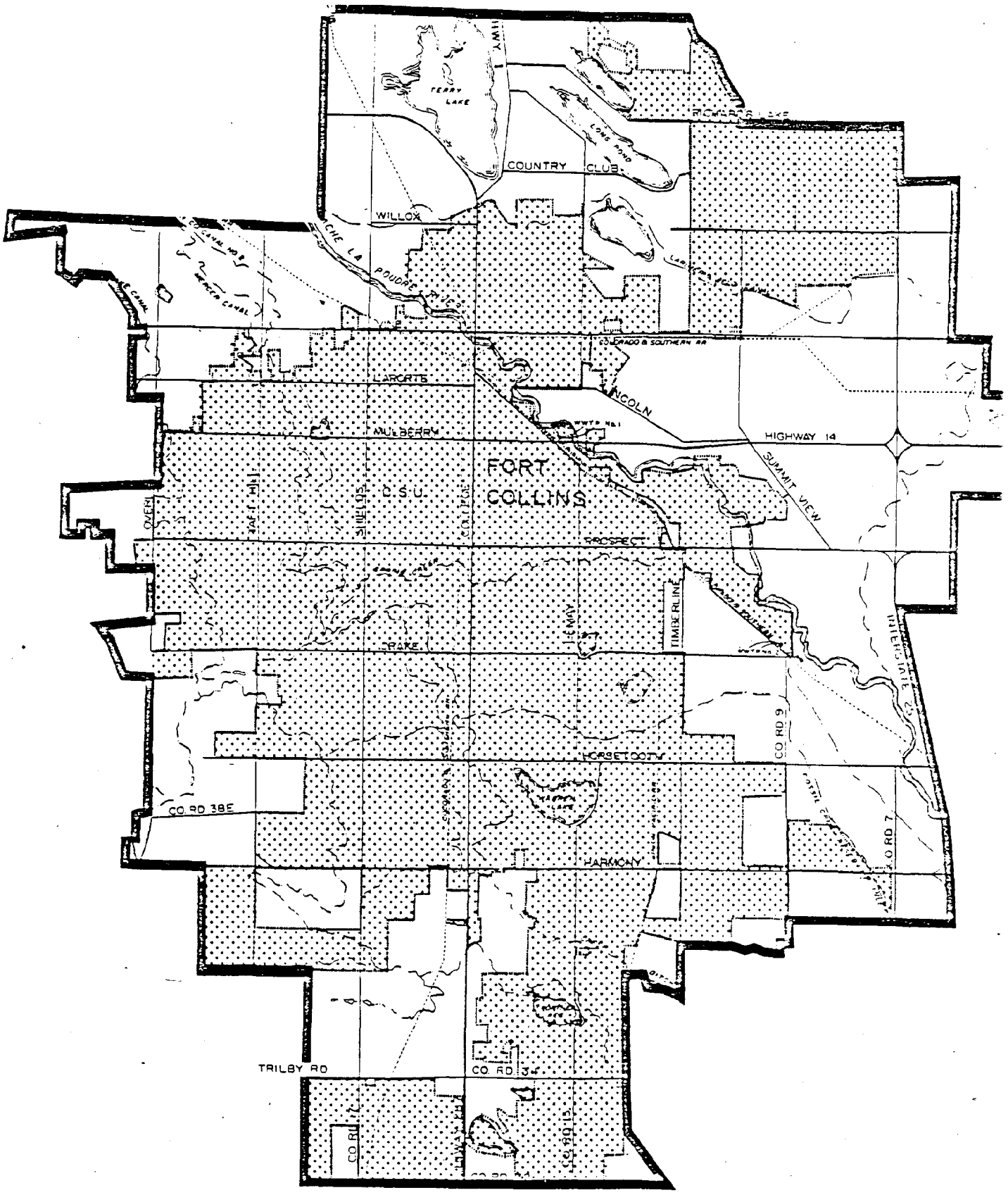

Diagram N-1
FORT COLLINS URBAN GROWTH AREA

Ft. Collins also has an open space acquisition program, though not nearly as active as Boulder's. The Open Space Plan, originally adopted in 1974, is currently being revised by the city. It establishes goals and objectives of the program and identifies priority areas in and around the city for acquisition. The city has already acquired much of the foothills ("Hogbacks") to the immediate west of the city, which provide an important scenic backdrop, as well lands along the Poudre River. The city has provided an impressive bike trail along the Pondre (see City of Ft. Collins, 1981).

Ft. Collins has also expended great efforts to improve its historic downtown. A Landmark Preservation Commission exercises direct control over proposed changes to the exterior of buildings in the Old Town Historic District. The city has developed and adopted a set of specific design guidelines which are used during this review process (City of Ft. Collins, 1981). (These guidelines have been included in Volume III, the Technical Appendix.) The city is also currently developing a downtown redevelopment plan.

As with many Colorado communities, Ft. Collins has adopted an extensive set of impact fees (City of Ft. Collins, 1987). Fees are collected for a range of public services and facilities including sewer plant investment, storm drainage and parklands (see Table N-1).

Success of the Land Development Guidance System

The PUD development guidance system used by Ft. Collins has dramatically changed the way that growth is managed in this community. While conventional zoning remains in place, it has lost most of its importance. Ft. Collins contrasts with a community like Boulder in its general pro-growth attitude and thus the guidance system does not seek to regulate the amount or the pace of

Table N-1

Fees Normally Required of New Development in Ft. Collins*

Water plant investment fee

Water rights acquisition charge

Sewer plant investment fee

Storm drainage fee

Off-site street improvements

Electric off-site and on-site service fees

Parkland fee

Source: Ft. Collins Department of Community Development

*These are in addition to plan processing/submittal fees and building permit fees. There is also a sewer and water tap charge which represents the actual costs of connection.

growth, but rather its quality. The Ft. Collins system appears to have done this well. A 1985 study by the City's Department of Community Development (planning division) conducted an analysis of how the system functioned between 1981, when first established, and 1984. In terms of actual differences in resulting development projects, the study found that the guidance system did result in a greater mix of land uses (mixes of industrial, office, retail, public and private recreation and residential uses). As the study states:

> There are several advantages to a greater mixing of land uses. By having homes, places of employment, and shopping in close proximity discourages the use of the automobile and encourages bicycling, walking and other modes of transportation, as well as decreases trip length of automobile travel and encourages trip consolidation. The experience in Ft. Collins prior to the adoption of the LDGS demonstrated an emerging pattern of more uniform land uses. The residential to non-residential land use ratio is 1:1.7 for the master plans as compared to the overall city figure of 1:1.29. The master plans demonstrate an increase of over 32 percent in terms of greater mixing of land uses (City of Ft. Collins, 1985, p. 12).

A field survey of PUD projects by one of the UNC researchers confirmed this conclusion. Mixed uses occurred both within single projects, and between projects within a general area. While there are often significant design and buffering features required, the general assumption, again, is that mixed uses are a good thing and that most problems of compatibility can be overcome. An area where city staff think the benefits and feasibility of mixed-use development are most obvious is the corner of Drake and Lemay. On a recent tour of the city, a group of reporters from USA Today writing a profile on the city were particularly impressed with this intersection (Getz, 1987). This area is perhaps prototypical of what the Ft. Collins system attempts to achieve. As described by a local Ft. Collins reporter (Getz, 1987).

> Parkwood Lake and the elegant homes around it sit on one corner. The First Christian Church, surrounded by acres of grass, sits on another. The southwest corner has the Scotch Pines shopping center, a subdued place with shake roofs that is hardly visible from the street, thanks to nice landscaping. The northwest corner features a park-like setting of trees and flower beds wrapped in a stately black fence. The

visitors were surprised to hear that in the midst of the trees was a Woodward Governor factory -- essentially in a residential neighborhood.

The city study also concluded that residential densities have been increasing, at least partly in response to the flexibility of the LDGS. This result is also consistent with the city's stated land use policies, reducing the higher public costs associated with low density urban sprawl (e.g., greater construction and operating costs of sewerage systems, roads and streets, etc.), as well as the environmental consequences of this pattern of growth (e.g., air and water pollution). The report also concludes that many new development projects include various community amenities, such as designs which reduce energy consumption or which provide low income housing units, which would not otherwise be provided without the incentives of the LDGS.

The city's study also concluded that generally new projects were better designed under the LDGS than under previous conventional zoning. This is due in part, it is hypothesized, to the increasing need to rely on design professionals (e.g., architects, landscape architects) given the demands of the LDGS.

The LDGS also appears to have significantly changed the pattern of citizen involvement in the development review process. Citizens and neighborhood groups are now more fully involved in this review process and the city study concludes that this is in large part due to the explicit performance standards that are used during project review. "The explicit listing of criteria in the LDGS has reduced differences in the evaluation from project to project, increased the sophistication of citizens input on specific development projects and has helped neighborhood residents better understand the basis for decisionmaking by the City in advance." (City of Ft. Collins, 1985, p. 15) For proposed projects which are likely to have "significant

neighborhood impacts" the LDGS review criteria, in fact, specifically require informal neighborhood meetings. These meetings have provided informal forums for developers to present their projects prior to formal application to the city, and an opportunity for neighborhood residents to express concerns about compatibility. Often these concerns can be resolved in advance through changes in project design.

While this increase in the citizen involvement in project review is a positive result of the LDGS, it is not without its problems. The planning staff indicate that one problem is that there is often disagreement about how some of the project review criteria are to be interpreted. The staff or developer may feel that one set of buffering requirements are adequate, for instance, while neighborhood representatives may feel that another more stringent set of requirements is demanded by the criteria. Often it appears that neighborhoods are offended by any form of development and would rather have a parcel remain undeveloped. Under these expectations it is often difficult to provide a set of design and buffering standards which satisfy neighborhood groups. Nevertheless, this adversarial process of interpreting the design criteria is probably beneficial.

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O. Breckenridge, Colorado
(Performance-based Development Code; Development Point System; Historic District Guidelines)

Introduction

The Town of Breckenridge was established in the 1800's as a gold mining town. It has gone through several boom-bust cycles over the years, essentially until the ski industry entered the picture in about 1960. The Town is now heavily dependent on skiing and tourism. Located in the Rockies, about eighty miles west of Denver, the Town is a unique mixture of historic mining town buildings (from several different periods) and modern ski-related development. The Town's downtown area was designated as a National Register Historic District in 1980 by the National Park Service, and much of the town's planning efforts in recent years have centered on preserving the history and flavor of the town, while at the same time accommodating the new growth generated by the ski economy.

The town is home to approximately 1300 permanent residents, with peak population during the winter jumping to over 15,000. During the 1985-86 ski season, over 907,000 skier visits were recorded (Town of Breckenridge, 1986). New construction in the town has in recent years reflected the demands of the ski market, with extreme growth in the number of multi-family units (condominiums). At Table O-1 indicates, in 1970, there were very few multi-family units in the town (about 100). By 1980, however, multi-family units comprised some 80% of the total housing units in the town. Between 1980 and 1987, the number of multi-family units more than doubled.

Table 0-1

Housing Units in Breckenridge
(As of January 1 of year shown)

	Single Family	Duplex	Multi-Family	Apart-ment	Employee Housing	Mobile Homes	Total Housing	Lodging
1970	220	0	102	-	-	-	324	
1975	235	10	847				1082	
1980	245	26	1024				1295	
1983	271	60	2153	51	106	6	26472	93
1984	273	64	2171	53	112	5	2678	157
1985	277	66	2183	57	124	5	2712	157
1986	281	72	2284	57	125	5	1818	369
1987	281	72	2666	59	125	5	3208	402

Source: Breckenridge Department of Community Development, July, 1987.

The Breckenridge Master Plan

Breckenridge's efforts at planning for this explosive resort growth began in earnest in the late 1970's. A comprehensive plan was prepared and adopted in 1978, and later updated (1983). It analyzed the capacity of natural and manmade systems to accommodate growth and set forth goals and policies for guiding future growth and development. A number of detailed studies were prepared to serve as the factual foundation for the plan, including a detailed analysis of the natural system, the transportation system and other public facilities, and an inventory and analysis of historic buildings and resources, among others.

Among the urban growth problems identified in the plan, the occurrence of uncontrolled urban fringe development is indicated to be one of the more serious. This pattern of development is seen as a threat to scenic backdrop areas, to wildlife habitats, commercial woodlots, as creating special pollution problems and creating inefficiencies in the provision of public services, among others. In response, the plan delineates a master plan boundary, intended to separate urbanized land from rural land. The master plan boundary includes enough land to accommodate future growth in Breckenridge for the next 15 to 20 years. A number of specific criteria and factors considered in determining the specific master plan boundary are contained in the plan.

The land use element of the plan establishes the appropriate pattern of uses and densities within the master plan boundary. Initially certain lands within the boundary were identified as being nonbuildable. The following lands were considered nonbuildable:

1. Areas with slopes of 15% or greater
2. Wetland areas
3. Areas adjacent to, and parallel to rivers, streams, and gulches
4. A scenic corridor along Colorado State Highway 9 from the northern boundary of the Master Plan to the Commercial Core of the Town (Town of Breckenridge, 1983, p. 5-1).

These are areas considered to be inappropriate for development and are designated as open space on the plan's land use map. Approximately 40% of the land within the master plan boundary is included in this classification. For developable areas, four use categories are employed: residential, retail commercial, service commercial and recreational. Of these categories residential is by far the largest, also comprising about 40% of the total area within the master plan boundaries. From these general use categories, a series of more specific districts have been delineated, establishing appropriate base densities. (More than forty use/density districts are delineated in the plan.) Some residential districts permit a base density of twenty units per acre, some only one unit per three acres, much as a conventional zoning ordinance would specify.

The open space districts, comprising more than forty percent of the mast plan area deserve a special note. While designated as open space and considered inappropriate for development, a density of one unit per ten acres is permitted. As the plan states, "(T)his designation recognizes that there is some residential value connected with the land, but very little" (Town of Breckenridge, 1983, p. 5-15). The plan states, as well, that the Town will do everything it can to encourage either the transfer of open space densities to other parcels or ensure that residential structures are located on the site in such a way as to minimize their impacts.

The plan serves as the primary policy document guiding growth and development in the town. It is implemented in several ways. Unlike Boulder, and similar to Ft. Collins, little explicit attempt is made to control the rate of growth in the town. Rather, the focus is on enhancing the quality of growth which does occur and accomplishing various other community objectives through the development process. The city's annexation policies and public service agreements do have an influence on the rate of growth and these are described in a later section. The primary regulatory mechanism used by the town is its development code which contains a set of performance standards and a point system very similar to that in place at Ft. Collins. (Ft. Collins, in fact, studied the Breckenridge system when developing their own.)

The Breckenridge Development Code: Performance Standards and the Point System

The land use and density specifications, as well as many other goals and policies contained in the Breckenridge Master Plan, are implemented through the town's development code. Unlike conventional zoning and land use regulations, the Breckenridge Code consists entirely of a series of detailed performance standards. Some standards are absolute -- that is, a proposed development must satisfy the standard to obtain approval. Other standards are relative and involve the assignment of points based upon the extent to which a proposed project does or does not address the standard. According to the Development Code, a +2 score, for instance, indicates that the project provides a significant public benefit or does an excellent job at implementing the standard. On the other hand, a score of -2 indicates just the opposite, and that the project may even create an unmitigated negative effect. Multipliers are also used to express the relative priority of certain standards or project features. A multiplier of x1 indicates that a policy is

of minimal importance, while a multiplier of x5 indicates that a policy is of significant community importance (Town of Breckenridge, 1983, p. 3-2). For a project to gain approval it must satisfy all absolute performance standards, and must accumulate points on the relative standards such that the total score is positive or at least zero (i.e., not negative). This set of standards is included in its entirety in Volume III, the Technical Appendix.

The absolute and relative standards address a range of local issues, including: architectural compatibility, building height, site design, the placement of structures, fire control and prevention, snow removal and storage, parking, landscaping, open space, economic base, social diversity, public transit, infrastructure, air and water quality, water and energy conservation, and geologic hazards, among others. Some of the standards are fairly subjective and call for considerable judgement on the part of the Town's staff, while others incorporate specific quantitative or other measures. The staff have developed their own internal guidelines for determining compliance and assigning points (what a member of the planning staff called a "cheat sheet").

The Town recognizes that different types of residential units may be more desirable (from the Town's point of view) than others and provides, as part of the absolute standards, a multiplier table to provide incentives for the provision of these types of units. As Table 0-2 below indicates, permitted density for condominium or apartment projects is reduced, reflecting the town's concern over the proliferation of these types of uses in recent years. On the other hand, additional density is provided for hotels or inns, and for employee housing.

A number of issues concerning the economic and social composition of the town are addressed through relative standards. Positive points are assigned,

Table 0-2

Density Bonuses for Desired Residential Uses

Use	Multiplier
Hotel or Inn	1.15
Employee Housing	1.15
Lands/Hotel	1.00
Single Family	1.00
Duplex and Townhouse	1.00
Condominiums or Apartments	.75

Source: Breckenridge Development Code

for instance, where a proposed project will encourage off-season activities, year-round activities, will provide long-term job opportunities, or will contribute to the diversity of the local economic base. Under the category of "social community," point assessments are made based on the extent to which employee housing is incorporated into a proposed project. For all residential projects of greater than 10,000 square feet in size, four points (4x+1) are given for "the provision of employee housing units equal to or greater than 10 percent of the proposed gross dwelling area of the proposed project" (Town of Breckenridge, undated, p. 6-16). On the other end of the scale, a project can receive a minus 8 points (4x-2) if the provision of employee housing units is "equal to less than 3 percent of the gross dwelling area of the proposed project." In this case, the accumulation of negative points must be compensated for by an equal or greater number of positive points obtained under a different relative standard. The Development Code defines "employee housing" in the following way:

... a living unit which is deed restricted, restricting the units to either one of the following:

1. Long-term lease for a minimum period of six months or,

2. Sale to a person, residing in and employed in Summit County, as their primary residence under a Town-approved sale program

Units not sold under the provisions of number two above shall be held in the ownership of an acceptable entity as approved by the Town Planning Commission and Town Council. (Homeowners' Associations, Condominium Associations, and businesses providing the units are acceptable entities among others.)

All employee units shall be between 500 and 1200 square feet in size unless otherwise determined by the Planning Commission (Town of Breckenridge, undated, p. 1-5).

A number of the absolute and relative standards are oriented to protecting the town's natural environment. Air quality is a good example. Here both relative and absolute standards are included. The absolute standards stipulate that only one wood-burning appliance (i.e., a woodburning stove) is permitted for each new residential unit, except that a maximum of two are permitted in single family detached units. Woodburning stoves are prohibited in dwelling units or rooms of less than 600 square feet "that are designed and operated primarily as short-term accommodations". The relative air quality standards encourage the provision of fireplaces in central lounge areas only, and assign negative points for projects incorporating additional fireplaces. Specifically, the code provides the following formula:

2 x
- -3 1 woodburning appliance per 1200 sq. ft. feet of dwelling area
- -2 1 woodburning appliance per 2400 sq. ft. of dwelling area
- -1 1 woodburning appliance per 3600 sq. ft. of dwelling area

Additional point benefits are also given for the use of woodburning appliances which are designed to minimize air pollution or to maximize heat gain.

A number of standards relate to water quality and water conservation. All projects must satisfy, for example, certain minimum water conservation requirements. Specifically, all projects must include low flush toilets, low-flow shower heads, faucet aerators, and pressure reducing valves. The water quality standards address such issues as internal drainage requirements, provisions to minimize vegetation disturbance, project designs which minimize impervious surfaces, and the use of pesticides and fertilizers, among others.

The development code also contains a relative standard which encourages the provision of open space. For residential areas it is recommended that at least 30% of the project's land area be left in open space (excluding street and parking lots). For commercial areas it is recommended that at least 10% of the project's area be left in open space. Under the point formula for this standard, projects may receive point scores ranging from -6 to +6, depending upon the extent to which the proposed project satisfies these recommendations. A project would receive positive points for additional open space set asides.

Many of the standards reflect a general concern with protecting the high quality of the visual environment. The environmental protection and open space standards certainly reflect this. Standards are also included which seek to maintain the visual compatibility of new development with the historic district. The relative standard dealing with building height (there are no pre-established building heights in the town) assign points based upon, among other things, the extent to which views and scenic vistas are maintained or destroyed.

One of the more interesting absolute standards which relates as well to the visual quality and flavor of the town is Standard No. 16 -- Internal Circulation -- Subpart (c), which prohibits drive-thru window operations in certain districts in the town (the older sections). The creation of this standard was precipitated by a request by Wendys to build a drive-thru restaurant on main street in the heart of the historic district. Despite threats by Wendys that they would take their restaurant elsewhere, the town held firm on its prohibition on this type of use. Wendys ended up complying with the Town and built the restaurant without the drive-thru window. The planning staff claim that this is one of only two Wendys nationwide without a drive-thru window.

Generally, the Breckenridge planning staff feel the point system works well. It provides the developer with substantial flexibility and provides considerable certainty about what the expectations of the town in fact are. (The developer can sit down and compute the points himself.) Problems have developed since its initial use and over the years certain unexpected physical outcomes have resulted requiring modification of the point system. These modifications have been continual and ongoing and the staff feel that over time most of the bugs have been worked out. A tour of development projects built under the point system conducted by one of the UNC researchers is fairly convincing that the quality of new development is quite high. New development has been by and large highly compatible with the older, more historic portions of the town, and has incorporated numerous amenities as a direct result of the point system. The "Windwood Condominium" is perhaps a good example. This project gained point advantages for including a large percentage of its site in open space and by restricting the fireplaces to only central lounge areas.

Historic Preservation

Protecting the historic district is a high priority in Breckenridge. The town's historic heritage, and the physical remnants of this history, are impressive and a major aspect of the attraction many visitors have for the town. (Comparisons with Vail which has few historic buildings are often made.)

As with protecting the natural and scenic environment, protecting the integrity of the historic district is seen not as a luxury, but rather as good economic sense for the town. It is their bread and butter and there is generally strong support for stringent design and compatibility requirements. There are three distinct periods of architecture represented in the town: The Settlement Phase (1859-1870); the Camp Phase (1870-1880) and the Town Phase (1880-present) (Town of Breckenridge, 1984). Buildings from each of these architectural periods have been preserved.

The town seeks to maintain the integrity of historic districts in several ways. The compatibility standards incorporated into the development code have already been mentioned. As well, the town exercises additional special controls over building and redevelopment in the historic district through The Breckenridge Historic Commission. A detailed set of historic district guidelines (1984) have been developed and serve as the basis for regulating new construction and changes to the exteriors of existing structures. The following are general historic district guidelines (without the text elaboration and examples included in the guidelines document) that must be followed:

Natural Setting

1. The views of the mountains should be protected.

2. The natural setting of the buildings should be maintained.

3. The grid pattern of the original town should be preserved.

4. The physical and visual access to traditional community focal points (e.g., Blue River, the mountains, courthouse, mainstreet) should be preserved.

Manmade Elements

5. The visual integrity of area boundaries should be protected and a transitional or buffer area outside the District boundary encouraged.

6. The duplication of historic styles is strongly discouraged.

The Block

7. The unity of the block (as seen from alley to alley) should be viewed as single entity and strengthened.

Color

8. The colors of the buildings should be compatible with the District.

Building Details

9. Building elements like brackets and porches should be functional.

Parking

10. Parking areas should not be visible from the street.

Following these general guidelines are more specific guidelines for new construction as well as for rehabilitation of, and additions to, existing structures. In total there are sixty-two guidelines addressing a comprehensive set of design issues, including questions of scale, proportion, building height, materials, visual patterns, landscaping, and building setbacks, among others. These guidelines are included in their entirety in Volume III, the Technical Appendix.

Other Growth Management Tools

In addition to the development code and historic district restrictions there are several other tools the town employs to manage growth. Its annexation policies and public facility extension policies have substantial influence on the rate and location of growth. Annexation policies are contained in the Master Plan and essentially state the conditions under which annexations will be approved.

For the annexation of undeveloped land the following criteria must be answered in the affirmative (Town of Breckenridge, 1983, p. 4-16):

a. There is a need for additional developable land within the town which is usually indicated by a 50 to 70 percent build out of the type of use proposed.

b. There is a need for developable land within the town for a stated high priority use such as affordable housing, or recreation.

c. The town and other service entities have the physical and economic capabilities and capacity to provide urban level services within a reasonable period of time.

d. The developer f the site to be annexed has the ability to develop within a reasonable period of time.

e. There will be a positive economic and/or social benefit to the community.

f. The developer of the site has the ability to install all needed services and facilities to the site.

For annexation of already developed areas the following criteria must be satisfied (Town of Breckenridge, 1983, p. 4-17):

a. The town has the ability to provide needed urban services within a reasonable period of time.

b. The residents are willing to annex to the town.

c. There are social and economic ties of the subdivision to the town.

d. The residents have the ability and are willing to upgrade substandard facilities (roads, and perhaps sidewalks, sewage, water) upon or prior to annexation.

e. There is an economic benefit to the town realized by the annexation, or the social benefits outweigh any economic concerns.

It is also the town's policy to annex only lands within the Master Plan boundaries and to give priority to the annexation of already built-up areas adjacent to the town, as well as to "vacant lands than can provide uses or housing mixes not readily available within the town limits" (Town of Breckenridge, 1983, p. 4-16). The plan also includes a more specific prioritizing of different areas of the town for annexation (e.g., the Peak 8 area is a high priority area for annexation; the Silver Shekel subdivision is a moderate to high priority area for annexation).

Water and sewerage disposal are two services the town has some degree of control over and which have direct influence on the town's growth. Water is provided in the area both by the Town of Breckenridge and the Blue River Water District. The town is the primary source of water within the Master Plan areas and anticipates being able to provide water to this entire area under total buildout. The town obtains the water from the Blue River and has in recent years purchased additional water rights from outlying ranches (and continues to work towards securing additional rights). While the town has in the past provided water service to areas outside of its boundaries, in the future areas must be annexed first before extension of water service will be permitted.

The town has less control over wastewater treatment service which is provided for the town through the Breckenridge Sanitation District. The allocation of sewer taps has in the past been controlled through agreements between the town, the Sanitation District and Summit County. While the Sanitation District's 3 mgd treatment plant will likely accommodate future growth for the next 5 to 10 years (as reported in the 1983 plan) it appears

inadequate to accommodate build-out within the master plan area, requiring the district to eventually secure additional treatment capacity. While not a problem in the near future, this may eventually represent a constraint to growth in Breckenridge. It may also suggest, as the Breckenridge Master Plan notes, that the town should be cautious in granting additional higher densities within the master plan area.

P. Cannon Beach, Oregon
(efforts to protect community character; prohibition of "formula food" restaurants; design review procedures and criteria)

Introduction

Located along the northern Oregon coast, approximately seventy miles northwest of Portland, Cannon Beach is a quaint and charming small town. The city has a reputation of being an artists colony, a sort of Carmel of the Oregon coast. Nestled between the coast range to the east and the Pacific ocean to the west the town lies in an incredibly scenic location. Haystack Rock and the Needles, off-shore rock formations, as well as Chapman Point to the north (Ecola State Park), make for a breathtaking shoreline. While many of the artists have left Cannon Beach since their hayday there in the 1970s, there is still considerable concern about protecting this atmosphere and charm, as well as the scenic resources in the area. While the city is primarily a residential community, its downtown areas have developed as a collection of shops, galleries, and other small-scale commercial activities. A major concern of locals, then, is maintaining this non-commercialized village environment.

As in the case of the other Oregon localities described in this case study volume, Cannon Beach is highly influenced by the planning requirements of Senate Bill 100. As required by law it has prepared a comprehensive plan (adopted 1984), consistent with the statewide goals. As well, Cannon Beach has delineated, in cooperation with Clatsop County, as an Urban Growth Boundary separating urbanizable and resource land. As already mentioned, the UGB restrictions are very effective both in promoting more efficient provision or urban services and protecting important resource and environmental lands. Cannon Beach has, as well, adopted fairly conventional land use regulations to

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implement the plan -- regulations which must, according to Oregon law, be consistent with the plan (the land use plan is a legally-binding document in Oregon).

Protecting Community Character

What makes Cannon Beach interesting from a growth management point of view is not that the Town is employing any particularly innovative management or regulatory tools, but rather is using its conventional land use regulations to protect the charm and character of the community. Cannon Beach has made a conscious attempt to control and enhance these factors while other coastal Oregon localities have left them to the whims of the free market. The preamble of the comprehensive plan stresses the importance of protecting this "character."

> This character has, and is, created by having charm in design of buildings, by keeping buildings small in scale, by honoring the beauty and ecology of the geographical and topographical setting, by utilizing structures for small intimate shops, quality food establishments, adequate visitor housing, arts and crafts studios and galleries, by maintaining high quality merchandise and services, performing and visual arts experiences for visitors and citizens alike, and by recognition that the arts are an integral part of the community and business, reflecting the quality of life we desire.
>
> The special beauty of the natural environment as well as our unique village character and its business enterprises attract thousands of visitors and potential new residents annually. This increase in growth creates problems as well as benefits to the community. Adequate parking, housing, public services and private enterprise are affected.
>
> This Comprehensive Plan is the basis for our management of the growth, and the goals, policies, plus subsequent ordinances developed shall reflect the goals and recommendations of the Plan in order to maintain the unique character and quality of life in Cannon Beach (1984, p. 6).

The Comprehensive Plan goes on to set forth both general development policies for the City, and development policies for different geographical sectors in the city (North Side, Downtown, Ecola Creek Estuary, Midtown,

Tolovana Park). The plan also sets forth policies in different substantive policy areas, including policies for the Urban Growth Area (area within the Cannon Beach Urban Growth Boundary but outside the town's boundaries); housing; the economy; transportation; a bike plan; natural hazards; construction on sand dunes; construction of beachfront protective structures; energy; recreation; openspace; natural, visual and historic resources; public services and facilities; visual and performing arts; and air, water and land quality; among others.

The City's Zoning Ordinance is the primary mechanism for implementing many of these policies. It is similar to most zoning ordinances in that it designates use districts, establishes permissible densities and building heights, and contains a number of development performance requirements. Many of these restrictions, as already indicated, are intended to maintain the village character of Cannon Beach. There are only two commercial districts contained in the zoning ordinance and special restrictions have been placed on the type of commercial activities permitted within them as well as their location. The Limited Commercial Zone, including the city's downtown area, is primarily intended to accommodate retail uses which require prime locations. Eating and drinking establishments are a use permitted outright (not permitted at all in the other commercial zone) except that....

> ...a mobile food vending wagon, or like service, a drive-in restaurant or formula food restaurant is not permitted (City of Cannon Beach, 1984, p. 37).

A formula food restaurant is further defined in the definitions section of the ordinance to mean "a restaurant required by contractual or other arrangements to offer standardized menus, ingredients, food preparation, interior or exterior design, or uniforms" (1984b, p. 6). Cannon Beach currently has no fast food restaurants and is proud of this fact. There is a

strong local sense that any type of fast food establishment, no matter how tastefully developed, would damage the village character of the city. City officials are aware of the legal problems encountered by this type of restriction in Maine and Massachusetts but are not worried by them. This provision of the ordinance has not yet been challenged legally. Local officials see these provisions also as being useful simply in their ability to "send the right signal" about these types of uses.

The second commercial district in the city -- General Commercial Zone (CZ) -- is intended to provide sites for more intensive commercial uses. Relatively few uses are permitted either by right or as conditional uses. This zone also specifically prohibits retail uses "that are oriented to or dependent upon highway traffic for business including, but not limited to gas stations, drive-in restaurants and similar uses ...." (City of Cannon Beach, 1984b, p. 40). The full zoning texts of these two zones are included in Volume III, the Technical Appendix.

Design Review

All proposed development in the city, with the exception of the construction of a single family dwelling and renovations of existing structures, is subject to special design review procedures and criteria. These provisions are included in Section 4.100 of the zoning ordinance and have the stated intention of ensuring that development is "...compatible with the community in terms of size, use of materials, architectural design, use of signs, landscaping and similar design aspects" (City of Cannon Beach, 1984b, p. 91). A special Design Review Board conducts the review and applies the design standards. It consists of one member of the planning commission and five other members "with expertise, education, or demonstrated ability in the

field of design, including architecture, landscape design, art of construction" (p. 91).

Those wishing to construct a building for which design review is required must submit to the Design Review Board the following materials: (1) a site analysis diagram (e.g., location and species of trees, slopes, drainage, other natural features); (2) a site development plan (e.g., location of proposed structures, parking and circulation areas, grading and drainage plan); (3) a landscape plan (e.g., placement and type of plant materials), and; (4) architectural drawings. Specific design guidelines, to be used by the Design Review Board, are provided in the Ordinance. Site design standards specify, for instance, that existing trees must be left standing, that lighting shall be subdued, and that a certain portion of a site must be devoted to landscaping (to a maximum of 40% in the case of duplexes and triplexes). The Design Review Board is to apply the following standards when considering building design:

(1) The height, bulk and scale of buildings should be compatible with the site and adjoining buildings. Use of materials should promote harmony with surrounding structures and sites.

(2) Evaluation of a project should be based on quality of design and relationship to its surroundings. However, the use of styles characteristic of Cannon Beach and the coastal area are preferred. This includes the use of natural wood siding such as cedar shingles, pitched roofs, and, in commercial areas, wood signs. Colors should be harmonious with the structure, with bright or brilliant colors used only for accent.

(3) Monotony of design in single or multiple projects should be avoided. Variety of detail, form and siting should be used to provide visual interest.

(4) Design attention should be given to the placement of storage or mechanical equipment so as to be screened from view (City of Cannon Beach, 1984b, p. 96).

Reinmar Bartl, planner for the Clatsop-Tillamook Intergovernmental Council, indicates that the design review process has not so much been

effective at promoting excellence in design, but rather has served to screen out the potential eyesores. The process and guidelines have been relatively successful at ensuring the compatibility of new development and growth. The full text of the design review requirements is included in Volume III, the Technical Appendix.

Other elements of the city's effort to maintain its village character include building height limitations (maximum 28 feet, most zoning districts limited to 24 feet), strong sign regulations, buffering and screening requirements, and restrictions to tree removal (a permit is required for tree removal and will only be issued upon certain findings).

Natural Resources and Hazard Mitigation

In addition to protecting the architectural character and integrity of the community, the city's land use plan and zoning ordinance also stress the importance of protecting natural resources. As already mentioned the land use plan contains detailed policies to guide development in several sensitive environmental areas in the city, including the Ecola Creek estuary, beach and dune areas, floodplains, and high-slope/geologic hazard areas. The zoning ordinance includes, for instance, a special estuary zone which prohibits most forms of development in these areas. An Active Dune Overlay District is also contained in the ordinance which places similar restrictions on building in beach and active foredune areas. These dune regulations essentially follow, however, the requirements of the state concerning setbacks out of and away from dunes. There is a belief on the part of some in the community that these standards are still too permissive, and allow development too close to the dunes. As a result, there has been some discussion, but no action yet, of strengthening the dune provisions. A flood hazard overlay zone is also contained in the zoning ordinance.

Geological hazards receive considerable attention both in the comprehensive plan and the zoning ordinance. Under general development policies, the Comprehensive Plan states that the permissible density of development in hillside areas shall be directly related to the slope and geologic hazards evident in these areas, and establishes density limits for different ranges of slope ((e.g., 10-24% slope, density limits of four dwelling units per acre). The zoning ordinance reflects the existence of these hazard areas by placing them in lower density residential categories (e.g., RVL -- Residential Very Low Density Zones; RL -- Lower Density Zones). Section 4.110 of the Zoning Ordinance requires a site investigation by a qualified expert in cases where development is proposed on slopes of 20% or greater or in other hazard zones (e.g., high hazard coastal zones, potential landslide hazard areas as delineated on the City Master Hazards Map, areas of weak foundation soils). Where serious hazards from a proposed use are found to exist the site investigation must identify engineering or construction methods which will eliminate or minimize the hazards. The city may then make the issuance of a building permit contingent upon these special mitigation and design features.

Other Growth Management Tools

The city's annexation and capital facilities extension policies also strongly influence the rate and pattern of growth in Cannon Beach. The UGB requirement means that the city will continue to assume a fairly compact and contiguous form. The city and county have jointly adopted policies for the urban conversion of the urbanizable land within the UGB but outside the Cannon Beach municipal boundaries. Under the joint management agreement the county notifies the city of proposed land use actions in the urban growth area,

providing the city with the opportunity to offer its input and recommendations. All land use actions must be consistent with the City's Comprehensive Plan and Zoning Ordinance, as well as the Clatsop County subdivision ordinance. Density is to be in the range of one to three acres per dwelling unit, though this will vary depending on the actual characteristics of the land and the availability of public services.

Annexation to the city is necessary for development to obtain full public services (water, sewer, police, street maintenance, etc), and the city and county have jointly agreed upon specific policies to govern annexation. Specifically, the city must find, and the county concur with, the following:

a. There is a demonstrated need to accommodate long-range urban population growth.

b. There is a need for housing, employment opportunities, and livability that the change would accommodate.

c. The change would provide for orderly and economic extension of public facilities. For annexation requests, adequate sewer and water system capacity must be available at the time of the request, or the applicant must commit to providing the required sewer and water system improvements.

d. The change would allow for efficient land use and utility patterns.

e. Environmental, energy, economic and social consequences are considered. (City of Cannon Beach, 1984a, p. 31)

Generally, the City of Cannon Beach has been extremely successful at protecting the visual and cultural flavor of the community. Unlike many other parts of the Oregon Coast (e.g., Lincoln City; what Senator Hatfield has called "the twenty miserable miles") Cannon Beach remains uncommercialized. It has managed to protect this village atmosphere and to capitalize upon it. Still, there are some things that are beyond the city's control. An issue of extreme importance, and on the minds of many local officials, is how the forestlands surrounding the city will be used in the future. Much of the

visual beauty in Cannon Beach derives from the lush mountain backdrop. Most fear, however, that the lumber companies owning most of this land will begin harvesting in the next few years.

The visual quality and attractiveness of Cannon Beach would be diminished significantly if the forestlands were fully harvested. Bartl, the planner with the Clatsop-Tillamook Intergovernmental Council, notes the paradox of the Oregon Planning System which lets this type of situation occur. The UGB in a sense almost works too well at constraining urban growth and protecting these forest resource lands. If these backdrop areas were available instead for residential development perhaps the visual consequences would not be as severe. Residents might have to tolerate seeing a home here and there, but the vegetative canopy would basically remain intact. Concern about future forest harvesting has spurred some local discussion about the possibility of the city purchasing some of these lands (or acquiring some interest in them). However, no serious proposals to do this have yet been generated.

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