

MANAGING GROWTH:

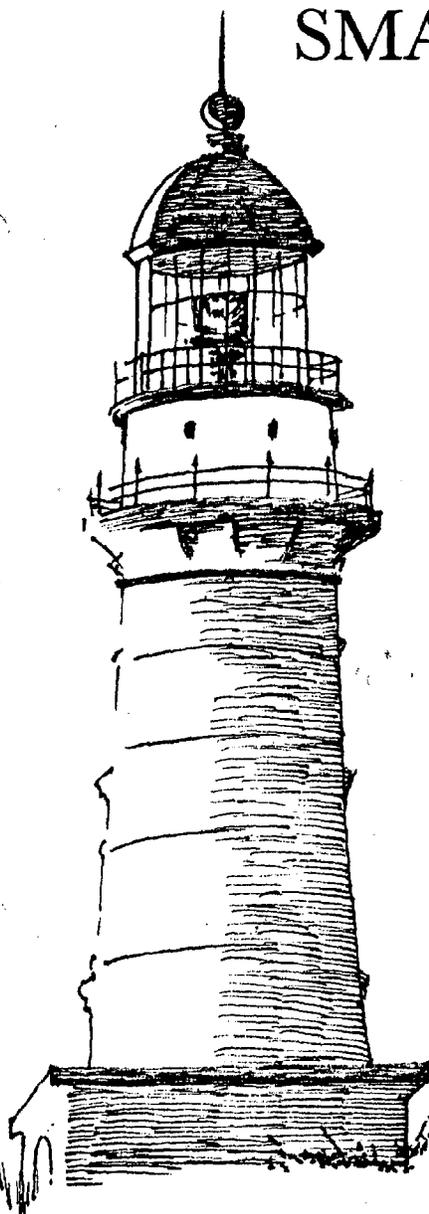
SMALL COMMUNITIES

AND

RURAL AREAS

COASTAL ZONE
INFORMATION CENTER

Timothy C. Beatley
David J. Brower
Lou Ann Brower



HD
205
.B427
1988

Coastal Zone Management Program
← C14
Library

MANAGING GROWTH:
SMALL COMMUNITIES AND RURAL AREAS

Property of CSC Library

Timothy C. Beatley
David J. Brower
Lou Ann Brower

Center for Urban and Regional Studies
The University of North Carolina at Chapel Hill
Chapel Hill, North Carolina

U. S. DEPARTMENT OF COMMERCE NOAA
COASTAL SERVICES CENTER
2234 SOUTH HOBSON AVENUE
CHARLESTON, SC 29405-2413

Financial assistance for this report was provided by a grant from the Maine Coastal Program and the Maine Department of Economics and Community Development, through funding provided by the U.S. Department of Commerce, Office of Ocean and Coastal Resource Management, under the Coastal Zone Management Act of 1972 as amended.

March, 1988

HD205 .B427 1988
17996019

DEC 19 1988

BARRETT & LEE TYPESET

Copyright 1988

Acknowledgments

We would like to express our appreciation to the large number of Mainers who contributed of their time and talent to the success of this project. Richard E. Barringer encouraged the idea and in many ways made it become a reality. Denise V. Lord, Holly H. Dominie, John R. DelVecchio, and David H. Keeley all contributed significant wisdom and insight. Our special thanks to Josie Quintrell for her wisdom, insight, constructive criticism and above all commitment. We are confident that Maine will be a better place because of people like these.

In addition our very special thanks to Barbara Rodgers, Carroll Carrozza and especially Carolyn Jones of the Center for Urban and Regional Studies for their help.

Table of Contents

	<u>Page</u>
Preface	i
Part One.	1
Chapter One: Rural and Urban Growth in the 1980s: Change and Challenge.	1
The Setting.	2
Shrinking Federal Support.	3
Shifts in Politics and Economics	4
Growth Management.	6
Overview of This Book.	8
Conclusion	9
Chapter Two: Some Emerging Goals in Growth Management.	11
The Importance of Setting Community Goals.	13
Protecting and Enhancing Aesthetic Resources.	15
Protecting Historic and Cultural Resources	19
Preserving Farmland and Open Space	20
Protecting the Natural Environment	21
Mitigating Natural Hazards	23
Providing Affordable Housing	24
Conclusion	24
Chapter Three: Tools and Techniques of Growth Management.	27
Introduction	29
Four Categories of Techniques.	30
Regulation.	30
Regulations that Affect the Rate of Growth	30

	<u>Page</u>
Point Systems.	31
Performance Standards and Performance Zoning	33
Urban Growth Boundaries.	34
Design Review Processes and Sign Ordinances.	35
Environmental Performance Standards and Other Controls in Sensitive Ecologic Habitats and Watersheds	36
Regulations in Areas Subject to Natural Disasters.	38
Regulations to Preserve Farmlands.	39
Refinement Plans	40
Land Acquisition.	41
Purchase of Development Rights	41
Taxation.	42
Making Growth Pay Its Own Way.	42
Real Estate Transfer Taxes	43
Other Approaches	44
Public Spending	44
Impact Fees.	44
Other Considerations.	46
Affordable Housing.	46
Citizen Participation.	48
Regional Coordination.	52
Conclusions and Further Reading	53
References to Chapters One through Three.	57

Part Two

Case Studies of Innovative Local Growth Management Programs

Annotated Table of Contents

	<u>Page</u>
1. Cannon Beach, Oregon.	63

Demographics: Small coastal town, 2 hours driving time from major metropolitan area (Portland); with permanent population of 1,215, including many local artists, with summer visitor population of 10-12,000.

Natural Environment: Magnificent coastline; forested coastal mountains.

Distinctive features of planning: Application and enforcement of traditional tools of planning such as zoning to protect character of community; ban on formula food restaurants; procedures and criteria for review of design of new development.

- Tools and Techniques -

- A. The Master Plan which includes definition of community character.
- B. Use of zoning ordinance to protect village character, e.g., by banning "formula food" restaurants.
- C. Design review procedures and criteria applied to all new development.
- D. Protection of natural resources, including designation of natural hazard danger zones of varying seriousness.
- E. Control of pace and pattern of growth through policies of annexation and extension of facilities.

- Observations -

- A. Successful in protecting natural beauty and village atmosphere.
- B. Uncertain thus far on how to protect mountain views endangered by overharvesting by lumber companies.

2. Breckenridge, Colorado 75

Demographics: Permanent population: 1300; seasonal (skiing): 15,000.

Historical: An early gold-mining town; downtown is National Register Historic District.

Natural Environment: Surrounded by the Rocky Mountains.

General: A pro-development stance while maximizing quality of life in face of explosive growth in condominium development.

Distinctive Features of Planning: Dedication of open space; performance-based development code with point system; guided development in and around historic district.

- Tools and Techniques -

- A. The comprehensive master plan.
- B. A development code built on absolute and relative performance standards to effect environmental protection, increased dedication of open space, and compatibility with historic district.
- C. Historic preservation.
- D. Other tools: criteria for annexation; criteria for extension of public facilities.

- Observations -

- A. After a period when frequent modifications were needed, the point system of the development code seems to work well.

3. Nags Head, North Carolina 93

Demographics: An old coastal resort community that is within 4 hours driving time of the Washington, D.C., metropolitan area. A population of 2,000 permanent residents and a summer population that swells to 35,000. The number of year-round residents has risen rapidly in the past decade and is expected to grow. The town has retained a village atmosphere thus far. Continued growth is projected for both types of residents.

Natural Environment: Sited on one of a chain of fragile barrier islands (the Outer Banks); bounded by extensive stretches of National Seashore; containing one of the few remaining examples of maritime forest; subject to hurricanes.

Distinctive Features of Planning: Comprehensive plan is based on carrying capacity; planning for mitigation of natural hazards (hurricanes, flooding, shifting shoreline); environmental zoning; preferred land uses given advantage in water allocation.

- Tools and techniques -

- A. Growth management based on the town's carrying capacity (e.g., amount of developable land after adjusting estimates for expectation of beach erosion, availability of treated water, sewer capacity, percolation readings, vulnerability to natural disaster) of the town.
- B. Ordinance for allocation of water that favors certain types of development.
- C. Plan for mitigation of hurricane hazards and post-storm reconstruction.
- D. Protection of endangered natural resource (maritime forest) by creation of a special environmental zoning district.

- Observations -

- A. There has been successful use of several new and complex techniques.
- B. Vigorous planning is going on in a very small community with history of an anti-planning orientation.
- C. The zoning ordinance was voted down by town council.

4. Manteo, North Carolina. 105

Demographics: Permanent population: 1,000.

Historical Significance: Site of first English settlement in America (1587).

Natural Setting: Protected harbors and easy access to Atlantic Ocean.

Recent Experience: Economic strength and significance declined post-World War II as bridges and highways were built; business in downtown losing ground to strip development on highway to beaches of Outer Banks; planning for a State-wide, 4-year celebration of the First Colony begun in 1980.

Distinctive Features of Planning: Invigoration of historic significance, natural resource (waterfront) and economic health; process of definition of community identity, values and goals, with emphasis on overall appearance and architectural design; accomplishment of comprehensive planning and redevelopment with limited resources.

- Tools and Techniques -

- A. Process of defining values and goals by a community.
- B. Use of zoning to protect and enhance visual appearance.

- Observations -

- A. There was successful emphasis on visual resources from which grew a new use for downtown, enhancement of the character of the community and coordination with a state-wide celebration of the first Roanoke colonies in ways that assured the town's position as a long-term tourist attraction.
- B. Venture capital was attracted to the downtown waterfront redevelopment.

5. Medford Township, New Jersey. 117

Demographics: Historic 40-square mile region, 20 miles east of Philadelphia; the 1980 population (17,622) reflects a 112% increase since 1970.

Natural Environment: Still primarily rural; within New Jersey Pinelands region.

Historic significance: Settled by Quakers in 1600s.

Distinctive Features of Planning: Formal ecologic study carried out; environmentally-based zoning; design and performance standards applied to new development; transfer of development rights.

- Tools and Techniques -

A. "Ecological" study and detailed mapping of natural processes conducted by Ian McHarg and other planning faculty at the University of Pennsylvania.

B. Four major environmentally-based use zones established in zoning ordinance and comprehensive plan: residential growth, environmental management, trade, and village.

C. Subdivision plats required to have composite environmental constraints map and detailed environmental impact statement.

D. Design and performance standards applied to review of new development include open space requirement, resource extraction analysis, scenic and visual buffers, very strict provisions on wetlands development, among others.

E. Many types of credits offered in transfer of development rights program.

6. Martin County, Florida 127

Demographics: Area on the Atlantic Coast; 555 square miles with population of 64,000 (53% urban); 128% increase over 1970 population; 20 miles north of West Palm Beach.

Natural Environment: Extensive wetlands and barrier islands network.

Distinctive Features of Planning: Detailed performance standards; controls on landscaping; beach impact fees, barrier island ordinance.

- Tools and Techniques -

A. Detailed performance standards that regulate, among others: 1) overall density, 2) development in wetlands, 3) open space, and 4) impact on transportation.

B. Landscaping ordinance requiring the drawing up of a landscape plan before land clearance can begin.

C. Beach impact fees.

D. Barrier Islands Ordinance including detailed standards of design for the site plan including requirements for open space, buffers, building height restrictions, among others.

- Observations -

- A. Beach impact fees have served as "negotiating tool" in approval of new PUDs.

7. Hilton Head, South Carolina 133

Demographics: Island off coast of South Carolina; once home of prosperous plantations; later subsistence farming and fishing by slave descendents who nurtured a distinctive culture and language (Gullah dialect). Resort development with extensive recreational facilities (golf and tennis) begun in 1950s. Permanent population of 17,000, having increased by 200% over the past decade. Seasonal population of 50,000. One million people visited the resort in 1987.

Natural Environment: One of the larger barrier islands on the East Coast; variety of natural habitats.

Recent Developments: Island incorporated as a town in 1983 and took over planning responsibility from the county.

Distinctive features of planning: Land Management Ordinance; preferred design elements such as provision of public access to beaches rewarded with density bonuses; control of rate of growth; requirement that developers make prior assessment of impacts on facilities such as schools and emergency preparedness; environmental performance standards such as protection of dunes, wetlands and trees.

- Tools and Techniques -

- A. Comprehensive Land Management Ordinance.
- B. Overlay zoning.
- C. Impact assessments.
- D. Management of rate of growth through absolute annual limit on number of new dwelling units.
- E. Detailed performance standards, bolstered by system of bonus density points awarded for such elements as protection of natural resources, scenic beauty and public's access to beaches.

F. Noncontiguous Planned Unit Developments (PUDs) allowed around areas of common ownership.

-Observations -

A. Some bonus density provisions were felt to conflict with cap on growth rate and were repealed.

8. Napa County, California 143

Demographics: 744 square mile region with long history of agriculture, emphasizing vineyards in recent decades; within commuting distance of San Francisco and the East Bay region; population of 100,000 (rural and unincorporated), 81% urban; population has grown 25% during the 1970-80 decade.

Recent Experience: Successful passage of a public referendum on imposition of cap on annual development, holding rate of growth to 1% or less.

Distinctive features of planning: Annual allocation of voter-determined number of building permits.

-Tools and Techniques -

A. Cap on residential development at 1% per year, distributed among four categories of residential buildings and granted on a first-come, first-served basis.

- Observations -

- A. Effect of cap thus far is to delay rather than to stop development.
- B. Large-scale developments have been shifted from unincorporated to urban areas, thus protecting farmlands.
- C. Development by numbers and on first-come, first-served basis is easy to administer and explain to public.
- D. Introduction of the cap has strengthened support for planning already in place such as very large lot zoning and contracts between state and farmland owners to protect working vineyards.

9. Fort Collins, Colorado. 151

Demographics: City of 80,000 population, 40 miles north of Denver, dramatic growth in 60s and 70s.

Natural Environment: Located at the foot of the Rockies.

Recent Experience: City has adopted a pro-growth stance; private market invited to determine location of industrial and shopping centers.

Distinctive Features of Planning: Land Development Guidance System with point system to evaluate conformance with an elaborate and wide-reaching set of design and performance criteria; emphasis on PUDs over conventional zoning to direct growth; establishment of boundaries for new growth; acquisition of open space; preservation of historic heritage.

- Tools and Techniques -

- A. Comprehensive Plan and accompanying Land Development Guidance System that includes reports on such topics as community goals, open space, etc.
- B. Land use guidance system covering issues such as design and consumption of energy.
- C. Provisions such as absolute and variable criteria for review of planned unit developments (PUDs) as alternative to conventional zoning.
- D. Establishment of Urban Growth Area to control fringe development.
- E. Acquisition of open space to preserve scenic backdrop, bike trails, etc.
- F. Preservation of historic district while undertaking downtown redevelopment.
- G. Imposition of impact fees on developers to offset cost to the public of services such as sewers.

- Observations -

- A. Focus on quality of growth, rather than pace or amount, has been successful.

- B. Favoring mixed use areas and high density residential projects is seen to diminish problems of the alternative -- urban sprawl -- such as air and water pollution and excessive energy consumption.
- C. Meaningful participation by citizens and neighborhoods in review of new development is helped by use of explicit performance standards.
- D. Interpretation of design criteria can be difficult and controversial.

10. Salem, Oregon. 167

Demographics: The state capital, with a population of 95,000 (258,000 in the greater metropolitan area).

Natural Environment: Located in the fertile Willamette Valley.

Recent Experience: Growth has waxed and waned in the 70s and 80s (18% in late 70s, 6% in early 80s). Growth management programs were undertaken in a period of high growth.

Distinctive Features of Planning: Regional cooperation in development of city's comprehensive plan; establishment of urban growth boundary; maintenance of 10-year supply of developable land.

- Tools and Techniques -

- A. A comprehensive plan that sets out policies on growth management.
- B. Involvement of counties in greater metropolitan area in comprehensive plan.
- C. Linkage of development to adequate public facilities and services, with developers paying substantial proportion of costs of needed new facilities.
- D. Establishment of an Urban Growth Boundary.
- E. Separation of Current Developed Area (CDA) and Urban Growth Areas (UGA), the latter requiring developers to do special planning and to pay to "link" facilities to the CDA.
- F. Sector plans for facility needs created for geographic areas of UGA.

- G. Creation and maintenance of 10-year supply of developable land.
- H. Levy of a development tax based on value of new structures and size of land parcel.
- I. Refinement plans prepared for each neighborhood.
- J. Function-based plans prepared for bicycles, transportation, and airport, among others.

11. Eugene, Oregon 179

Demographics: A city of 200,000, home of the University of Oregon, attractive to research and development and to high technology activities.

Natural Environment: Situated in the fertile Willamette valley.

Recent Experience: Population projected to reach almost 300,000 by year 2000.

Distinctive Features of Planning: Regional approach to planning; timed annexation and servicing of "urbanizable" land; preparation of refinement plans for neighborhoods and functions; multi-jurisdictional refinement plans; renter protection in condominium conversion law.

- Tools and Techniques -

- A. A "1990 regional plan" sets out policies on growth management.
- B. Urban Growth Boundary established.
- C. A 6-10 year surplus of land available for development.
- D. Annexation and plan for provision of public facilities and services must precede conversion to urban uses.
- E. Procedures established for amending comprehensive plan.
- F. Refinement plans done for geographical areas under pressure from new development and for functions such as parks, public facilities and industrial growth areas.

G. Other significant tools are: land division and zoning ordinances; capital improvements program; historic preservation program; economic diversification program; bikes and bikeways; solar access ordinance; condominium conversion law .

- Observations -

A. Protection of integrity of Urban Growth Boundary has been successful.

12. Austin, Texas. 197

Demographics: Capital of Texas; home of flagship branch of the University of Texas; 116 square mile area; population (1980) of 346,000, a 36% growth for the previous decade.

Natural Environment: Situated on the Colorado River; on the edge of the Hill Country, a recreational resource and location of second homes of Texans living in Houston and other metropolitan areas.

Recent Experience: A recent city-wide planning effort was not successful.

Distinctive Features of Planning: Herculean citizen participation process put in place to develop a comprehensive plan and implementing ordinances; historic view protection; protection of watersheds..

- Tools and Techniques -

- A. Citizen participation: representation of all factions and interest groups in community; staged publication of a series of milestone reports written by each task group; use of a sectoral planning approach drawing on already existing neighborhood associations.
- B. Development of a Land Development Code.
- C. Capitol View Protection Overlay Zones.
- D. Comprehensive Watershed Protection ordinance.

- Observations -

- A. Participatory process itself is likely to create and sustain the political support needed for passage of the comprehensive plan.
- B. Time commitment of process has been too much for some of the original participants, and the balanced representation, especially of minorities, has been eroded.

13. Charlotte, North Carolina. 207

Demographics: Population of 446,000; a healthy economy and steady population growth with prediction of 575,000 by the year 2005. Rapidly developing into a throughly urban region where there once was the ambience of a small town with several distinctive neighborhoods surrounded by low density suburban development and rural lands.

Natural Environment: In the foothills of the Blued Ridge mountains.

Distinctive Features of Planning: Citizen participation including citizen study groups and a community-wide symposium; emphasis on "balanced growth" for entire city-county region, rather than concentrating on the urban edge; public-private partnerships encouraged; thorough revision of regulations to reflect realities of an increasingly urban community.

- Tools and Techniques -

- A. Strong emphasis on processes of citizen participation and consensus building; e.g., sponsorship of community-wide symposia on urban issues; invited citizen review and revision of position papers on growth issues.
- B. Emphasis on city-county cooperation in planning process and on regional scope; region divided into seven planning districts.
- C. A "Generalized Land Plan 2005," the culmination of citizen participation processes and leadership from planning departments, which along with demographic projections and other elements, clearly stated community preferences, adopted in 1985.

- D. "Development enterprise areas" were established to redirect growth to weak market areas.
- E. Development and implementation of a city-county public investment program.
- F. Major revision of regulatory codes, originally written in the 60s and drawn up for suburban, low density development, so that they respond to the needs of an urban area.

- Observations -

- A. Consensus-building processes address the tension between the goals of continuing economic vitality and the desire to maintain and enhance the quality of life.
- B. Members of business community concerned about efforts to distribute costs -- such as impact fees, exactions, and development taxes -- which they see as disincentives to development, but they support funneling capital expenditures to priority growth areas.

14. Boulder, Colorado. 221

Demographics: Settled in 1850s as mining town; located 25 miles northwest of Denver in a county of 750 square miles; population of 86,000; combined city-county population of 200,000; home of the University of Colorado.

Natural Environment: The Boulder Valley is bounded by the Rockies to the west and plateaus to the east and south; the western border follows the Continental Divide.

Recent Experience: Rapid rates of city growth: 1960s, 77%; 1970s, 15%; 1980s, 12%; referendum in early 70s directed city-county leaders to determine and control for optimum population and growth rate for region.

Distinctive Features of Planning: To protect mountains, establishment of elevation boundary beyond which city water would not be extended; early development of comprehensive regional plan; consecutive implementation of two plans to limit growth rate.

- Tools and Techniques -

- A. To control development on the mountains, the extension of city water services was delimited by establishing a "Blue Line" at about altitude 6000'.
- B. Comprehensive plan written for Boulder Valley in 1970 to respond to explosive growth.
- C. Spurred by a public referendum, city implemented interim growth policies while a study of future regional growth options was carried out.
- D. A cap on annual rate of growth at 2%, with a merit system to evaluate permit requests.
- E. A second "cap", imposed when earlier one ended, uses a proportional allocation system to encourage favored uses such as low cost housing.

- Observations -

- A. Imposition of "blue line" not effective in protecting mountains from development, but led to program of open space acquisition, which has been effective.
- B. The true effect of development cap difficult to evaluate since it was imposed coincident with a dramatic slowing of growth.
- C. Downtown revitalization efforts appear to have benefitted from the limited permit plan.
- D. Some note that a negative effect of annual permit restriction has been rise in housing costs; others say inflation explains the rise.

15. Denver, Colorado 249

Demographics: City population of 492,000 reached in 1980, a 43% change from 1970; area of 110 square miles.

Natural Environment: A city in the Rocky Mountains on the South Platte River; 5,000 + feet altitude.

Distinctive Features of Planning, Mountain view protection program.

- Tools and Techniques -

- A. A view protection ordinance, part of the building code, sets building height restrictions in certain zones to prevent obstruction of view of Rockies, enacted in 1968.
- B. Criteria for establishing new view protection districts were established in 1980s.
- C. Other scenic regulations enacted: temporary moratorium on billboards; building height restrictions around state capitol building; imposition of bulk plane limitations on new construction in protected residential districts; transfer of development rights.

- Observations -

- A. View protection is successful in Denver.
- B. The view protection ordinance sustained a legal challenge; the court reasserted that protection of aesthetic value is legitimate legislative function.
- C. Public and political support for view protection was based on economic as well as aesthetic rationales.
- D. The Denver ordinance is strictly enforced, with variances rare.
- E. The law may be diverted to preserve private property values. Although the original intent was to protect views from public places such as large city parks, some say the provisions have been used to protect a neighborhood.
- F. Only buildings are controlled; obstruction from tall trees and other vegetation is not covered.

16. King County, Washington. 261

Demographics: County population of 1.3 million in 1985; Seattle, about 500,000; covers area of 2,131 square miles.

Natural Environment: Bordered on the east by the Cascade Mountain range, on the west by Puget Sound.

Recent Experience: Growth in unincorporated areas has jeopardized farmlands; efforts to protect rural lands began in late 70s.

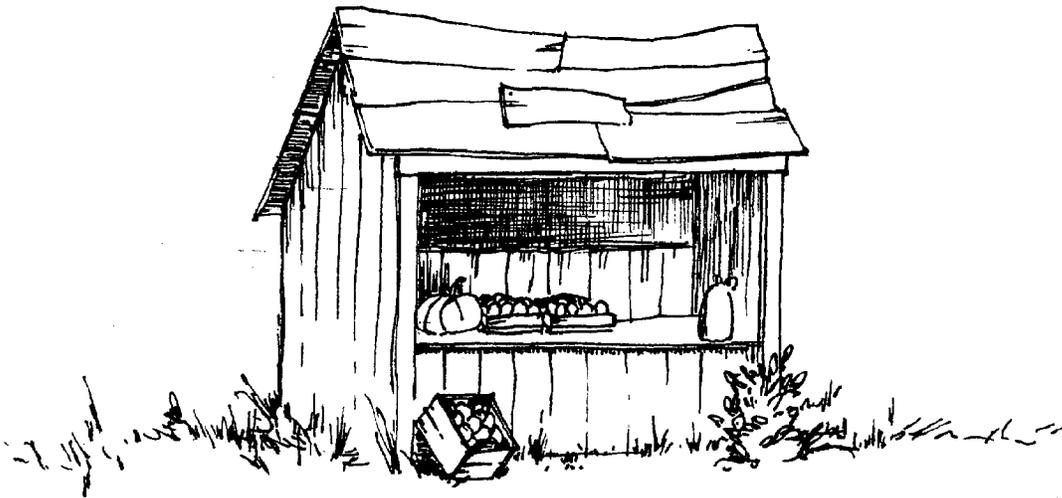
Distinctive Features of Planning: Purchase of development rights (PDR).

- Tools and Techniques -

- A. Funded by a bond issue, about 33,000 acres (divided into areas by priority) were initially made eligible for PDR; purchases overseen by committee representing farmlands and other interests.

- Observations -

- A. Program felt to be successful in protecting economically viable farming areas.
- B. Program has succeeded in purchasing interest in about 13,000 acres at a cost of \$4200 per acre.



APPENDIX*

Ordinances and Other Documents Related to Growth Management

1. Austin, Texas
 - Austinplan Process Description
 - Capitol View Corridor Overlay Zones
 - Comprehensive Watersheds Ordinance
2. Boise, Idaho
 - Boise River Plan
 - Foothills Ordinance
3. Boulder, Colorado
 - Growth Rate Ordinance
 - Moderate Income Housing Regulations
 - Solar Access Ordinance
 - Sign Code
4. Boulder County, Colorado
 - Non-Urban PUD Provisions
5. Breckenridge, Colorado
 - Performance Standards and Point System
 - Historic District Guidelines
6. Cannon Beach, Oregon
 - Commercial Zone Regulations
 - Design Review Procedures and Criteria

* Printed in a separate volume

7. Denver, Colorado
 - View Protection Ordinance
8. Eugene, Oregon
 - Condominium Conversion Ordinance
 - Solar Access Ordinance
9. Fort Collins, Colorado
 - Land Development Guidance System
 - Design Guidelines for Historic Old Town
10. Hardin County, Kentucky
 - Development Guidance System
11. Hilton Head, South Carolina
 - Rate of Growth Restrictions
 - Overlay Zoning Districts
12. King County, Washington
 - Purchase of Development Rights Ordinance
 - Deed Restriction Agreement
13. Martin County, Florida
 - Performance Standards
 - Beach Impact Fee Resolution
 - Barrier Island Ordinance
 - Landscaping Ordinance
14. Nags Head, North Carolina
 - Water Tap Allocation Ordinance
15. Napa County, California
 - Growth Rate Restrictions

16. State of North Carolina

- North Carolina Mountain Ridge Protection Act

17. Portland, Oregon

- Downtown Design Guidelines

18. State of Rhode Island

- Act Establishing Little Compton Agricultural Conservancy Trust

19. San Francisco, California

- Housing and Day Care Requirements for Office Development Projects
- Downtown Park Fee Requirements
- Text of Proposition M

MANAGING GROWTH: SMALL COMMUNITIES AND RURAL AREAS



PREFACE

The people of Maine have long struggled with the pain of economic adversity, but they have enjoyed a challenging and stimulating environment. What was once merely compensation for the rigours of their own lives now has become a major attraction for other Americans who are tired of the pressures and hazards of urban living. Maine's land and waters have become thereby more valuable and the prospects for higher income brighter -- and the dangers to Maine's quality of life are greater. In the 1970s the citizens of the state were endeavoring to see whether they could achieve a balance between prosperity and those natural and human qualities that have made Maine unique in the nation.

It is doubtful whether the authors of the above quote -- the editors of the 15th edition of Encyclopedia Britannica (published in 1979) -- realized the urgency of their prophetic vision. In the 1980s, Maine has grown far more rapidly than most observers would have predicted. Much of the growth has been in the second home and resort market, financed primarily by out-of-state investors. Much less growth has been seen in industry, farming, and fishing, the traditional sectors of the Maine economy. Nor is the boom limited to southern Maine, where proximity to the urban centers of the Northeast is a natural magnet for growth. More and more small Maine communities are finding themselves in situations such as that of Cherryfield:

When Ellen Tennon, chairperson of the Cherryfield Planning Board, testified before the Maine Economic Development Task Force in April, she spoke with urgency and concern about the enormous development pressure now facing her Washington County town. The Patten Corporation, a huge land speculation company from outside Maine, recently purchased over 4,500 acres of valuable coastal land to construct residential subdivisions. Loopholes in Maine's laws allow the company to develop all but 500 acres of this land without any review by the community. Yet even if the Cherryfield planning board had greater authority, Tennon explained, it lacks the resources and expertise to effectively deal with the corporate developers and such enormous projects. Cherryfield needs help, she testified, and quickly.*

*T. Andrews, "Who Will Control Maine's Future?", Habitat, 4: June, 1987.

Many other communities are finding that they need help, and quickly. What form should that help take? One approach is, anticipating development, to institute an active, prospective system of managing growth at the local level.

The concept of growth management assumes that (1) growth will occur, (2) there are and will continue to be problems associated with growth, and (3) these problems can be moderated through planning. It is clear that Maine citizens recognize problems: there have been a number of recent citizen-initiated moratoria on growth in Maine communities. In essence, these ordinances are buying time during which the community can plan for the growth that is inevitable -- and in many cases welcomed when the community is ready for it.

We offer here a book based on the experiences of many communities across the country that have attempted to manage growth. Why do we hope that such a compilation will be relevant and of practical help to Maine communities? Admittedly, many of the examples described here are more urban, have more economic resources and planning staff, and reflect community values that differ from those found in Maine. Nevertheless, we believe that experiences and approaches in communities selected for study in this book can be helpful to Maine communities, despite obvious differences. We base our belief on the following assumptions:

(1) Uncontrolled growth and erosion of the quality of life for individual citizens are national phenomena, and for this reason, Maine can look beyond its borders for solutions to its internal problems. Maine communities do not have to start from scratch in seeking solutions to local growth problems.

(2) Growth management has been found to be as effective in small, rural areas as in large, urban areas.

(3) Growth management is a collection of practical solutions, not an untested theoretical construct. Growth management emphasizes what will work, given a particular community's goals.

(4) The choices of tools and their combinations into a single program suited to a particular community are endless, so it is very helpful to see what has been tried elsewhere.

Maine, while a "poor" state, is rich in many things -- clean air, uncrowded streets, a quiet, deeply satisfying way of life, a people steeped in traditional American values, and the possibility of community. Maine is also The Country of the Pointed Firs, where the Appalachian Trail begins, where the coast is wild, where inland lakes and woods offer solace to the human spirit. Many Americans, whatever their income, feel "poor" in exactly these things, and want to move to Maine. If planned for, Maine can welcome this influx of people as an opportunity to improve the economic situation of its citizens. Too many people in Maine still live below the poverty line. Young people are now forced to leave Maine to find jobs. By enriching the state's treasury, growth and development could help support expansion of human services such as education and health care, as well as encourage programs to rejuvenate small businesses such as fishing and recruit new industry. But these opportunities, derived from new development, must be courted with care lest, in a few years,

the state finds it has lost "those natural and human qualities that have made Maine unique in the nation," and is left with the same long-standing economic problems.

In many places in the United States, it is too late. The losses are permanent and no amount of local growth management can retrieve them. It is not too late for Maine. So then, we offer this source book, with respect, to the citizens and leaders of Maine communities taking up the challenge of managing growth. The future of Maine, a national treasure, is in your hands.

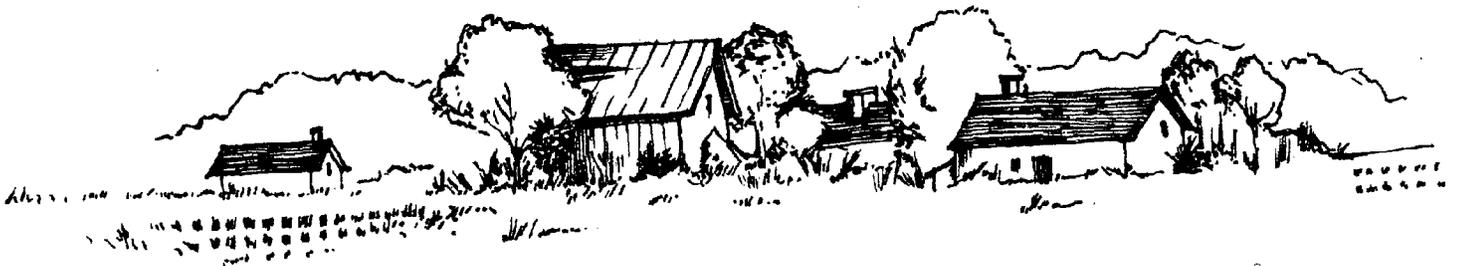
Timothy Beatley
David J. Brower
Lou Ann Brower

Chapel Hill, North Carolina
March 1988

Chapter One

Rural and Urban Growth in the 1980s: Change and Challenge

- The Setting
- Shrinking Federal Support
- Shifts in Politics and Economics
- Growth Management
- Overview of This Book
- Conclusion



Chapter One

Rural and Urban Growth in the 1980s: Change and Challenge

The Setting

The quality of life in urban areas continues to decline, a process that is accelerating and spreading to suburbs and small rural towns. Some problems are obvious -- traffic congestion, pollution, ugliness and clutter, destruction of trees and historic buildings, dying downtowns. Miles of development from "Anywhere, USA" invade towns of distinctive character and natural beauty. Other, less visible problems daily exert their insidious effects on the residents -- decaying infrastructures, shrinking open spaces for recreation, higher taxes and destruction of a sense of community and shared values. In once cohesive places the contrasts in quality of life among social and ethnic groups accentuate divisions and antagonisms. These problems, once confined to large metropolitan areas and a few regions of the country, are spreading to small and mid-sized communities throughout the nation.

City-dwellers, anxious to escape the ills of the big city while still earning high salaries, look to the rural areas for relief. As the wealthy seek and buy second homes and ex-urbanite locations for their first homes, small towns are being caught unaware. Suburbs are becoming "accidental cities"; small towns are turning into suburbs.* Residents find that the face of their community and the fabric of their daily lives are being permanently transformed, and they feel helpless to stop or affect the changes. Small

*Todd K. Buchta, "Will We Live in Accidental Cities or Successful Communities?", Conservation Foundation Letter, No. 6, 1987.

Small rural places and ecologically fragile regions such as coastal areas and mountainous regions, prized as resort locations, are in special danger.

Response to these changes often follows a pattern. Communities and regions find themselves torn between, on the one hand, the welcome prospect (real or merely promised) of new jobs and economic rejuvenation, and on the other, the wish to preserve natural and/or historic landmarks, deeply held community values and traditional occupations and ways of life. New development pours in, and residents see the character of their community disrupted. The promised long-term benefits to the local economy become less certain. The residents begin to see more minuses than pluses. Most often they articulate their desire for order, rational control, a reasonable pace of change and integration of the new with the old as complaints, rather than as forceful, positive statements of values and aesthetic concerns. As the individual resident's sense of helplessness grows, these complaints become increasingly strident.

Spiralling costs, both public and private, have accompanied this decline in the quality of life and increased pace of uncoordinated change in our communities. Residents find themselves paying higher and higher taxes while the potholes in local roads get bigger from one year to the next. The needs caused by continuing growth outpace the new dollars available.

Along with the increasing burden on the citizen to pay for public facilities and services, costs in the private sector have exploded. Rising costs of land and construction, steadily increasing property taxes and high interest rates are weakening the housing position of even those long-time owners, the middle class. Home ownership is out of the grasp of more and more young families, even those with two incomes. The working poor, the elderly and others on fixed incomes are being forced out of their homes. Traditional

occupations that are land or water intensive are losing their economic viability; farmers and fishermen cannot afford to compete for the diminishing supply of land and shoreline. Put simply, we are paying more and more for less and less in our communities, and some people are being left out entirely.

Shrinking Federal Support

Given these circumstances, mirrored in communities across the country, the public is demanding a change. Local residents want leaders who will restore the livability of the past. But recent changes at the national level present formidable obstacles to these hopes for improvement. The obstacles are both fiscal and structural. The Federal government, after decades of support and influence on America's cities and towns, is pulling back. Once a major provider of capital, policies and goals for America's cities and towns, the Federal government has withdrawn from much of its involvement in local affairs. Communities have long depended on Washington for assistance with such problems as waste water treatment, roads, redevelopment and housing. Block grants (under which each state decides how it will spend its Federal allocation) and other financial programs are now replacing Federal grants for specific programs such as housing. And the overall amount of Federal monies available to local communities is shrinking, and can be expected to continue to do so.

Much has been written about the changes and decreases in Federal financial support of cities and towns, but the changes wrought by the absence of Federal guidance are only now being appreciated. In the 60s and 70s there were strings attached to the monies that Federal agencies offered to communities. Through these limitations, seen by some as excessive, the government provided direction to communities. During the past three decades

many communities designed and implemented local plans in response to what programs and how much money were available from the Federal government. Local efforts to define community goals and to make plans tailored to the local situation took second place to Federal initiatives. In those communities with long-standing local leadership and citizen commitment to planning, Federal involvement has been more of a partnership than a leader-follower pattern. Some towns developed imaginative programs such as redevelopment programs that rebuilt a working waterfront while renewing a central business district. Here the effect of Federal withdrawal is different but no less complex.

Thus in the late 80s local leaders and planners face loud and often conflicting criticism from the public for failing to guide the forces threatening the quality of community life. At the same time, they are working in the vacuum of leadership, direction and fiscal support left by the withdrawal of the Federal government. Localities must now take the major responsibility for maintaining and expanding services, facilities for sewage treatment, solid waste disposal, roads, etc., and an infrastructure in need of major repair or complete replacement. Along with these traditional planning and municipal responsibilities, localities must deal with the new problems and expectations described earlier in this chapter. Furthermore, communities must plan for the future -- and find ways to pay for all of these. Although the decline in Federal involvement has been gradual, most communities are only now facing up to the new realities resulting from this change.

Shifts in Politics and Economics

During this same period, the political and economic forces and attitudes of many communities have been changing. Where once the business and industrial scions and real estate developers had the organized political clout

in a locality, now in many states, citizens groups and coalitions organized around a single issue are becoming political forces to contend with. Referenda on growth issues, including some that impose a "cap" on growth, once a hallmark of California politics, are being carried by majorities in many states and cities. In local politics, neighborhood associations are backing representatives, often running as a slate of candidates, who are winning elections. Initially, these "local growth" candidates base their campaigns on a single issue such as protection of neighborhood property values or the location of a new town dump. However, more and more of these political newcomers become knowledgeable on a broad range of urban issues. With their direct link to a constituency of local residents, these elected officials can become powerful allies, as well as formidable foes, in community planning efforts. These representatives, and the grass roots movement they embrace, are an emerging force that cannot be ignored.

The citizen participation movements of young people in the early 70s have had an effect throughout American society. People are less willing to give over most of the responsibility for managing growth to their elected officials, professionals and municipal administrators. Although planners have long felt it vital to have citizens involved in the planning process, such involvement is now under close public scrutiny. Even the best laid planning program may fail if all segments of the community have not been drawn into its initial design and the ongoing decision-making process.

So attempts to cope with growth often take place in communities where the political mood is complex and volatile, and both the citizenry and its leadership may feel overwhelmed with the task. The changing economic situation is equally important and is especially difficult for leaders in small towns and suburbs. Again, the problems involve both public resources

and the private economy. Small towns and rural areas often do not have the personnel and fiscal resources to serve a rapidly growing constituency. Pressing needs for more police officers and for a trash collection service absorb resources that might be directed toward expansion or creation of a planning department. In the private sector, the subtle economic redistribution nationwide, brought on by recent changes in tax laws and social support programs, has affected the so-called desirable communities. The wealthy and upper middle class have more money and tax incentives to buy second homes, while the working class, small businessmen, the poor and the elderly are being squeezed out of the communities by higher taxes and the cost of real estate and land. Small local businesses and industries such as agriculture and fishing are unable to compete with well-funded outside developers for the resources of the community.

Growth Management

As communities take more responsibility for their own future, many have turned to the approach of growth management and its associated tools and techniques for direction and as a guide for decisions. Growth management is not new; the concept has been around for years. It has withstood legal and political challenges. At the present time growth management has found support in all sectors of communities. In the past, the concept has been linked wrongly with no or slow growers, militant environmentalists and exclusionary groups. Now business leaders recognize that the quality of life is an important factor in whether or not their companies should move into (or out of) a community. They want excellent public facilities and services, as well as a favorable economic environment and labor supply, but they also want to be located in an area that their employees and executives will enjoy. A

community or regional system of managing growth establishes a framework within which these several goals can be met. Perhaps less so but increasingly, developers, investors and residents in resort areas are recognizing that without growth management they are in danger of losing the very natural resources and beauty that make an area an attractive resort.

In general parlance, the meaning of "growth management" has reflected the interests of the group using the term: to some, synonymous with no growth and return to the past, while meaning economic development when used by the Chamber of Commerce. These biased uses are not correct. We define local growth management as a conscious government program intended to affect the rate, amount, type, location and/or quality of future development within a local jurisdiction. We chose the term "affect" carefully. Encouragement of growth, slowing down of growth and/or encouragement of economic development can be goals and results of a growth management program. Growth management does not favor any one goal or result to the exclusion of others. The purpose and direction of a growth management program is locally determined. Everything depends on the goals a community sets for itself. In fact, a growth management program can, and often does, simultaneously affect no growth in some areas and encouragement of growth in others in the same community.

To be successful, a growth management program must fit the particular situation of the community -- political, physical, social, historic traditions and economic needs. There are no generic quick fixes, no cookbook solutions recommended. Excellent work by planning professionals, and community consensus and support are essential. In addition, the constitutional mandates for respect for private property, provision of equal protection and others must be kept in mind at all stages of designing and implementing a growth management system and/or planning tools and techniques.

An array of tools and techniques associated with growth management is available to a community to apply to its particular situation and goals. There are several levels of a growth management program. The growth management program itself is a system, which consists of a statement of community goals and mission, a comprehensive plan and related refinement plans. Mechanisms for achieving the expressed community goals are called strategies, tools and techniques. Strategies, tools and techniques are selected to fit into a system, or one or several may be used selectively. The tools fall into four major categories:

1. regulation
2. land acquisition
3. taxation
4. public spending

Overview of This Book

This book is meant to gather together the several threads of the concept of growth management as it has developed over the past decade. We describe some of the more innovative and effective tools and techniques that fall under the general rubric of growth management.* In doing this we hope to give planners, local officials and citizens a rich and essentially up-to-date picture of what is and can be done in a growth management program. We rely heavily on case studies of many types of communities, emphasizing pieces of existing planning programs that, with careful adaptation, may have practical application in another locality. We have looked especially for those experiences and approaches that may be useful for communities in the State of

*For a more complete listing and more extensive description of tools and techniques used to manage growth see Brower et al., Managing Development in Small Towns, Chicago, Planners Press, 1984.

Maine. Through our appendix, we hope to direct practicing planners to detailed documents from communities that have similar physical, political and economic characteristics and/or that have experience with a particular tool or set of tools.

The book is organized as follows. Chapter Two discusses emerging goals in growth management. Chapter Three discusses several growth guidance strategies. We then describe, in brief, 16 communities that have particularly interesting or innovative elements in their growth management systems. In a companion volume helpful ordinances, reports and related documents are reproduced in full or are excerpted.

Conclusion

This book is not meant to be read cover to cover, but rather to be dipped into frequently as problems and ideas come up in a particular community. The consensus that growth management is beneficial, even essential, is growing, and the successes of several communities, some of which are described in this book, strengthen the support for growth management. Christopher J. Duerksen* has identified factors that seem to be critical to the success of communities under growth pressures. Some of these factors are: (1) identification of distinctive community assets around which land use plans are designed; (2) a vision of what the community can be; (3) attention to aesthetic concerns; (4) use of a variety of tools, rather than overreliance on regulations, to attract desirable development; (5) the presence of individuals and groups who are

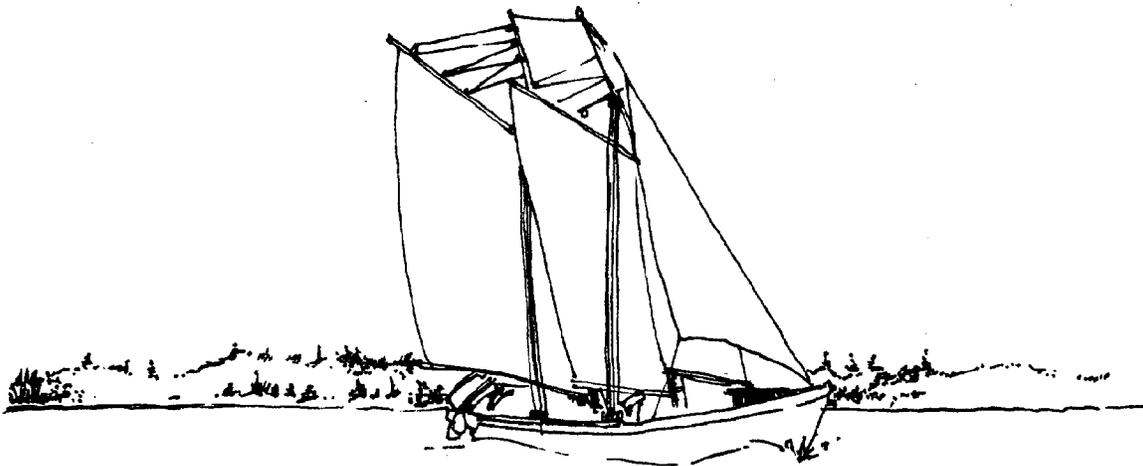
*From a manuscript "Successful Communities," by Christopher J. Duerksen, as excerpted in: Todd K. Buchta, op. cit., pp. 5-6.

informed, vocal and capable of sustained effort on growth. As you read and refer to this text you will find some or all of these factors in the communities we have identified and described as innovative. You will find also much diversity in the goals, problems and resources of these communities. Yet all have in common the use of growth management to guide growth and change.

Chapter Two

Emerging Goals in Growth Management

- The Importance of Setting Community Goals
- Protecting and Enhancing Aesthetic Resources
- Protecting Historic and Cultural Resources
- Preserving Farmland and Open Space
- Protecting the Natural Environment
- Mitigating Natural Hazards
- Providing Affordable Housing
- Conclusions



Chapter Two

Emerging Goals in Growth Management

(Note: For the reader's convenience, communities that served as case studies are identified by bold face type. When reference is made to materials available in the Appendix, this is noted by an asterisk.)

The Importance of Setting Community Goals

As we emphasized in Chapter One, everything in a growth management program depends on the goals a community sets for itself. The design of the system and the choice from among the many and varied tools and techniques available will and should be different for each community. These should reflect the particular mix of physical, social, economic and political resources, and the shared values unique to each place. Obviously, the establishment of these goals (or the writing of a mission statement) is the first step in a growth management program. The case studies and documents in this book have some excellent examples of the results of a goal-setting process, e.g., Manteo and Charlotte, North Carolina; Denver, Colorado.

Put in its simplest terms, a community or rural area needs to come up with a vision of what it wants to become. This vision (or mission) may embrace social needs such as schools, on-site day care and housing; economic needs such as creation of new jobs or protection of traditional occupations such as farming; enhancement of visual aspects of a place; among others. The articulation of a vision and definition of goals are the first steps in development of a comprehensive plan. The plan is the grounding essential to a growth management program; without it a community may work on one or a few goals outside of the context of the entire community and to the detriment of

other equally important goals. In another familiar situation, leaders and professional planners look to one or a few "trendy" techniques rather than evaluating and selecting from the array of tools, including more traditional techniques such as zoning that are already proved and tested in their community.

Despite its obviousness, it is important to reassert the essential place the comprehensive plan holds in each community. The plan must be well thought out and carefully executed in order to make growth management work, but it need not be complex. Many good plans are marked by their simplicity and clarity. Furthermore, the comprehensive plan has a central place in meeting legal challenges to all or parts of a growth management program. The design of the process of developing a community vision and the comprehensive plan must take into consideration the need for full, representative and ongoing citizen participation. It is also important that a community assess and act on the need for coordination among neighboring governmental units.

Traditional goals of growth management programs have been economic development; provision of adequate transportation, public safety and other city services; planning for harmonious patterns of land use; and planning for the infrastructure. In recent years people have become more and more concerned with quality of life. Quality of life is not easily defined; often it is recognized in its decay. Pollution, traffic congestion and long commuter trips, crowded schools, water shortages, disruptive development in established neighborhoods, ugly buildings and clutter, destruction of areas of natural and historic value and of open spaces have been cited here as evidence of a decline in quality of life. Many of the emerging goals of growth management discussed in this chapter relate to attempts to enhance the quality of life in a community.

Protection and Enhancement of Aesthetic Resources

Protection of visual amenities has emerged in recent years as an important goal in many communities. Increasingly, visual blight is seen as an ominous--and unnecessary--side effect of urban growth. Several types of aesthetic concerns can be identified, falling roughly into two categories: those related to protecting natural beauty and views of natural resources, and those related to the built environment, including architectural style and man-made edifices that in excess can create visual clutter or blight. Often in setting overall goals, localities draw both categories together as they seek to preserve a visual image or flavor that is distinctive.

Many communities are beginning to view visual amenities not simply as "extras," but rather as essential to maintaining and indeed enhancing the salability of their communities to business and commerce. And the courts have upheld regulations and programs directed toward the natural surroundings and aesthetically pleasing design. Even the city of Houston, famous for its absence of zoning and a laissez faire attitude toward growth and development, is worried. 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. It's 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).

Some interesting local growth management efforts have centered on protecting views of the natural environment. The City of Denver has taken a strong position to protect views of the Rocky Mountains. The height of buildings is restricted in eight "view preservation areas," established as part of the building code of the city. Together these designated areas cover 14 square miles or 12.5% of the city's land area, and include views from the state capitol and a number of city parks (City and County of Denver, 1985).

In nearby Boulder, more than 20,000 acres of open space around the city, including a 4,600-acre mountain park, have been acquired. If these lands had not been secured, the community feared that further growth and development would jeopardize what has historically made Boulder a special place. Boulder also has a 55-foot building height limitation, and special conditions must be met (including protecting existing views and vistas) before a building over 35 feet can be constructed. For similar reasons, Fort Collins, Colorado, has purchased most of the foothills (the "Hogbacks") to the west of its boundaries to preserve the natural beauty of its surroundings.

Two states, North Carolina* and South Carolina, have enacted Mountain Ridge Protection Acts, which place restrictions on the permissible height of new structures on mountain ridges (Heath, 1983). While the stated objectives of these programs included concerns ranging from the ability to provide adequate fire protection to the existence of aviation hazards, it is clear that the primary impetus was preservation of the appearance of the mountains. Local officials and legislators in North Carolina supported this bill largely because the economic vitality of the region depends on visual and natural settings for ski and resort activities and the second home industry.

Some of the impetus for protection of the natural environment has always come from the Federal government. For example, in 1986 the Columbia River

Gorge National Scenic Area Act (PL 99-663) was passed. 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 overall plan. Also the United States Forest Service is charged with managing development and forest management practices in certain special management areas. While the bill lists a number of stated objectives, it is clear that preservation of the incredible beauty of the gorge is primary among them. Other examples of Federal involvement in guiding growth in a regional resource are the Pinelands in New Jersey and Chesapeake Bay.

Communities also value and fear for cultural and historic landmarks. Austin, Texas, has enacted a Capitol View Protection Overlay Zone, with building height restrictions, as part of its zoning ordinance. View corridors open onto the Texas capitol building, the largest of the state capitols, which is one foot taller than the United States Capitol. Similar provisions have been adopted by the City of Lincoln, Nebraska, and Denver, Colorado.* When a 54-story trade tower (Port America) was planned on the outskirts of the nation's capital, in Prince George's County, Maryland (Forgery, 1986), many feared that the United States Capitol and other national monuments would be dwarfed. A Senate bill, designating "sensitive visual zones" and imposing severe economic sanctions on buildings that are very tall, was introduced. (The controversy was eventually resolved when the developer agreed to build smaller twin towers.) As these examples, all of them recent, indicate, goals of protecting natural treasures and historic landmarks are driving growth management efforts in many towns.

As the Port America case demonstrates, issues of urban design and architecture are the second major aesthetic force underlying recent growth

management programs. Towns of all sizes, and more and more resort communities, are enacting strict controls on billboards and commercial strip development (e.g., Nags Head, N.C.; Hilton Head, S.C.; Medford Township, N.J.). More and more frequently, larger cities are demanding a design review of large development; ugliness is not tolerated, nor is damage to other urban amenities through the development process. San Francisco has perhaps gone the furthest with the adoption in 1985 of its Downtown Plan. Concerned about the "Manhattanization" of San Francisco, the residents supported the plan which, 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). Through the Downtown Plan, high-rise growth has been reoriented to minimize its impact on surrounding neighborhoods and views of the San Francisco Bay (Shaffer, 1985), and 250 historic buildings in the downtown are to be preserved. Boston has considered a similar plan for its downtown (Guenther, 1986).

This concern with the built environment is not limited to the big cities. Tiny Cannon Beach, Oregon, a coastal community surrounded by dramatic natural beauty, has attracted many artists and tourists. Its efforts at protecting the "character" of the community are oriented toward artistic sensibilities and appreciation of the natural environment. The town has instituted a design review process for all development other than single-family detached units. Of special interest is the prohibition of all "formula-food" (fast-food) restaurants. Other places that have acted upon their concern for the aesthetic effects of the built environment are Raleigh and Nags Head in North Carolina, which have stringent billboard restrictions. The land development

codes of Hilton Head, South Carolina and Medford Township, New Jersey have stringent sign regulations.

Protecting Historic and Cultural Resources

Another emerging goal of growth management programs, one related to protection of visual amenities, is preservation of historic and cultural resources. Several of the communities studied and described in this book are good examples. The town of Breckenridge, Colorado,* an 1860s gold mining town, has architecture from three different historic periods. Clearly, the charm and flavor of the place grow out of these several heritages and are a major attraction for tourists and skiers. The town has undertaken a substantial effort to build upon and enhance these historic resources. Among other things, the design standards prevent new buildings that attempt to "imitate" historic architecture, and the efforts to protect historic landmarks are integrated with those directed toward open space and views of the surrounding mountains.

The town of Manteo, North Carolina, is using its land use plan and development regulations to enhance its historic importance as the site of the first English colony in the New World. In doing so, the town attracted major redevelopment on the waterfront and broadened its economic base with tourism. Other communities, including Fort Collins, Colorado, Nags Head, North Carolina, Eugene, Oregon, and Austin, Texas, have built growth management programs upon their historic and cultural heritage. Linking plans for future growth with design standards and the protection of the elements of a community that make it memorable and unique is being done more and more frequently.

Community leaders see that the goal of historic and cultural preservation makes good economic sense, promoting tourism, a sense of local pride and

community attractiveness, as well as having intrinsic value to the locality, region and nation.

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 these acquisitions are intended to serve several objectives. Acquisition of rights in farmland may be intended to protect these areas for their agricultural productivity, but also because farmland represents an important and valued form of open space. Open space programs also serve other types of natural and scenic lands not being protected for agricultural potential. Moreover, many of these open space preservation programs are strengthened by the increasing importance being placed on aesthetic and visual quality. One of the most interesting land acquisition/preservation programs was implemented on Nantucket Island, where real property costs are being driven up in a booming and speculative market (see Chapter Three and the Appendix for more detail). Other communities, all in New England, have been finding creative ways to overcome the major financial obstacles to preserving open space. These include Little Compton* and New Shoreham, Rhode Island. Boulder County, Colorado, also has programs in place to preserve open space. Most of these are discussed in more detail in the next chapter.

The rich and beautiful vineyards of Napa County, California,* are being protected despite pressures from the nearby metropolitan areas of San Francisco and Oakland. King County,* which includes Seattle, is also working to preserve its farmlands, as are Suffolk County, Long Island, Montgomery County, Maryland, and several areas in Oregon, among others (see Chapter

Three). As will be described later, many land acquisition programs have been enhanced when applied in concert with regulations such as zoning.

Protecting Sensitive Areas

Growth management programs are increasingly concerned with protecting the natural environment: reduction of air pollution, protection against groundwater contamination and protection of sensitive habitats such as wetlands, coastal beaches and dunes.

Groundwater, and the ways in which urban development influences its quality, have been receiving special 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 prevent groundwater contamination (e.g., Celis, 1987). These laws regulate density of development, and/or types of uses allowed in the areas. South Kingstown, Rhode Island, has enacted a special rural low density, five-acre minimum lot size zone to protect its groundwater. Middletown, Rhode Island, uses a special aquifer protection overlay regulation. Nantucket, Massachusetts, has similarly stringent groundwater protection provisions. Groundwater protection is clearly a widespread important goal of growth management.

A number of localities have placed the protection of natural ecosystems and habitats at the center of their growth management efforts. The Sanibel, Florida, land use plan and land development controls 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.

New development is increasingly being held to stringent environmental protection standards as a means of meeting the community goal of protecting special and fragile natural areas. The case studies of Breckenridge and Fort Collins, Hilton Head, Medford Township, Martin County, and Boulder are illustrative. Communities are conducting thorough assessments of the sensitive ecological habitats within their boundaries, a first and essential step in developing an environmentally sound plan. The Medford Township program, done by Ian McHarg and discussed in more detail in the next chapter, is an excellent example of this approach. Beaverton and Cannon Beach, Oregon, are examples of relatively developed areas that have recently made efforts to protect the remaining wetlands within their boundaries. An extensive review of natural resources in Beaverton, a suburb of Portland, Oregon, resulted 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 its areas and to acquire Cougar Mountain (see King County, 1987). Nags Head, North Carolina, has taken special action to minimize the impact of development on a nature preserve, The Nags Head Woods, as will be described in more detail later.

Some of this progress at the local level is in response to increasingly stringent state requirements. State coastal management programs, which were themselves largely stimulated by Federal legislation (the Coastal Zone Management Act), have encouraged substantial local efforts toward protecting natural resources. Arundel County, Maryland, adopted a strong shoreline management plan in response to the requirements of Maryland's Chesapeake Bay

Critical Areas Program. King County, Washington, developed strong shoreline policies as a result of requirements under Washington State's Shoreline Management Program.

Mitigating Natural Disasters

Floods, hurricanes, avalanches and other hazards are regular events in certain areas and should guide plans for future growth. Incorporation of the potential for natural hazards into the management of land use and growth is becoming more 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. Nags Head, North Carolina, has made the mitigation of coastal hazards a major component of its growth management system and implementation is directed toward minimizing the effects of storms and floods in vulnerable areas. The states of North Carolina and Florida now require 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).

Mountainous areas are controlling growth to prevent slides and slope failure. Hazard reduction strategies can include low density development on high slopes, such as San Mateo County, California (Kockelman, 1986). The foothills ordinance in Boise, Idaho,* for example, imposes special requirements on all proposed construction on slopes of 15% or more, 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. Scottsdale, Arizona, has also adopted special regulations for

development in its district. Similarly, some California communities have also taken actions to restrict the amount and type of growth near earthquake fault zones (Brown and Kockelman, 1985).

Providing Affordable Housing

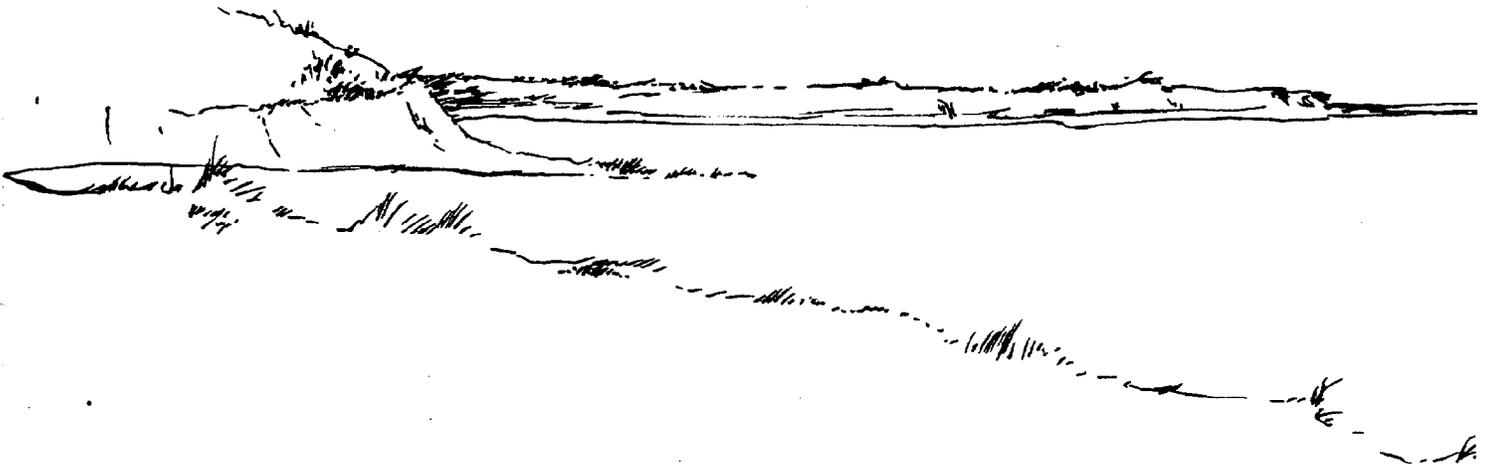
A shrinking supply of affordable housing can be one result of rapid growth. Many communities believe that urban growth should be accompanied by, and indeed should promote, affordable housing. A number of communities have been implementing inclusionary housing programs, typically as a part of their land use regulatory mechanisms. Often high density developers are asked to "set-aside" a number of units for low and moderate income families. A number of communities have used creative approaches to boost the supply of low cost housing in a period of rapid growth and development of high cost housing. The city of Eugene, Oregon, has enacted an ordinance placing restrictions on conversion of rental units to condominiums. As discussed in Chapter Three, however, there are limits to what growth management can do to assure an adequate range and quantity of housing options in a community.

Conclusions

The emerging goals for growth management described here reflect the need felt by a community of people to conserve, to protect and to enhance the quality of life of the particular place that is their home and workplace. These goals have gained acceptance in part because of the rapid pace of change and uncontrolled development that have characterized much of the American landscape in the 1980s. In concluding this chapter, we want to re-emphasize the importance of blending these emerging goals with those of long-standing in a community. These may be economic development, improvement of public services, and enhancement of the quality of life overall. The themes of the

emerging goals -- conservation, preservation and articulation of the aesthetic and social values -- cannot be anti-progress or anti-growth. To become and remain a successful community, there must be year-round jobs for its people, family farms must survive and local businesses must stay healthy and viable.

Thus in most places the emerging goals for growth management related to quality of life will and should be blended in with such traditional goals as maintaining a thriving local economy and providing adequate public services. As we have pointed out, there is strong economic force behind the emerging goals, especially in a state such as Maine that has attracted growth because of its natural beauty and lifestyle. It is essential for a community that the process of assessing the present, looking into the future and defining goals be broadly based, open to all voices in the community; the process should emphasize the broad view while responding to the immediate problems of the present. The outcome of such a process should be a set of goals, with some sense of the priorities among them. We have called this set of goals a vision of what the community wants to become.



Chapter Three

Tools and Techniques of Growth Management

Introduction

Four Categories of Techniques

- Regulation

- Regulations That Affect the Rate of Growth
- Point Systems
- Performance Standards and Performance Zoning
- Urban Growth Boundaries
- Design Review Processes and Sign Ordinances
- Environmental Performance Standards and Other Controls in Sensitive Ecologic Habitats and Watersheds
- Regulations in Areas Subject to Natural Disasters
- Regulations to Preserve Farmlands
- Refinement Plans

- Land Acquisition

- Purchase of Development Rights

- Taxation

- Making Growth Pay Its Own Way
- Real Estate Transfer Taxes
- Other Approaches

- Public Spending

- Impact Fees

Other Considerations

- Affordable Housing
- Citizen Participation
- Regional Coordination

Conclusions and Further Reading

Chapter Three

Tools and Techniques of Growth Management

(Note: For the reader's convenience, communities that served as case studies are identified by bold face type. When reference is made to materials available in the Appendix, this is noted by an asterisk.)

Introduction

The concept of growth management has evolved in the last 20 years. As we have gained experience, and as societal changes have reshaped the environment in which community planning must take place, the goals that communities seek to achieve through growth management have expanded to include a large number of issues broadly described as quality of life. Also, the tools and techniques available to achieve these goals are much more varied and sophisticated than they were two decades ago. They can be grouped into four categories: regulation, land acquisition, taxation and public spending. Depending on the goals and resources available, communities can select from this wide array. In the previous chapter we presented several techniques used by one or more places to achieve a community goal such as protection of the natural environment. In this chapter's discussion, we elaborate on some of these. We focus on techniques that are more frequently used, found to be effective, and/or considered to be innovative. The list is not meant to be comprehensive. Where applicable, we describe the experience of one or more of the 16 communities we studied. As with the process of developing community goals, the needs of citizen participation and regional coordination must be

addressed. Finally, planners need to assure that the constitutional mandates for equal protection, respect for private property, and others are held inviolable.

Four Categories of Techniques

Regulation

Regulations that Affect the Rate of Growth. A number of localities around the country regulate the amount of growth that is allowed in a given year. Based on the so-called Petaluma (California) model, a growth rate is established, either as a precise number (e.g., 500 dwelling units per year) or as a rate (e.g., 2% of existing dwelling units per year). Santa Cruz County, California passed a referendum that placed a 1% annual growth rate cap on new development. A number of other California communities have adopted a similar approach, including the city of Davis and Napa County.* Enacted by a citizen-generated referendum, the Napa ordinance restricts annual growth to a rate equal to that of the region. The ordinance addresses four categories of housing, one of which is "affordable." Permits are issued on a first-come, first-served basis. When demand for development permits exceeds the supply in a given year, a lottery system is used.

Hilton Head,* a resort island off the South Carolina coast, has enacted a similar restriction in its Land Management Ordinance which sets an absolute limit on permits (4,250) over a five-year period ending in 1991. Of that number, 2,050 are reserved for single-family units and 800 for hotel/motel units. An allocation schedule is established for each year. Potential developers submit a "building permit allocation reservation request." The Administrator makes allocations "according to the order in which such reservation requests are received." Priority is given to single family units;

when the allocation for single family units is exhausted, units from other categories can be used. The ordinance clearly states that this limitation and the allocation scheme are temporary, enacted because of the limited capacity of the island's existing infrastructure.

Many of these local efforts have included point systems to control the type as well as the timing of growth. Boulder, Colorado,* adopted a 2% per year "cap" on building permits in 1976. Named after one of its most vigorous advocates, Paul Danish, the Danish Plan required the city to set priorities among development proposals. Those proposals given the most points were granted permits. The Danish plan ended in 1982 because of a sunset clause; however, the technique of an annual development cap continues to be used. The city has added a set of performance standards (see discussion below) that all proposed development projects must satisfy, thus separating the goal of control of the quality and purpose of a development proposal from the goal of allocating a scarce resource, that is, the number of permits. Boulder now uses a proportional allocation system related to the total number of permits requested in a given period. For example, if 100 permits are available and 200 are requested, an applicant who requested 50 permits would be entitled to one-fourth of the pool, or 25.

Some cities' efforts to slow the pace of growth have been directed to only certain areas. San Francisco's Downtown Plan placed an annual cap on new downtown development in an effort to direct development away from the city's financial district. Proposition M*, passed in the fall of 1986, reduces office development even further.

Point Systems. Some localities have developed growth management systems that rely, entirely or in combination with other types of regulations, on point systems to determine the permissibility of proposed developments. Fort

Collins* and Breckenridge, Colorado,* were among the first communities to develop and apply point systems. As in the Boulder approach discussed above, the Fort Collins Land Development Guidance System, enacted in 1982, combines performance standards with a point system. Development proposals are subject to both absolute and relative standards. Each type of development -- residential, industrial, neighborhood service -- is held to a specific set of standards, some of which are absolute and some of which vary according to priority and category. Absolute standards are just that, absolute; a project will not be approved if these standards are not satisfied. For example, all vehicular use areas, pedestrian circulation paths and building exteriors must have adequate security lighting (City of Fort Collins, 1982, p. 7). The point systems use the relative standards. One to three points are assigned for each element (e.g., density); this number is then multiplied by a weighting factor derived from the priority of that element. Projects can proceed if they earn a specified percentage of the maximum points possible; usually that percentage is 50%. For residential uses, permissible density is determined by a point system that promotes certain types and locations of development. For example, developments located next to existing development, those close to a neighborhood shopping center, public transportation, and schools "earn credit"; this earned credit can be conveyed into permission for increased density.

The Breckenridge plan, which was enacted before the one in Fort Collins, is very similar, incorporating both absolute and relative performance standards and a point system. In Fort Collins, however, the land use plan establishes general use zones and density levels, although there are provisions for density bonuses. Negative as well as positive points can be assigned under the Breckenridge system. A proposed development must earn a

final positive score (or at least zero) before it can proceed. A developer can compensate for a factor in his plan that receives a negative grade by earning extra points for other elements where he or she has added amenities. The point systems in the two Colorado communities also differ in specific performance standards applied because of local needs. For example, Breckenridge, a very small town with a very large transient population of skiers and seasonal workers, imposes performance standards related to snow removal and employee housing.

Hardin County, Kentucky,* adopted its point system in January, 1984 (see Harned, 1984). The use categories found in typical zoning ordinances are replaced with a unified evaluation scheme. Most developments must obtain a special use permit and in that process are assigned points based on a number of factors relating to the site. For example, the system evaluates relative productivity of the soil, access to roads and types of development surrounding the proposed site (Gordon, 1984). If a project earns at least 150 out of the possible 325 points, it is automatically approved. If a project earns less than 90 points, it is not approved; projects with 91 - 149 points are reviewed by the county planning commission and may be approved by them. Even after approval based on this point system each project is subjected to a compatibility assessment and a detailed review of its development plans. Since they can be somewhat complex, an important ingredient in making such point systems work is an adequate planning staff.

Performance Standards and Performance Zoning. The application of performance standards represents one of many efforts by planners to overcome the limitations they have found with traditional Euclidean zoning (Kendig, 1980). "Performance zoning sets standards for each zone based on the permissible effects of a development rather than specifically enumerating the

types of uses permitted" (Brower, Carraway, et al., 1984, p. 109). Used either as an overlay to or a replacement of conventional zoning, growth management systems with performance standards can be helpful in reducing environmental degradation and in promoting quality development. A number of small communities and rural areas have used the techniques of performance standards to protect environmentally sensitive areas (Brower, 1984, p. 110-11).

Largo, Florida, has adopted a performance-based land development system, replacing many of its traditional use restrictions. The new system focuses on intensity;

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). (Easley, 1984, p. 25)

Urban Growth Boundaries. Many localities have identified areas where growth is preferred or permitted and those where no or only very limited growth is allowed. These efforts vary in sophistication and in legal implementation. Oregon requires that all municipalities in the state establish Urban Growth Boundaries (Senate Bill 100). These boundaries separate urban and "urbanizable" lands (the latter defined as land not yet developed but which could be developed for urban uses) from land to remain as a resource and/or for rural uses. This state mandate has been successful in promoting efficient patterns of growth and in preserving valuable farms and forests (Beatley, 1987).

The Oregon law leaves room for local adaptation and innovation. The city of Salem, for example, established a system of phasing development within the urban growth boundary that encourages growth in areas where services are less

costly. Land within Salem's urban growth boundary is divided into two areas: a developed area and an urban growth area. In the urban growth area developers are required to construct public facilities such as streets, sewers and drainage to "link" with the developed area. The intended public benefits are that developers share the costs of growth and that inefficient development patterns are discouraged. Another interesting part of the Salem growth management program is the maintenance of a reserve of at least a 10 year supply of serviced land in or contiguous to the developed area.

Similar techniques are being used in Boulder to control the timing and sequence of growth. The Boulder Valley Comprehensive Plan, which is based on a 15-year planning period, delineates three broad development zones. These zones will guide the city in making annexation and capital improvement decisions. The definition of "adequate" public facilities and services needed for growth to occur is precise, including acceptable levels set for police and fire response times, and sewer and water flow standards.

Montgomery County, Maryland, located just outside Washington, D.C., has planned for concentration of growth in the area nearest the city. Its comprehensive plan calls for the preservation of open space "wedges" between growth "corridors." Development on farmland and open space is restricted, with local landowners compensated for loss of development possibilities through transfer of development rights (see below) to designated growth areas. Elements of this strategy to guide growth have come under political and legal attack recently. Nevertheless, the "wedges and corridors" plan has been effective in protecting open space in the Montgomery County.

Design Review Processes and Sign Ordinances. The use of design review boards is increasing as communities turn their attention to protecting beauty, order and distinctive characteristics. The programs in San Francisco have

been mentioned; other examples of active design review boards are the Vieux Carre Commission in New Orleans, The Fine Arts Advisory Committee in Cleveland, the River Walk Advisory Commission in San Antonio, the Fine Arts Commission in Washington, D.C., and Boston's new Civic Design Commission. The active regulation of visual characteristics of a place is not limited to large cities; communities of all sizes are instituting design review processes (Zotti, 1987). For example, Freeport, Maine, has initiated such a program.

These design review bodies are not necessarily given established standards or guidelines on which to make their judgments; where such design standards do exist, their level of detail and specificity differs from place to place. Design standards in Portland, Oregon,* represent an effort to be quite specific. The general standards that guide Portland's visual management program were adopted in 1980 to implement goals established in a Downtown Plan. Among the design issues addressed are: a ratio of open space to buildings; protection of existing pathway systems and pedestrian rights-of-way; protection or reinforcement of special urban sub-areas; reinforcement of the sense of a gateway at bridgeheads; invigoration of intersections at activity areas; inclusion of architectural features that connect the interior activity of a building with the streets; and reservation of places for people to rest and meet others. The ordinance provides examples to illustrate how each standard might be satisfied. There are extra standards for special districts such as Chinatown.

Environmental Performance Standards and Other Controls in Sensitive Ecologic Habitats and Watersheds. Clearly, one of the substantial problems that growth management programs have addressed is protection of groundwater. The New Castle County, Delaware, Water Resources Agency recently proposed the prohibition of future development in certain important recharge areas,

including sand and gravel areas (Pummer, 1987). Middletown, Rhode Island, uses a special aquifer protection overlay zone. Nantucket, Massachusetts, also has stringent provisions for groundwater protection.

Several localities place protection of natural ecosystems and habitats at the center of their growth management efforts. In Sanibel, Florida, land use plan and land development controls are explicitly based on the carrying capacity of the island's natural systems, e.g., the capacity of those systems to absorb developments without seriously harming them. Medford, New Jersey, has a similar plan in which decisions on future development are based on a consideration of the geological and biological characteristics of the site; soil types, vegetation, and also visual quality are examined. The Medford regulations explicitly tie the performance and design standards to the environmental conditions of the area.

Several case studies describe the use of environmental performance standards. In Boulder all new development must meet a certain minimum level of resource conservation, achieved through orientation of buildings for solar energy systems, use of water-conserving toilets, among other requirements. The point systems used in Breckenridge and Fort Collins emphasize environmental protection. For example, Breckenridge places penalties on developments that contribute to air pollution by having an excessive number of fireplaces. Eugene, Oregon,* is one of several communities that have adopted solar access ordinances.

Communities are giving more attention to sensitive ecological habitats within their boundaries that may be permanently changed or destroyed by nearby development. Beaverton and Cannon Beach, Oregon, have taken steps to protect wetlands. After an extensive review of its natural resources, Beaverton designated certain areas as sensitive environments where special development

restrictions apply. These restrictions are especially important in a suburban environment (City of Beaverton, 1984). King County, Washington, has acquired Cougar Mountain on the basis of a similar assessment of natural habitats (see King County, 1987). Nags Head, North Carolina, has imposed regulations on both privately and publicly owned land in and around one of the last maritime forests, Nags Head Woods.

To a large extent the states have taken the lead in protection of sensitive habitats. State coastal management programs encourage the local efforts to protect natural resources. For example, Arundel County, Maryland, adopted a forceful shoreline management plan in response to the requirements of the state's Chesapeake Bay Critical Areas Program. King County, Washington, wrote a vigorous set of policies on the shoreline as a result of requirements under Washington State's Shoreline Management Program.

Regulations in Areas Subject to Natural Disasters. More and more frequently, plans to manage growth speak to concerns about natural hazards. The most widespread of these management activities is the restriction of the quantity and type of development in areas subject to flooding. Again, the Federal government has spurred many of these efforts through the requirements of the National Flood Insurance Program.

The town of Nags Head has made the mitigation of coastal hazards a major component of its growth management. Several actions have been taken or are being contemplated now to direct future patterns of growth so that the town will be less vulnerable to coastal storms. North Carolina and Florida require that coastal towns prepare hurricane mitigation and disaster reconstruction plans as part of land use planning (see Brower, Godschalk, and Beatley, 1986).

Mountainous and steep-slope areas are being controlled to prevent slides and collapse of slopes. In San Mateo County, California, the permissible

density of development on steep slopes and unstable zones is limited to one unit per 40 acres (Kockelman, 1986). Another approach is to impose special engineering requirements on development in areas at risk. The foothills ordinance in Boise, Idaho,* requires that all new construction on slopes of 15% or greater prepare detailed grading and drainage plans, among other requirements. The hillside development standards are detailed, addressing grading, vegetation, drainage controls, roadways and circulation, among other things. Benton County, Washington, has established hillside development standards as a condition for the issuance of special use permits. Scottsdale, Arizona, has also imposed standards. Some California communities have imposed controls on growth and requirements for seismic design for new structures on sites at risk from earthquakes.

Regulations to Preserve Farmlands. Although acquisition is probably the most effective way to preserve agricultural land, regulatory approaches are most common. In an innovative approach that ties regulations to farmland productivity, Oregon's Senate Bill 100 requires that all counties place farmland of a certain quality (SCS classes I through IV west of the Cascade Mountains, classes I through VI east of the Cascades) in an Exclusive Farm Use zone. Land parcels in these zones are not allowed to be reduced below a size needed for a commercially viable farm unit (Beatley, 1984). Local governments throughout the country have adopted farmland protection provisions based on the Department of Agriculture's new Land Evaluation and Site Assessment system, among them, Clarke County, Virginia, and Linn County, Oregon.

Many communities continue to rely on traditional zoning, particularly large lot provisions, to protect farmland and open space; for example, the townships of Plainsboro, Gransbury, Colts Neck, Franklin and Bethlehem in New Jersey. Perhaps the most successful application of zoning for this purpose is

in Napa County, California.* Lot sizes in the vineyards must be 40 acres or more.

Another approach to preservation of farmland and open space is use of incentives. We mention here two techniques that have been used for this purpose. Boulder County, Colorado,* provides a special non-urban Planned Unit Development designation in which the right to develop high density units is given in exchange for a commitment to keep a certain percentage of the land as open space or farm use in perpetuity. Specifically, the maximum permissible density in most rural zoning districts in the county of one dwelling unit per 35 acres can be increased under the non-urban PUD provisions to two units, plus one existing homestead, if the landowner agrees (1) to place both structures on 25% of the land parcel and (2) to enter into an easement to maintain the remaining 75% in open space and agricultural uses. Another approach to saving farmlands, with which there has been more experience, is use of transfer of development rights; the technique is discussed in more detail in the section on Land Acquisition that follows. A number of case studies reflect this use. Montgomery County, Maryland, relies on TDR to maintain its open space wedges.

Refinement Plans. Some cities refine city-wide growth management programs with a series of more specific or refinement plans, related either to geographic area or function. It is common for Oregon communities to have active neighborhood planning programs, which are integrated into the larger community planning framework. In Eugene, formal procedures exist for informing and consulting with some 20 neighborhood groups on planning and development matters. As a part of Austinplan, 22 sectors will prepare plans to be integrated in a plan for the City of Austin as a whole. King (Seattle)

and Snohomish counties, Washington, combined refinement plans into the county plans.

Functional planning is not new, but it is especially important to growth management programs. In Eugene, Oregon, a master plans for each of the following were prepared: bikeways, culture/leisure, entrance beautification, airport, parks and recreation, fire and emergency services, downtown housing, among others. King County followed a similar course.

A recent use of refinement planning is resource area planning. For example, Martin County, Florida,* adopted special planning and regulatory provisions for its barrier islands. Accomack County, Virginia, recently enacted a special barrier island ordinance that restricts the types of development and modifications of the natural environment (e.g., prohibition of sand fences). Boise, Idaho,* adopted special planning and regulatory provisions governing future development along the Boise River. The plan calls for establishment of a continuous public greenbelt along the river (City of Boise, 1985). Similar regulations had been adopted earlier for Boise's hillside and foothills areas (City of Boise, 1981).

Land Acquisition

Purchase of Development Rights. Acquisition of less-than-fee-simple interests in open space and resource lands is being used more and more in growth management programs. One of the most successful programs using the purchase of development rights (PDR) is in King County, Washington.* King County has acquired development rights to 12,650 acres of farmland. The program was funded through a \$50 million bond issue passed in 1979. A farmland ordinance enacted at the same time established in detail the areas where purchase of development rights was permissible and encouraged. A series

of maps was appended to the ordinance, and priorities were set for the selection of farmland to be acquired. Acquisition took place over an 8-year period. With the plan completed in 1986, county officials report that the approach of PDR has worked extremely well.

The technique of purchase of development rights has been used by many types and sizes of governmental units in areas of differing sizes, populations and economic positions. Perhaps the oldest example of the use of PDR is that of Suffolk County, Long Island. Faced with rapid suburbanization, the government acquired development rights to several thousand acres of prime farmland and open space. Forsyth County, North Carolina, has begun a PDR program to protect farmland from the expanding city of Winston-Salem. There are statewide PDR programs in Maryland, New Jersey and Connecticut (Kwong, 1987).

Taxation

Making Growth Pay Its Own Way. For decades localities have been making demands on developers that would soften the economic and social effects of proposed new growth on governmental units. Towns have required that developers dedicate land, or fees in lieu of dedication, as a condition of approval of a subdivision or development proposal. Cities have also required that certain facilities be installed at the expense of the developer. However, the idea that growth and development should in a real sense pay its own way has only recently gained credence. More and more developers in the 1980s are being required to assume a substantial portion of the costs of growth. These requirements cover a widening range of public facilities and services, from road construction to police and fire protection to the provision of libraries. Developers are also being required to assume a large portion of the "off-site" costs associated with their projects. The extent to

which this trend of making growth pay its way is evident varies by state and region, as do the particular techniques employed.

Real Estate Transfer Taxes. The Nantucket Land Bank, created by a special act of the State of Massachusetts in 1983, uses an effective and progressive means to fund and implement its land acquisition and preservation program. In the booming and speculative land market of Cape Cod, the amount of money Nantucket can raise by imposing a tax on each real estate transaction is impressive, approaching \$80,000 per week. By July 1986 the Bank had raised over \$6 million from about 3,000 real estate transfers (Klein, 1986, p. 12). These monies were used as leverage to float tax-free bonds. The Bank, governed by a five member board elected locally, has exceptional authority, including the power to acquire land through eminent domain.

The experience in Nantucket may be unique, however, and not instructive to other areas in the country. Being an island, the condition of land scarcity is immediately obvious to all. The situation of a large number of pieces of property changing hands with frequency is necessary to generate monies. In addition, some have observed that it was easier to rally public opinion behind this plan among the high income residents of the island, distinguished by a long history of concern for conservation of natural resources, historic preservation and high architectural standards (Phillips, 1985). On the other hand, as we have noted at several points in this book, the concern with quality of the environment is not limited to "those who can afford to care," but is advocated with equal ardor in many communities in the country. Thus, the Nantucket strategy may be found to be effective in other localities in the future. Among those using the real estate transfer tax are Little Compton and New Shoreham, Rhode Island.*

Other Approaches. Although not a tax, a few localities have sought to tap into the profits of growth-related development through equity-sharing agreements. This may be a trend in growth management programs. The California cities of Fontana, Fairfield, Monrovia and Duarte have entered into agreements with private developers, which secure for the community a certain percentage of the net profits from the operation of the proposed development. Monrovia has become a partner in the development of a shopping center. The city, through the Monrovia Redevelopment Agency, acquired and prepared the land for development. A developer then purchased the land and a 30-year lease on land for a parking lot. In exchange, the city will receive 17% of the annual net income for the life of the shopping center. Duarte, California, has joined in the development of a 5-story condominium.

Public Spending

Impact Fees. One of the most popular new techniques being used to defray the costs of growth is the impact fee, with its underlying concept of linking approval of new development to the provision of certain services and facilities. Increasingly, developers are being expected to offset, at least in part, the effects that their investment decisions have on the social and economic structures of the broader community. To some, this is an issue of equity. For example, to the extent that new office development will create problems such as traffic congestion and needs for new housing, that development should be required to contribute to their resolution. As San Francisco residents recently note, "These developers are getting a lot out of this city, so it's only right that they put something back in." (Myers, 1986).

Impact fees are used extensively in California and Florida (Kirlin and Kirlin, 1982; McKay, 1986; Snyder and Stegman, 1986). Florida's innovative

1985 growth management package explicitly encourages localities to use impact fees (Bosselman and Stroud, 1985). The technique is now spreading beyond California and Florida. Oregon and Washington use impact fees extensively, although they may be called "systems development charges" or some other similar term.

The type and percentage of services and facilities expected to be paid for by new development are expanding. At first, impact fees were applied to water and sewer improvements, the construction of roads, parks and recreational facilities, police and fire protection and schools. Recently, they have been applied to goals such as conservation. Martin County, Florida,* enacted a Beach Impact Fee Ordinance, to build funds to purchase recreational beachlands. The percentage of the total costs created by new development that developers are required to pay through impact fees varies greatly; some places reach 100%. The total cost of these fees to a developer is growing and can be enormous. In Fairfield, California, impact fees are as much as \$15,000 per dwelling unit (Vesey, 1987).

Special units of local government such as school districts can be given authority to impose impact fees. A relatively new law in California permits school districts to impose an impact fee on new residential and commercial development based on the number of square feet being built (Billiter, 1987). The fee is not permitted to exceed \$1.50 per square foot for new residences and \$0.25 per square foot for commercial structures. The Los Angeles Unified School District, the largest system in the state, adopted such a fee requirement shortly after the state law passed.

In order to withstand a legal challenge, the community that imposes impact fees must show a "rational nexus" between growth and the service demands created by it. Some communities have incorporated sophisticated

computer models to calculate impacts. The Traffic Review and Impact Planning System in Broward County, Florida, is one example; the setting of road impact fees is directly related to the street and traffic impacts of a project as predicted by the computer model (see Knack, 1984). Other places that have developed traffic impact models are Washington County, Oregon, and Austin, Texas.

More and more large cities are holding downtown development projects accountable for their social impacts on the wider community; high-rise office buildings are the most likely target. For years San Francisco* has required that new downtown office complexes contribute to a trust fund for construction of affordable housing. Now downtown development must also contribute to a transit fund, and perhaps for the first time in any city, to child-care facilities, either as on-site construction or in the form of contributions to a city child care fund (at the rate of \$1 per square foot). Concord, California, a burgeoning suburb in the Bay Area, has adopted similar requirements for builder-funded day care facilities.

Looked at in its broadest context, impact fees are a form of linkage program, that is, approval of urban development is linked to provision of certain services and facilities. Few municipalities attempt to cover as broad a range of social needs as San Francisco. Notable linkage programs have been established in Santa Monica and Palo Alto, California, in Chicago, and in Washington, D.C. (Keating, 1986).

Other Considerations

Affordable Housing

Many communities are concerned that the supply of affordable housing keep pace with, or at least be maintained during urban growth. A number of

communities rely on land use regulatory mechanisms to implement inclusionary housing programs. Often developers seeking zoning changes to permit high density development will be asked to "set aside" a certain number of units for low and moderate income families. In Newton, Massachusetts, for example, developers who seek an increase in permissible residential density must agree either to set aside 10% of the dwelling units for low income and elderly citizens or to provide for these units in some other way (e.g., through a cash payment, 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 approach has been replaced by a mandatory performance standard that all new development must satisfy. These standards vary depending upon when the land to be developed was annexed. For residential projects proposed on land annexed on or after December 1973 at least 15% of the units must be for moderate income residents, or 7.5% for low income persons. For projects proposed on sites annexed before that time, the requirement drops to 10% for moderate income, or 5% for low income units.

The case studies illustrate several approaches to the provision of affordable housing. Hilton Head, South Carolina,* has a special affordable housing overlay zone, where density bonuses are offered to projects that incorporate low and moderate income housing in their plans. The point system in Fort Collins rewards developments that address the need for moderately priced units with density bonuses. Breckenridge* uses a similar positive incentive, but also subtracts points when affordable housing plans are deemed inadequate. Napa Valley, California,* with its cap on development rate, sets aside a certain number of its annual permit allocation for affordable housing

projects. Eugene* has enacted an ordinance placing restrictions on the conversion of rental units to condominiums. The developer involved in the condominium conversion is required to find displaced tenants comparable housing elsewhere (or provide a lifetime tenancy), or to provide moving expenses, among other compensations.

There are many examples of planning programs and private redevelopment projects that have destroyed existing neighborhoods and a pool of low-cost housing. Planners developing a growth management program need to assess its effect on the local and regional housing markets. Compensatory plans, inclusionary programs and incentive point systems such as those mentioned here should be essential parts of a growth management system in many local situations. However, it is important to acknowledge that the techniques of growth management can only enable provision of adequate housing for low and moderate income residents. Growth management cannot assure that an additional supply of such housing will be built. If one of the goals of a community is maintenance or expansion of affordable housing options, the community must look beyond the techniques of growth management to achieve it.

Citizen Participation

John Naisbitt, in his book Megatrends, argues that the United States is experiencing a "massive shift from a representative to a participatory democracy" (1982, p. 160). One indication of this shift is the use of "ballot box measures," that is, citizen initiatives and public referenda. Public concern about growth issues are putting more and more referenda up for voters to decide on. Ormon (1984) has counted some 50 ballot box measures related to growth management in California in the past decade; he predicts their use will increase. The purposes of these referenda have ranged from the setting of

annual rates of growth to establishing minimum lot sizes for agricultural land. In Corvallis, Oregon, all annexations must be approved by a popular vote. In Portland, Maine, residents passed a referendum that restricted the types of development permitted on its waterfront. At least 30 other towns in Maine have enacted emergency moratoria on local growth.

Several recent ballot box measures illustrate the ways these direct democracy endeavors have affected growth management. In November 1985, the voters in San Diego passed Proposition A, which placed 52,000 acres of farmland located on the city's northern fringe in a "future urbanizing zone." Over the succeeding ten years the city was prohibited from modifying the zoning to allow any development other than low density. The rezoning of these lands to permit more intensive development requires voter approval (Colburn, 1986; Stein, 1986). The citizens of Santa Cruz County created one of the most extensive grass roots based growth management programs when they approved Measure J in 1978 (Stein, 1986). The ordinance placed a 2% annual cap on population growth and requires 15% of the new housing in the county to be affordable. Through passage of Proposition M, San Francisco residents tightened a growth cap already in place. As mentioned, residents of Portland, Maine, used a referendum to affect waterfront development.

The recent passage of Proposition U in Los Angeles -- the so-called slow-growth initiative -- is a further example of this recent trend toward participatory democracy in planning decisions. This proposition, which won by a 2 to 1 majority, is directed toward commercial development. The allowable size of new buildings was cut in half in 70% of the land zoned for commercial and industrial uses. Supporters of the proposition heralded 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 it is a healthy trend, returning decisions to those who are most affected, others are apprehensive. Many growth issues are complex and call for careful thought and deliberation by representative government. The approach is also expensive; supporters of Proposition U in Los Angeles reportedly spent \$300,000 in their campaign. Other critics predict that the rights and interests of minorities will be overlooked in this pursuit of popular government. Some towns require that almost all growth issues must be put before the public. In Corvallis, Oregon, a referendum mandated that all future annexations be approved by popular vote. The requirement has resulted in project-by-project votes, with small projects gaining easy approval and larger ones subject to scrutiny and suspicion. The arrangement has not prevented the city's growth but has slowed its pace. Despite the shortcomings and unpredictable results of public initiatives, it seems that planners will have to contend with injections of ballot box measures into the traditional planning process for some time to come.

Communities and their planners are looking for other means of drawing out citizen participation in the planning process, ones that are deliberative, that have assured representativeness and that are consistently used at all stages and levels of planning. One approach is citizen participation in the formal planning process. Austin, Texas,* has embarked on a community participation program in which citizens and community leaders, aided by planning staff, are given most of the responsibility for developing the city's new plan. The process, called Austinplan, is overseen by an 87-member steering committee. A conscious effort was made to ensure representation of the many interests and constituencies in the community on this steering committee. These included real estate and land development leaders,

environmental groups, various neighborhoods in the city, business and finance heads and ethnic minorities, among others. In addition to the goal of full representation, the appointment decisions were guided by the intent to build lasting political credibility into the final plan and implementing program. Fourteen task groups were formed to address substantive planning and growth-related issues ranging from transportation to environmental protection and provision of health services. Planning for specific geographical areas is taking place concurrently through sectoral plans. The guiding principle of Austinplan is consensus-building; volunteer facilitators have been assigned to working groups. So far, the process has generated vigorous dialogue on growth issues, and the citizen groups are moving toward a deadline for submission of a final plan and a set of development ordinances and other implementation techniques.

Other areas using formal citizen participation processes are Charlotte, North Carolina, and San Antonio, Texas. In Charlotte, a series of public workshops and a day-long conference on "Planning for a Livable Community" were held to promote citizen involvement. A 12-member citizens task force was also appointed to oversee development of the comprehensive plan and to provide a forum for discussion of planning and urban growth (Crompton and Morris, 1986). Extensive citizen review preceded adoption of Charlotte's 2005 Plan.

In an interesting cooperation among groups with different interests, Williamsburg, James City/County and York County, Virginia, in collaboration with the Williamsburg Foundation and Busch Properties (Anheiser-Busch), began with a series of growth forums in the fall of 1986. Citizen participation was solicited through newspaper advertisements. Next, idea groups were formed around four growth-related topics: Housing and Balanced Development, Public Service Capacity, Visual Quality and Urban Design and Environmental and

Historic Resources. The Institute of Environmental Negotiation at the University of Virginia designed and staffed the meetings. After several months of meetings, a conference, "Perspectives on Growth," was held in March of 1987 at the College of William and Mary. The idea groups presented their conclusions and recommendations at this conference, after which a 21-member commission was established to pursue the work. The commission is composed of public officials and private citizens, an equal number from each of the three local jurisdictions.

Regional Coordination

In recent years growth management has been applied at the regional level. The primary objective is often protection of a sensitive environmental resource, the natural boundaries of which exceed those of any one local jurisdiction. Some regional programs reflect state and local leadership; others respond to Federal programs or legislation; some are informal in the sense that they are not mandated by law. Since the passage of the Land and Water Management Act of 1972, Florida has implemented an Areas of Critical State Concern (ACSC) program. The state established four areas of critical state concern: Big Cypress, Green Swamp, Florida Keys and Appalachicola Bay. The state requires that special management plans and land use regulations be prepared for these areas. In addition, special resource planning and management programs have been established for other sensitive regional environmental resources.

In North Carolina the Coastal Area Management Act (CAMA) was enacted in response to the federal Coastal Zone Management Act of 1972. Other examples of regional growth management include 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 New Jersey Pinelands Commission, the Puget Sound Water Quality Authority, and the Connecticut River Gateway Conservation Zone, among others. These regional growth management efforts vary substantially in their specific objectives and operation. Some such as the Columbia River program are formed voluntarily; others are mandated by law (e.g., Pinelands Commission). Some groups have direct regulatory powers (e.g., Tahoe Regional Planning Agency) while others are only advisory or coordinating bodies (e.g., Puget Sound Water Quality Authority). The programs vary in the geographic extent of their authority and the management tools employed.

Conclusions and Further Reading

The list of planning tools and techniques discussed in this chapter is selected. We have not tried to be comprehensive. The techniques are representative of the wide and growing array of options available. Also, we have emphasized certain strategies that have been applied in innovative ways in the 16 communities we studied. Some of these were described in Chapter Two (e.g., establishment of zones such as overlay, view protection, historic districts), and we did not repeat them here. We urge the reader to look closely at the case studies that follow. Examples of some very important techniques (such as the Planned Unit Development), not discussed in this chapter, are amply represented there. Other techniques such as purchase of development rights and development taxes deserve the reader's attention if they seem to fit a community's problems and resources. Finally, we do not discuss here two very powerful tools for shaping growth and development -- the local budgeting process and capital improvements programming. Nor do we spend much time on what are perhaps the most tested and proven techniques:

conventional zoning and subdivision regulation. As in Chapter Two, our purpose is to highlight recent trends and to emphasize newer tools or combinations of tools that might be applicable to the types of communities found in Maine. We hope thereby to draw the reader into the case studies, where he or she will learn specifics of how various growth management efforts have worked in practice in selected communities throughout the country. A more comprehensive treatment of tools and techniques can be found in Managing Development in Small Towns by D.J. Brower, C. Carraway, T. Pollard, and C.L. Propst (Washington, D.C. and Chicago: Planners Press, 1984).

Looming in the back of the minds of most local planners contemplating the design of an effective growth management system is the vulnerability to legal challenge. Litigation is costly, time-consuming, and whatever the outcome of the specific case, may make a community leery of innovative planning in the future. These problems are discussed in D.R. Godschalk, D.J. Brower, et al., Constitutional Issues of Growth Management (Chicago: Planners Press, 1979).

A carefully designed growth management program, tied closely to community goals, developed through an open and flexible process, and cognizant of constitutional and statutory mandates should surmount any legal challenge. Furthermore, some experts have said that the best way to avoid challenges coming up at all is to build and maintain a planning process that is open and politically credible. Developers, builders, local businessmen, community groups and the citizenry at large need to be drawn together and informed; all will be affected by the operation of a growth management system. Public hearings alone, while essential, do not constitute a program of citizen participation or an inclusive decision-making process. It is important to gauge the values of average citizens. This can be done through such traditional approaches as opinion surveys and citizen advisory boards. But

in-depth involvement such as that used in Austin, Texas, and Charlotte, North Carolina, should also be considered. It is also becoming obvious that new methods are needed to draw out such intangible issues as what are the aesthetic values of a community. Of course, concerns with these matters are more than a strategy for forestalling legal challenges; they are hallmarks of excellent planning. Similarly, attention to the process, goal-setting, and the comprehensive plan that underlie a growth management program build community acceptance and strengthen a community's chances of guiding its growth in a positive and prospective manner.

For further reading we recommend, in addition to those books already cited, the following sources:

- Appleyard, D.K., and J. Myer. 1964. The View from the Road. Cambridge, MA: The MIT Press.
- Arthur, L.M., and R.S. Boster. 1976. Measuring Scenic Beauty: A Selected Annotated Bibliography. USDA Forest Service General Technical Report RM-25. Ft. Collins, CO: Rocky Mountain and Range Exper. Sta.
- Beatley, Timothy C. 1985. Bibliography of Growth Management Sources (1970 Forward). Chicago: Council of Planning Librarians, CPL Bibliography 166.
- Brower, David J. et al. 1976. Urban Growth Management Through Development Timing. New York: Praeger Publishers.
- Burrows, Lawrence B. 1978. Growth Management: Issues, Technique and Policy Implications. New Brunswick, NJ: The Center for Urban Policy Research, Rutgers University.
- Chapin, F. Stuart and Edward J. Kaiser. 1979. Urban Land Use Planning. Urbana, Illinois: University of Illinois Press.
- Coomber, N.H. and A.K. Biswas. 1973. Evaluation of Environmental Intangibles. Bronxville, NY: Geneva Press.
- DeGrove, John. 1984. Land, Growth and Politics. Chicago: APA Planners Press.
- Einsweiler, Robert C. et al. 1975. Urban Growth Management Systems: An Evaluation of Policy-Related Research. Chicago: APA, PAS Report.
- Lynch, K. 1976. Managing the Sense of a Region. Cambridge, Mass.: The MIT Press.
- Porter, Douglas (ed.). 1986. Growth Management: Keeping on Target? Washington, D.C.: Urban Land Institute.
- Scott, Randall W. (ed.). 1975. Management and Control of Growth: Issues, Techniques, Problems, Trends. Washington, D.C.: Urban Land Institute.
- Snyder, Thomas P. and Michael A. Stegman. 1986. Paying for Growth: Using Development Fees to Finance Infrastructure. Washington, D.C.: Urban Land Institute.
- Thurow, Charles, William Toner and Duncan Erley. 1975. Performance Controls for Sensitive Lands. Chicago, ILL: ASPO.
- Zube, E.H., R.O. Brush, and J. Gy. Fabas (eds.). 1975. Landscape Assessment: Values, Perceptions, and Resources. Stroudsburg, PA: Dowden, Hutchinson and Ross.

References to Chapters One - Three

- Beatley, Timothy. 1982. "One States' Innovative Approval to the Protection of Farmland: Oregon's Senate Bill 100," Carolina Planning, summer.
- Bosselman, Fred P. and Nancy E. Stroud. 1985. "Pariah to Paragon: Developer Exactions in Florida, 1975-1985," Florida State Law Review, Vol. XIV:527-563.
- Brown, Robert D. and William Kockelman. 1985. "Geology for Decisionmakers: Protecting Life, Property, and Resources," Public Affairs Report, University of California, Vol. 26, February.
- Brower, David J., Candace Carraway, Thomas Pollard, and C. Luther Propst. 1984. Managing Development in Small Towns. Washington, DC, Chicago: Planners Press.
- Brower, David J., David R. Godschalk and Timothy Beatley. 1986. Implementing Coastal Storm Hazard Policy, Chapel Hill, NC: UNC Center for Urban and Regional Studies.
- Celis, William. 1987. "Building Atop Water Supplies Raising Safety Issue in Cities," The Wall Street Journal, Wednesday 24.
- Christeller, Norman L. 1986. "Wrestling with Growth in Montgomery County, Maryland," in Douglas Porter (ed.) Growth Management: Keeping on Target? Washington, DC: Urban Land Institute.
- City and County of Denver, Colorado. 1985. "Building Heights in Denver As Affected by Mountain View Presentation Ordinances," April 17, Denver Planning Office.
- City of Beaverton, Oregon. 1984. A Comprehensive Plan for Beaverton's Natural Resources, Planning Department, July.
- City of Boise, Idaho. 1985. Boise River Plan, adopted October 1, 1985.
- City of Fort Collins, Colorado. 1982. Land Development Guidance System for Planned Units Development, Planning and Development Department.
- City of Portland, Oregon. 1983. Downtown Design Guidelines, Bureau of Planning, January.
- Colburn, George A. 1986. "San Diego: Beyond Spits and Polish," in Douglas R. Porter (ed.) Growth Management: Keeping on Target? Washington: Urban Land Institute.

- Connell, Rich. 1986. "L.A.'s Slow-Growth Measure Wins by Wide Margin," L.A. Times, November 5.
- Cramston, Martin R. Jr. and Carol Stealey Morris. 1986. "Managing Growth Through Strategic Planning: Charlotte-Mecklenburg's 2005 Plan," Urban Land, (April):2-5.
- Easley, Gail. 1984. "Performance Controls in an Urban Setting." Urban Land (October):24-27.
- Forgery, Benjamin. 1986. "Intruder on the Horizon: Port America's Planned Sky Scraper Threatens the Area's Skyline," Washington Post, June 7.
- Gordon, Dennis. 1984. "The Power of the Point System," Planning (December):15-17.
- Guenther, Robert. 1986. "San Francisco Curbs Growth: But Will Other Cities Follow?" The Wall Street Journal, March 5.
- Harned, Catherine C. 1984. "Rebuilding a Rural Constituency," Planning (December):10-14.
- Heath, Milton. 1983. "North Carolina's Mountain Ridge Protection Act," North Carolina Law Review.
- Keating, Dennis W. 1986. "Linking Downtown Development to Broader Community Goals: An Analysis of Linkage Policy in Three Cities," Journal of the American Planning Association, Vol. 52, No. 2 (Spring):133-141.
- Kendig, Lane. 1980. Performance Zoning. Chicago: APA Planners Press.
- King County, WA. 1987. Wildlife Habitat Profile, Parks, Planning and Resources Department, February.
- Kirlin, John J. and Anne M. Kirlin. 1982. Public Choices--Private Resources: Financing Capital Infrastructure for California's Growth Through Public/Private Bargaining, Sacramento, CA: California Tax Foundation.
- Klein, William R. 1986. "Nantucket Tithes for Open Space," Planning (August):10-13.
- Knack, Ruth. 1984. "How Road Impact Fees are Working in Broward County." Planning. June.
- Kockelman, William J. 1986. "Some Techniques for Reducing Landslide Hazards," Bulletin of the Association of Engineering Geologists, Vol. XXIII, No. 1: pp. 29-52.
- Kwong, Jo Ann. 1987. "Farmland Preservation: The Evolution of State and Local Policies," Urban Land, January: 20-23.
- McKay, Patricia L. 1986. "Use of Impact Fees Encouraged by Florida Courts and Lawmakers," Economic Leaflets, Bureau of Economic and Business Research, University of Florida, Vol. 45, No. 8, August.

- Metropolitan Area Planning Council. 1986. Inclusionary Housing and Linkage Programs in Metrooooooopolitan Boston, May.
- Miller, Elizabeth L. and Elizabeth Lines. 1986. "Paying for Florida's Growth: Survey Shows Use of Impact Fees," Economic Leaflets, Bureau of Economic and Business Research, University of Florida, Vol. 45, No. 4, April.
- Myers, David W. 1986. "San Francisco Limit Gets Cheers, Jeers: Growth Curb on Downtown Buildings Given Mixed Reviews," Los Angeles Times, August 3.
- Naisbett, John. 1982. Megatrends. New York: Warner Books.
- Ormon, Larry. 1984. "Ballot-Box Planning: The Boom in Electoral Land-Use Control," Public Affairs Report, Vol. 25, No. 6 (December).
- Phillips, Patrick. 1985. "Nantucket's Land Bank: A New Direction in Land Conservation," Urban Land (December):34-35.
- Pummer, Christopher. 1987. "Water Plan Would Limit Land Use," Wilmington News Journal, April 22.
- Rubin, Saul. 1985. "San Francisco Ties Downtown Growth to Child-Care Steps," Los Angeles Times, Wednesday, July 3.
- Shaffer, Ralph. 1985. "San Francisco OKs Growth Limit: Downtown Plan Restricts Building Space, Height, Design," Los Angeles Times, September 22.
- Stein, Mark A. "Growth Policy: Votes Putting the Brakes On," L.A. Times, March 10, 1986.
- Snyder, Thomas P. and Michael A. Stegman. 1986. Paying for Growth: Using Development Fees to Finance Infrastructure. Washington, DC: Urban Land Institute.
- "Uglification Brings a Headache," Raleigh News and Observer, June 24, 1987.
- "Update on Local Development Rights Programs," 1987. Farmland Update, July.
- Vesey, Tom. 1987. "Fee Proposal Angers Home Buyers and Builders," Washington Post, April 23.
- Zotti, Ed. 1987. "Design by Committee," Planning (May):22-27.

CASE STUDIES OF INNOVATIVE LOCAL GROWTH MANAGEMENT PROGRAMS



Case Studies of Innovative Local Growth Management Programs

- Cannon Beach, Oregon
- Breckenridge, Colorado
- Nags Head, North Carolina
- Manteo, North Carolina
- Medford Township, New Jersey
- Martin County, Florida
- Hilton Head, South Carolina
- Napa County, California
- Fort Collins, Colorado
- Salem, Oregon
- Eugene, Oregon
- Austin, Texas
- Charlotte, North Carolina
- Boulder, Colorado
- Denver, Colorado
- King County, Washington

Cannon Beach, Oregon

Demographics: Small coastal town, 2 hours driving time from major metropolitan area (Portland); with permanent population of 1,215, including many local artists, with summer visitor population of 10-12,000.

Natural Environment: Magnificent coastline; forested coastal mountains.

Distinctive features of planning: Application and enforcement of traditional tools of planning such as zoning to protect character of community; ban on formula food restaurants; procedures and criteria for review of design of new development.

- Tools and Techniques -

- A. The Master Plan which includes definition of community character.
- B. Use of zoning ordinance to protect village character, e.g., by banning "formula food" restaurants.
- C. Design review procedures and criteria applied to all new development.
- D. Protection of natural resources, including designation of natural hazard danger zones of varying seriousness.
- E. Control of pace and pattern of growth through policies of annexation and extension of facilities.

- Observations -

- A. Successful in protecting natural beauty and village atmosphere.
- B. Uncertain thus far on how to protect mountain views endangered by overharvesting by lumber companies.

Cannon Beach, OregonIntroduction

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 of urban services and protecting important resource and environmental lands. Cannon Beach has, as well, adopted fairly conventional land use regulations to

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-Tillanook 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.

References

Bartl, Reinmar, Clatsop-Tillamook Intergovernmental Council, interview, April, 1987.

City of Cannon Beach, Oregon. 1984a. Cannon Beach Comprehensive Plan, amended through January, 1987, prepared by the Cannon Beach Planning Commission and the Clatsop-Tillamook Intergovernmental Council staff.

_____. 1984b. City of Cannon Beach Zoning Ordinance. Ordinance 79-4A, adopted July 13, 1984; as amended January 22, 1987; prepared by Cannon Beach Planning Commission with assistance of the Clatsop-Tillamook Intergovernmental Council staff.

Breckenridge, Colorado

Demographics: Permanent population: 1300; seasonal (skiing): 15,000.

Historical: An early gold-mining town; downtown is National Register Historic District.

Natural Environment: Surrounded by the Rocky Mountains.

General: A pro-development stance while maximizing quality of life in face of explosive growth in condominium development.

Distinctive Features of Planning: Dedication of open space; performance-based development code with point system; guided development in and around historic district.

- Tools and Techniques -

- A. The comprehensive master plan.
- B. A development code built on absolute and relative performance standards to effect environmental protection, increased dedication of open space, and compatibility with historic district.
- C. Historic preservation.
- D. Other tools: criteria for annexation; criteria for extension of public facilities.

- Observations -

- A. After a period when frequent modifications were needed, the point system of the development code seems to work well.

Breckenridge, ColoradoIntroduction

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 0-1 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)

	<u>Single Family</u>	<u>Duplex</u>	<u>Multi- Family</u>	<u>Apart- ment</u>	<u>Employee Housing</u>	<u>Mobile Homes</u>	<u>Total Housing</u>	<u>Lodging</u>
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 master 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

<u>Use</u>	<u>Multiplier</u>
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 of 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.

References

Davidson, William. Breckenridge Department of Community Development, interview, July, 1987.

Town of Breckenridge, Colorado. 1983. Master Plan, Department of Community Development, July.

_____. Undated. Development Code, Department of Community Development.

_____. 1984. Historic District Guidelines, Department of Community Development.

_____. 1986. "Breckenridge Overview," December

Nags Head, North Carolina

Demographics: An old coastal resort community that is within 4 hours driving time of the Washington, D.C., metropolitan area. A population of 2,000 permanent residents and a summer population that swells to 35,000. The number of year-round residents has risen rapidly in the past decade and is expected to grow. The town has retained a village atmosphere thus far. Continued growth is projected for both types of residents.

Natural Environment: Sited on one of a chain of fragile barrier islands (the Outer Banks); bounded by extensive stretches of National Seashore; containing one of the few remaining examples of maritime forest; subject to hurricanes.

Distinctive Features of Planning: Comprehensive plan is based on carrying capacity; planning for mitigation of natural hazards (hurricanes, flooding, shifting shoreline); environmental zoning; preferred land uses given advantage in water allocation.

- Tools and techniques -

- A. Growth management based on the town's carrying capacity (e.g., amount of developable land after adjusting estimates for expectation of beach erosion, availability of treated water, sewer capacity, percolation readings, vulnerability to natural disaster) of the town.
- B. Ordinance for allocation of water that favors certain types of development.
- C. Plan for mitigation of hurricane hazards and post-storm reconstruction.
- D. Protection of endangered natural resource (maritime forest) by creation of a special environmental zoning district.

- Observations -

- A. There has been successful use of several new and complex techniques.
- B. Vigorous planning is going on in a very small community with history of an anti-planning orientation.
- C. The zoning ordinance was voted down by town council.

Nags Head, North Carolina*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.

*Prepared by Joel Alan Boyette

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 proceeding. 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.

References

- Bryan, Donald, Mayor of Nags Head; Webb Fuller, City Manager, Town of Nags Head; and Bruce Bortz, Code Compliance Officer and interim planner, Town of Nags Head; interview, July 17, 1987.
- Brower, David J., et al. 1984. Carrying Capacity Analysis, Nags Head, North Carolina. Coastal Resources Collaborative, Inc., Chapel Hill, N.C.
- Brower, David J.; William E. Collins; and Timothy Beatley. 1984. Hurricane Hazard Mitigation and Post-Storm Reconstruction Plan for Nags Head, North Carolina. Coastal Resources Collaborative, Inc., Chapel Hill, N.C.
- Brown, J.D.; S. Wearden, and S. Ghorpade. 1984. Town of Nags Head 1984 Land use Survey. School of Journalism, University of North Carolina, Chapel Hill, N.C.
- Lewis, Sylvia. 1987. "The Little Town That Could: What One North Carolina Resort Town is Doing to Keep the Tides at Bay." Planning, June: pp. 14-17.
- North Carolina General Assembly, Chapter 187, House Bill 765, 1987. "An Act to Permit Regulation of Maritime Forests by Kitty Hawk, Kill Devil Hills, Nags Head, and Southern Shores." May.
- Town of Nags Head, North Carolina. 1985 Land Use Plan Update, adopted by Nags Head Board of Commissioners, March 3, 1986; certified by N.C. Coastal Resources Commission, April 4, 1986
- Town of Nags Head, North Carolina. 1987. Article V. Allocation of Water Consumption Units, Section 19. Water. As amended through May 4.
- Town of Nags Head, North Carolina. 1987. Zoning Ordinance, "An Ordinance Amending the Zoning Ordinance. Section 8.02 - SED-80 Special Environmental District." March.

Manteo, North Carolina

Demographics: Permanent population: 1,000.

Historical Significance: Site of first English settlement in America (1587).

Natural Setting: Protected harbors and easy access to Atlantic Ocean.

Recent Experience: Economic strength and significance declined post-World War II as bridges and highways were built; business in downtown losing ground to strip development on highway to beaches of Outer Banks; planning for a State-wide, 4-year celebration of the First Colony begun in 1980.

Distinctive Features of Planning: Invigoration of historic significance, natural resource (waterfront) and economic health; process of definition of community identity, values and goals, with emphasis on overall appearance and architectural design; accomplishment of comprehensive planning and redevelopment with limited resources.

- Tools and Techniques -

- A. Process of defining values and goals by a community.
- B. Use of zoning to protect and enhance visual appearance.

- Observations -

- A. There was successful emphasis on visual resources from which grew a new use for downtown, enhancement of the character of the community and coordination with a state-wide celebration of the first Roanoke colonies in ways that assured the town's position as a long-term tourist attraction.
- B. Venture capital was attracted to the downtown waterfront redevelopment.

Manteo, North Carolina*

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

*Prepared by Joel Alan Boyette

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.

References

Creef, H.A., former member, Manteo Board of Commissions, interview, July 17, 1987.

North Carolina State University, School of Design. Raleigh, N.C. 1980.
(includes a series of reports, as follows:)

Coastal Areas Management Act Land Use Plan 1981 for the Town of Manteo, N.C.

Survey of Townspeople, Public Report One

Theme for the Future, Public Report Two

Guide for Development, Public Report Three

Economic Analysis, Public Report Four

Roanoke Island's Past, Public Report Five

Town of Manteo, N.C. Zoning Ordinance, as amended through August 25, 1982

Wilson, John, former Mayor, Town of Manteo, interview, July 21, 1987.

Medford Township, New Jersey

Demographics: Historic 40-square mile region, 20 miles east of Philadelphia; the 1980 population (17,622) reflects a 112% increase since 1970.

Natural Environment: Still primarily rural; within New Jersey Pinelands region.

Historic significance: Settled by Quakers in 1600s.

Distinctive Features of Planning: Formal ecologic study carried out; environmentally-based zoning; design and performance standards applied to new development; transfer of development rights.

- Tools and Techniques -

- A. "Ecological" study and detailed mapping of natural processes conducted by Ian McHarg and other planning faculty at the University of Pennsylvania.
- B. Four major environmentally-based use zones established in zoning ordinance and comprehensive plan: residential growth, environmental management, trade, and village.
- C. Subdivision plats required to have composite environmental constraints map and detailed environmental impact statement.
- D. Design and performance standards applied to review of new development include open space requirement, resource extraction analysis, scenic and visual buffers, very strict provisions on wetlands development, among others.
- E. Many types of credits offered in transfer of development rights program.

Medford Township, New JerseyIntroduction

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.

References

- Juneja, Narendra. 1974. Medford: Performance Requirements for the Maintenance of Social Values Represented by the Natural Environment of Medford Township, N.J. Center for Ecological Research in Planning and Design, Department of Landscape Architecture and Regional Planning, University of Pennsylvania.
- Palmer, Arthur. 1981. Toward Eden. Winterville, NC: Creative Resource Systems, Inc.
- Township of Medford. 1986. Township of Medford 1983, 1984, 1985, Tri-Annual Report, Officer of the Manager.
- _____. 1983. "Chapter 160: Land Use and Development," Code of the Township of Medford.
- _____. 1985. Circulation Plan Element of the Master Plan for Medford Township, Burlington County, New Jersey. Prepared by Thomas J. Scangarello and Associates, December.

Martin County, Florida

Demographics: Area on the Atlantic Coast; 555 square miles with population of 64,000 (53% urban); 128% increase over 1970 population; 20 miles north of West Palm Beach.

Natural Environment: Extensive wetlands and barrier islands network.

Distinctive Features of Planning: Detailed performance standards; controls on landscaping; beach impact fees, barrier island ordinance.

- Tools and Techniques -

- A. Detailed performance standards that regulate, among others:
 - 1) overall density, 2) development in wetlands, 3) open space, and 4) impact on transportation.
- B. Landscaping ordinance requiring the drawing up of a landscape plan before land clearance can begin.
- C. Beach impact fees.
- D. Barrier Islands Ordinance including detailed standards of design for the site plan including requirements for open space, buffers, building height restrictions, among others.

- Observations -

- A. Beach impact fees have served as "negotiating tool" in approval of new PUDs.

Martin County, FloridaIntroduction

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.

References

Dreyer, Noreen, Martin County Attorney, interview, July, 1987.

Martin County. 1982. Martin County Comprehensive Plan, April 1.

_____. 1985. "Barrier Island Ordinance -- Ordinance No. 271,"
September 24.

_____. 1986. "Article III: Landscape Requirements" Sec. 23-49
Martin County Code, Ordinance No. 285, February 18.

_____. 1983. "Resolution to the Board of County Commissioners From
the Beach Acquisition Committee Regarding Establishment of Beach Impact
Fee," Resolution No. 83-2, July 21.

Hilton Head, South Carolina

Demographics: Island off coast of South Carolina; once home of prosperous plantations; later subsistence farming and fishing by slave descendents who nurtured a distinctive culture and language (Gullah dialect). Resort development with extensive recreational facilities (golf and tennis) begun in 1950s. Permanent population of 17,000, having increased by 200% over the past decade. Seasonal population of 50,000. One million people visited the resort in 1987.

Natural Environment: One of the larger barrier islands on the East Coast; variety of natural habitats.

Recent Developments: Island incorporated as a town in 1983 and took over planning responsibility from the county.

Distinctive features of planning: Land Management Ordinance; preferred design elements such as provision of public access to beaches rewarded with density bonuses; control of rate of growth; requirement that developers make prior assessment of impacts on facilities such as schools and emergency preparedness; environmental performance standards such as protection of dunes, wetlands and trees.

- Tools and Techniques -

- A. Comprehensive Land Management Ordinance.
- B. Overlay zoning.
- C. Impact assessments.
- D. Management of rate of growth through absolute annual limit on number of new dwelling units.
- E. Detailed performance standards, bolstered by system of bonus density points awarded for such elements as protection of natural resources, scenic beauty and public's access to beaches.
- F. Noncontiguous Planned Unit Developments (PUDs) allowed around areas of common ownership.

- Observations -

- A. Some bonus density provisions were felt to conflict with cap on growth rate and were repealed.

Hilton Head, South Carolina

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 <u>Per Net Acre</u>		
	<u>Over 8 Units</u>	<u>Over 25 Hotel Rooms</u>	<u>Over 20 Motel Rooms</u>
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	<u>8</u>	<u>15</u>	<u>10</u>

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.

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.

References

Bell, Mike, long range planner, Hilton Head Planning Department, interview, July, 1987.

Town of Hilton Head. 1986. Land Management Ordinance, Chapter 7, Title 16 of the Municipal Code.

Rahenkamp, John. 1986. "Coming to Grips with Growth in Hilton Head, South Carolina," in Douglas Porter (ed.), Growth Management: Keeping on Target? Washington, DC: Urban Land Institute.

Napa County, California

Demographics: 744 square mile region with long history of agriculture, emphasizing vineyards in recent decades; within commuting distance of San Francisco and the East Bay region; population of 100,000 (rural and unincorporated), 81% urban; population has grown 25% during the 1970-80 decade.

Recent Experience: Successful passage of a public referendum on imposition of cap on annual development, holding rate of growth to 1% or less.

Distinctive features of planning: Annual allocation of voter-determined number of building permits.

- Tools and Techniques -

- A. Cap on residential development at 1% per year, distributed among four categories of residential buildings and granted on a first-come, first-served basis.

- Observations -

- A. Effect of cap thus far is to delay rather than to stop development.
- B. Large-scale developments have been shifted from unincorporated to urban areas, thus protecting farmlands.
- C. Development by numbers and on first-come, first-served basis is easy to administer and explain to public.
- D. Introduction of the cap has strengthened support for planning already in place such as very large lot zoning and contracts between state and farmland owners to protect working vineyards.

Napa County, CaliforniaIntroduction

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 led 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

<u>Category</u>	<u>Share of Annual Allocation</u>	<u>Building Permit Availability Dates</u>	
		<u>January 1</u>	<u>June 1</u>
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	<u>132 D.U.</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.

References

Napa County, California. "Growth Management System," Napa County General Plan. 1983. Napa County Department of Conservation, Development and Planning.

Interview with staff, Department of Conservation, Development and Planning, Napa County, June, 1987.

Fort Collins, Colorado

Demographics: City of 80,000 population, 40 miles north of Denver, dramatic growth in 60s and 70s.

Natural Environment: Located at the foot of the Rockies.

Recent Experience: City has adopted a pro-growth stance; private market invited to determine location of industrial and shopping centers.

Distinctive Features of Planning: Land Development Guidance System with point system to evaluate conformance with an elaborate and wide-reaching set of design and performance criteria; emphasis on PUDs over conventional zoning to direct growth; establishment of boundaries for new growth; acquisition of open space; preservation of historic heritage.

- Tools and Techniques -

- A. Comprehensive Plan and accompanying Land Development Guidance System that includes reports on such topics as community goals, open space, etc.
- B. Land use guidance system covering issues such as design and consumption of energy.
- C. Provisions such as absolute and variable criteria for review of planned unit developments (PUDs) as alternative to conventional zoning.
- D. Establishment of Urban Growth Area to control fringe development.
- E. Acquisition of open space to preserve scenic backdrop, bike trails, etc.
- F. Preservation of historic district while undertaking downtown redevelopment.
- G. Imposition of impact fees on developers to offset cost to the public of services such as sewers.

- Observations -

- A. Focus on quality of growth, rather than pace or amount, has been successful.

- B. Favoring mixed use areas and high density residential projects is seen to diminish problems of the alternative -- urban sprawl -- such as air and water pollution and excessive energy consumption.
- C. Meaningful participation by citizens and neighborhoods in review of new development is helped by use of explicit performance standards.
- D. Interpretation of design criteria can be difficult and controversial.

Fort Collins, Colorado

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.

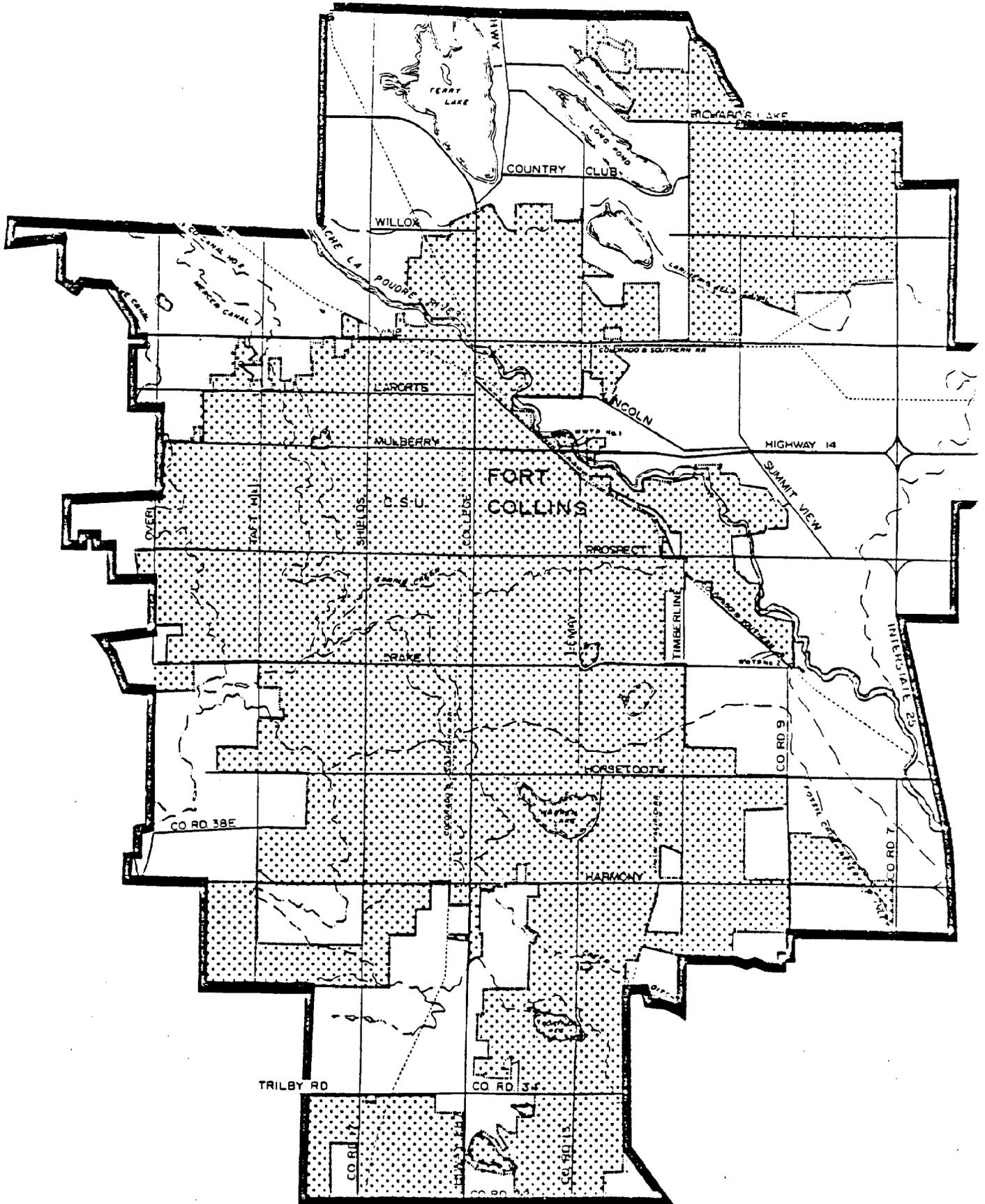


Diagram N-1
FORT COLLINS URBAN GROWTH AREA

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 Poudre (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.

References

City of Ft. Collins, Colorado. Undated. Land Development Guidance System For Planned Unit Developments.

_____. 1974. Open Space Plan, Planning Division, Department of Community Development, March.

_____. 1977. Goals and Elements, August.

_____. 1979. Energy Conservation Plan.

_____. 1979. Land Use Policies Plan, Ft. Collins Planning Division, August.

_____. 1981. Design Guidelines for Historic Old Town Fort Collins prepared by Downing/Leach and Associates.

_____. 1981. Poudre Area River Concept, Vols. I and II, Ft. Collins Planning Department, January.

_____. 1984. Strategic Plan for Solar Access, Planning and Development Department, October.

_____. 1987. "Development Fees and Charges." Division of Planning, Department of Community Development.

Frank, Joe E., Senior City Planner, Ft. Collins Department of Community Development, interview, July, 1987.

Getz, Bob. 1987. "So far, Fort Collins gets glowing reviews from visiting press," Ft. Collins Newspaper.

Salem Oregon

Demographics: The state capital, with a population of 95,000 (258,000 in the greater metropolitan area).

Natural Environment: Located in the fertile Willamette Valley.

Recent Experience: Growth has waxed and waned in the 70s and 80s (18% in late 70s, 6% in early 80s). Growth management programs were undertaken in a period of high growth.

Distinctive Features of Planning: Regional cooperation in development of city's comprehensive plan; establishment of urban growth boundary; maintenance of 10-year supply of developable land.

- Tools and Techniques -

- A. A comprehensive plan that sets out policies on growth management.
- B. Involvement of counties in greater metropolitan area in comprehensive plan.
- C. Linkage of development to adequate public facilities and services, with developers paying substantial proportion of costs of needed new facilities.
- D. Establishment of an Urban Growth Boundary.
- E. Separation of Current Developed Area (CDA) and Urban Growth Areas (UGA), the latter requiring developers to do special planning and to pay to "link" facilities to the CDA.
- F. Sector plans for facility needs created for geographic areas of UGA.
- G. Creation and maintenance of 10-year supply of developable land.
- H. Levy of a development tax based on value of new structures and size of land parcel.
- I. Refinement plans prepared for each neighborhood.
- J. Function-based plans prepared for bicycles, transportation, and airport, among others.

Salem, OregonIntroduction

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.

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

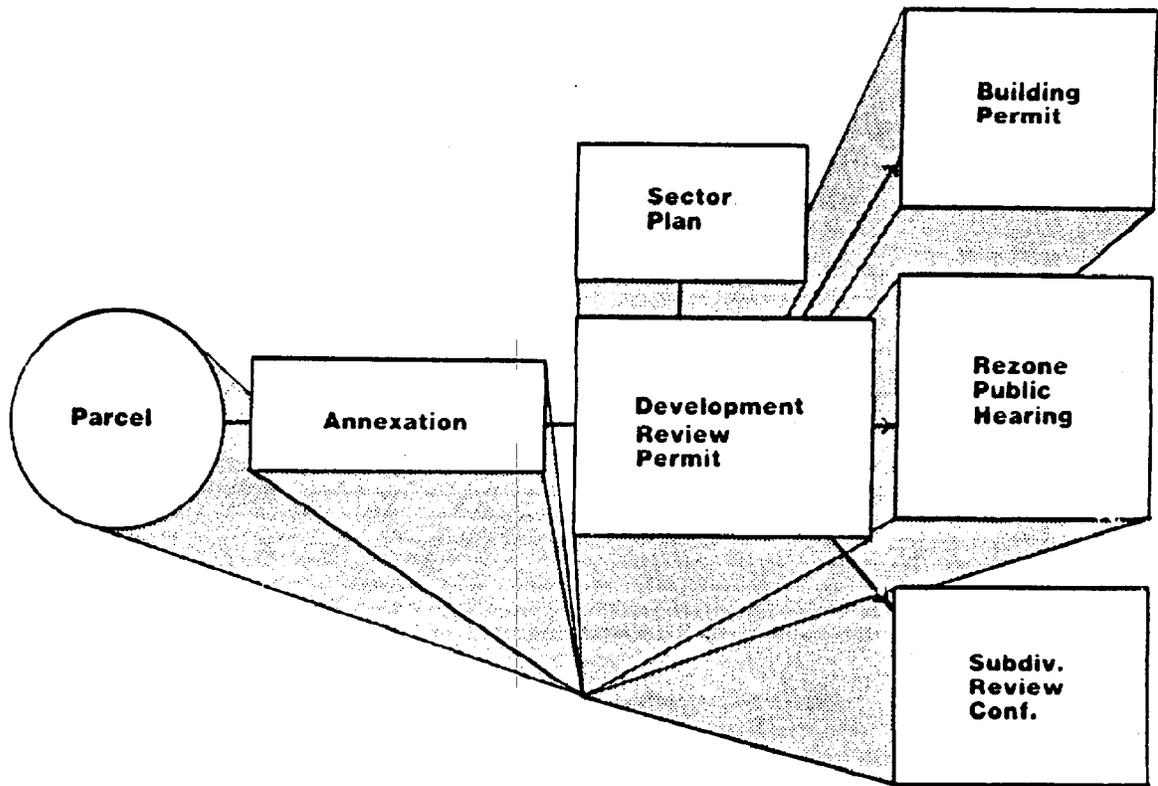


Diagram A-2

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.

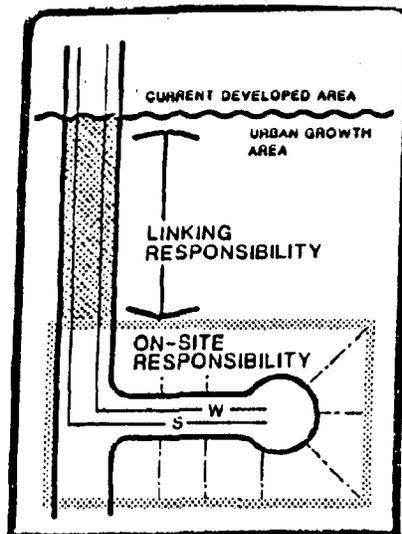


Diagram A-3

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 sewerred, 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.

References

Budke, Roger, Assistant Planning Administrator, Salem Department of Community Development, Interview, April, 1987.

City of Salem. 1986. "Data Report: Population, Residential Construction and Annexation, City of Salem." Report No. 9, Community Development Department, March.

City of Salem. 1982. Salem Area Comprehensive Plan, acknowledged by CCDC May 20, 1982, revised most recently in January, 1987.

_____. 1986. South Salem Sector Plan, adopted February, 10.

_____. 1986. Preliminary Capital Improvement Program 1987-88 through 1991-92, August.

_____. 1979. Urban Growth Management Program Report, August 1978, revised May, 1979; adopted by Salem City Council July 23, 1979.

Eugene, Springfield and Lane Counties, Oregon

Demographics: A city of 200,000, home of the University of Oregon, attractive to research and development and to high technology activities.

Natural Environment: Situated in the fertile Willamette valley.

Recent Experience: Population projected to reach almost 300,000 by year 2000.

Distinctive Features of Planning: Regional approach to planning; timed annexation and servicing of "urbanizable" land; preparation of refinement plans for neighborhoods and functions; multi-jurisdictional refinement plans; renter protection in condominium conversion law.

- Tools and Techniques -

- A. A "1990 regional plan" sets out policies on growth management.
- B. Urban Growth Boundary established.
- C. A 6-10 year surplus of land available for development.
- D. Annexation and plan for provision of public facilities and services must precede conversion to urban uses.
- E. Procedures established for amending comprehensive plan.
- F. Refinement plans done for geographical areas under pressure from new development and for functions such as parks, public facilities and industrial growth areas.
- G. Other significant tools are: land division and zoning ordinances; capital improvements program; historic preservation program; economic diversification program; bikes and bikeways; solar access ordinance; condominium conversion law .

- Observations -

- A. Protection of integrity of Urban Growth Boundary has been successful.

Eugene, Springfield and Lane County, OregonIntroduction

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 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 text. 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 which 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 be 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.

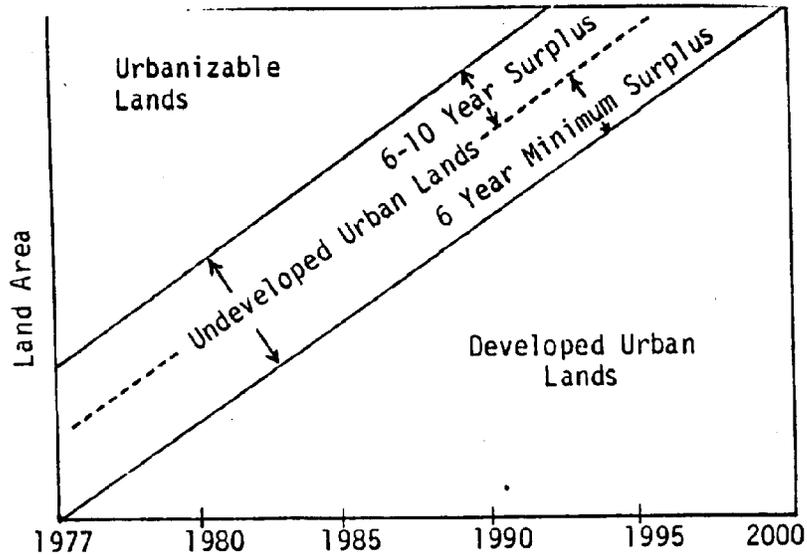


Diagram C-1

URBAN GROWTH BOUNDARY

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.

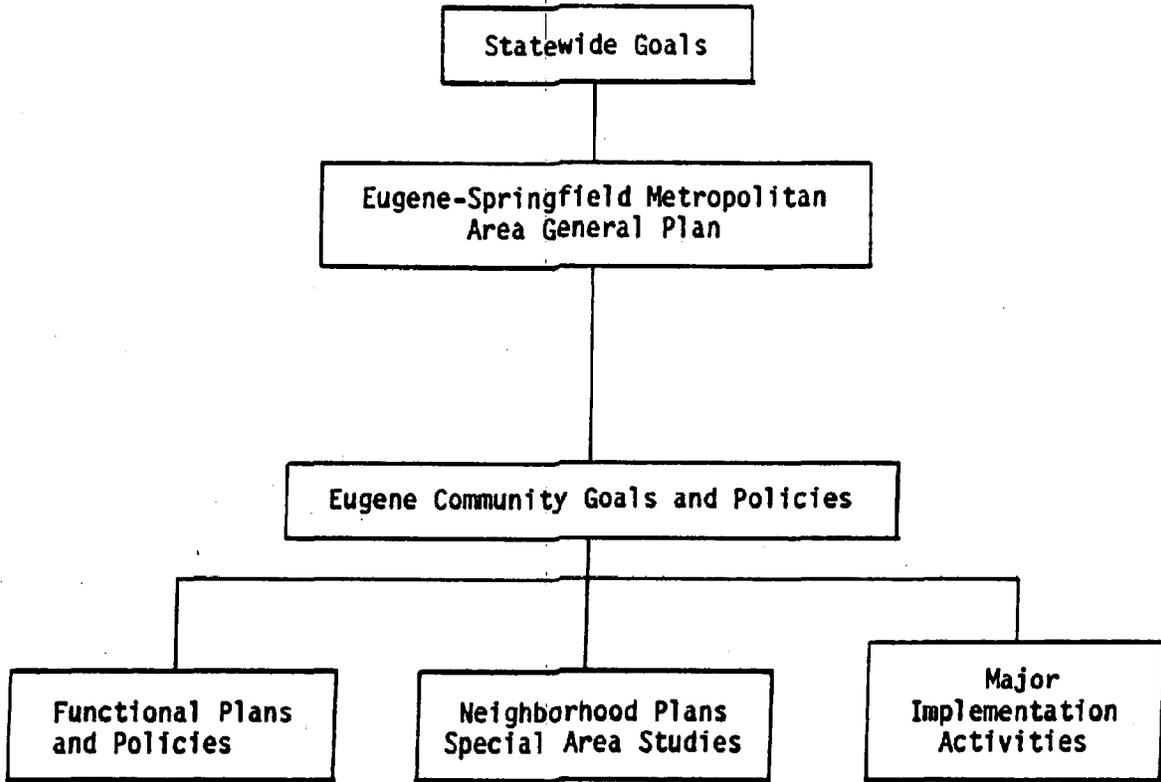


Diagram C-2

EUGENE PLANNING PROGRAM

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

References

Brody, Susan, Planning Director, City of Eugene, interview, April, 1987.

Chenkin, Senior Planner, City of Eugene, interview, April, 1987.

City of Eugene. 1986. A Guide to Eugene's Planning Program, Department of Planning, July.

_____. 1987. Westside Neighborhood Plan. Eugene Planning Department, adopted January 12.

_____. 1986. "Condominium Conversion Ordinance Tentative Changes," Memorandum, Planning Department, October 15.

Detzel, Tom. 1987. "Kerans Submits State Condo Bill, "Eugene Register Guard, March 13.

Draft Alternative Industrial Growth Areas Study, Eugene, Springfield, Lane County. 1986. September.

Lane Council of Governments. 1982. Eugene-Springfield Metropolitan Area General Plan, February-March, 1982.

_____. 1986. Metropolitan Area General Plan Amendments, July.

Austin, Texas

Demographics: Capital of Texas; home of flagship branch of the University of Texas; 116 square mile area; population (1980) of 346,000, a 36% growth for the previous decade.

Natural Environment: Situated on the Colorado River; on the edge of the Hill Country, a recreational resource and location of second homes of Texans living in Houston and other metropolitan areas.

Recent Experience: A recent city-wide planning effort was not successful.

Distinctive Features of Planning: Herculean citizen participation process put in place to develop a comprehensive plan and implementing ordinances; historic view protection; protection of watersheds.

- Tools and Techniques -

- A. Citizen participation: representation of all factions and interest groups in community; staged publication of a series of milestone reports written by each task group; use of a sectoral planning approach drawing on already existing neighborhood associations.
- B. Development of a Land Development Code.
- C. Capitol View Protection Overlay Zones.
- D. Comprehensive Watershed Protection ordinance.

- Observations -

- A. Participatory process itself is likely to create and sustain the political support needed for passage of the comprehensive plan.
- B. Time commitment of process has been too much for some of the original participants, and the balanced representation, especially of minorities, has been eroded.

Austin, Texas

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)

<u>Group/Faction</u>	<u>Number of Members</u>
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.

References

Austinplan Department of Planning and Growth Management. 1986. The Austinplan Process, February 22.

Beatley, Timothy. 1987. Preliminary Observations on the Austinplan Process, prepared for Austin Department of Planning and Growth Management.

Interviews with Norman Standerfer, Director, Austin Department of Planning and Growth Manager; Karen Walz, Chief, Comprehensive Planning Division; as well as numerous staff and citizens.

Charlotte, North Carolina

Demographics: Population of 446,000; a healthy economy and steady population growth with prediction of 575,000 by the year 2005. Rapidly developing into a thoroughly urban region where there once was the ambience of a small town with several distinctive neighborhoods surrounded by low density suburban development and rural lands.

Natural Environment: In the foothills of the Blud Ridge mountains.

Distinctive Features of Planning: Citizen participation including citizen study groups and a community-wide symposium; emphasis on "balanced growth" for entire city-county region, rather than concentrating on the urban edge; public-private partnerships encouraged; thorough revision of regulations to reflect realities of an increasingly urban community.

- Tools and Techniques -

- A. Strong emphasis on processes of citizen participation and consensus building; e.g., sponsorship of community-wide symposia on urban issues; invited citizen review and revision of position papers on growth issues.
- B. Emphasis on city-county cooperation in planning process and on regional scope; region divided into seven planning districts.
- C. A "Generalized Land Plan 2005," the culmination of citizen participation processes and leadership from planning departments, which along with demographic projections and other elements, clearly stated community preferences, adopted in 1985.
- D. "Development enterprise areas" were established to redirect growth to weak market areas.
- E. Development and implementation of a city-county public investment program.
- F. Major revision of regulatory codes, originally written in the 60s and drawn up for suburban, low density development, so that they respond to the needs of an urban area.

- Observations -

- A. Consensus-building processes address the tension between the goals of continuing economic vitality and the desire to maintain and enhance the quality of life.
- B. Members of business community concerned about efforts to distribute costs -- such as impact fees, exactions, and development taxes -- which they see as disincentives to development, but they support funneling capital expenditures to priority growth areas.

Charlotte, North Carolina*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

*Prepared by Joel Alan Boyette

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 (Gramton 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.

References

- Bradbury, Tom. 1979. "Ambitious Agenda," The Charlotte News, October 4.
- Charlotte-Mecklenburg Planning Commission. 1987. "Uptown Mixed Use District Ordinance and Urban Design Guidelines," April.
- _____. 1987. "The 1987 Spring Retreat: A Summary," March.
- _____. 1987. "South Mecklenburg Interim District Plan," March.
- _____. 1986. "1986 Annual Report," June.
- _____. 1986. "Proceedings Report of the Ordinance Revision Workshop for Zoning, Subdivision, and Sign Ordinances in Charlotte and Mecklenburg County," June 4.
- _____. 1986. "Zoning, Sign, and Subdivision Ordinances Revisions," January.
- _____. 1985. "Generalized Land Plan 2005 - Final Text," November.
- _____. 1985. "1985 Annual Report," June.
- _____. 1984. "1984 Annual Report," June.
- _____. 1984. "Urban Renaissance: Planning for a Livable Community, Proceedings Document," May 1.
- _____. 1983. "1990 Transportation and Land Development Policy," December.
- _____. 1983. "Urban Policy Program for Charlotte-Mecklenburg: Basis for Planning and Partnerships," August.
- _____. 1983. "1983 Annual Report," June.
- Cramston, Martin R., Jr., Director, Charlotte-Mecklenburg Planning Commission, interview, July 15, 1987.
- Cramston, Martin R., Jr. 1984. "Development Dialogue: Getting the Message Across in Charlotte-Mecklenburg County," Urban Land, April.
- Cramston, Martin, Jr. 1980. "Planning as Consensus Building," The Charlotte News, February 21.
- Cramston, Martin R., Jr. 1979. "Cooperation Needed as We Face Growth," The Charlotte News, November.

Cramston, Martin R., Jr., and Carol Stealey Morris. 1986. "Managing Growth Through Strategic Planning: Charlotte-Mecklenburg's 2005 Plan," Urban Land, April.

RTKL Associates, Inc., Real Estate Research Corporation and Wilbur Smith and Associates. 1980. Charlotte: Central Area Plan.

City of Boulder/Boulder County, Colorado

Demographics: Settled in 1850s as mining town; located 25 miles northwest of Denver in a county of 750 square miles; population of 86,000; combined city-county population of 200,000; home of the University of Colorado.

Natural Environment: The Boulder Valley is bounded by the Rockies to the west and plateaus to the east and south; the western border follows the Continental Divide.

Recent Experience: Rapid rates of city growth: 1960s, 77%; 1970s, 15%; 1980s, 12%; referendum in early 70s directed city-county leaders to determine and control for optimum population and growth rate for region.

Distinctive Features of Planning: To protect mountains, establishment of elevation boundary beyond which city water would not be extended; early development of comprehensive regional plan; consecutive implementation of two plans to limit growth rate.

- Tools and Techniques -

- A. To control development on the mountains, the extension of city water services was delimited by establishing a "Blue Line" at about altitude 6000'.
- B. Comprehensive plan written for Boulder Valley in 1970 to respond to explosive growth.
- C. Spurred by a public referendum, city implemented interim growth policies while a study of future regional growth options was carried out.
- D. A cap on annual rate of growth at 2%, with a merit system to evaluate permit requests.
- E. A second "cap", imposed when earlier one ended, uses a proportional allocation system to encourage favored uses such as low cost housing.

- Observations -

- A. Imposition of "blue line" not effective in protecting mountains from development, but led to program of open space acquisition, which has been effective.

- B. The true effect of development cap difficult to evaluate since it was imposed coincident with a dramatic slowing of growth.
- C. Downtown revitalization efforts appear to have benefitted from the limited permit plan.
- D. Some note that a negative effect of annual permit restriction has been rise in housing costs; others say inflation explains the rise.

City of Boulder/Boulder County, ColoradoIntroduction

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 led 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 led 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 laid 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

<u>Year</u>	<u>Allocations</u>
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. According 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.

References

- Baron, Diane. 1987. A Summary of Information About Boulder, Division of Research and Evaluation, Department of Community Planning and Development, March.
- Boulder County, Colorado. 1986. Boulder County Comprehensive Plan, adopted March 22, 1978, revised and updated 1986.
- _____. 1983. Boulder County Subdivision Regulations, adopted November 29.
- _____. 1986. Boulder County Zoning Resolution, October 30.
- City of Boulder. 1971. Sign Regulations, Department of Planning and Community Development.
- _____. Undated. Title 9: Land Use Regulations. Boulder City Code.
- _____. 1986. The Boulder Valley Comprehensive Plan, revised through October 9, 1986, prepared by Boulder County Land Use Department, City of Boulder Planning Department.
- _____. 1987. "Agricultural Preservation Program: Memorandum to Board of County Commissioners," July 2.
- Danish, Paul. 1986. "Boulder's Self Examination," in Douglas Porter (ed) Growth Management: Keeping on Target? Washington, DC: Urban Land Institute.
- Godschalk, David R., David J. Brower et al. 1979. Constitutional Issues of Growth Management, Chicago: APA Planners Press.
- Gawf, Ed. Director, Department of Community Planning and Development; City of Boulder, interview, July, 1987.
- Smith, Phyllis. 1981. A Look at Boulder From Settlement to City, Boulder: Pruett Publishing Company.
- Tepe, Ed, Land use Director, Boulder County, interview, July, 1987.
- Walker, Donald V. H. 1977. "Boulder Preserves Open Space," Urban Land, October.
- _____. Undated. "Lessons From a Greenbelt Program: Boulder, Colorado.
- Wheeler, Delani, Assistant Director, Real Estate Services/Open Space, City of Boulder, interview, July, 1987.

City of Denver, Colorado

Demographics: City population of 492,000, reached in 1980, a 43% change from 1970; area of 110 square miles.

Natural Environment: A city in the Rocky Mountains on the South Platte River; 5,000 + feet altitude.

Distinctive Features of Planning, Mountain view protection program.

- Tools and Techniques -

- A. A view protection ordinance, part of the building code, sets building height restrictions in certain zones to prevent obstruction of view of Rockies, enacted in 1968.
- B. Criteria for establishing new view protection districts were established in 1980s.
- C. Other scenic regulations enacted: temporary moratorium on billboards; building height restrictions around state capitol building; imposition of bulk plane limitations on new construction in protected residential districts; transfer of development rights.

- Observations -

- A. View protection is successful in Denver.
- B. The view protection ordinance sustained a legal challenge; the court reasserted that protection of aesthetic value is legitimate legislative function.
- C. Public and political support for view protection was based on economic as well as aesthetic rationales.
- D. The Denver ordinance is strictly enforced, with variances rare.
- E. The law may be diverted to preserve private property values. Although the original intent was to protect views from public places such as large city parks, some say the provisions have been used to protect a neighborhood.
- F. Only buildings are controlled; obstruction from tall trees and other vegetation is not covered.

City of Denver, ColoradoIntroduction

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 encompass 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

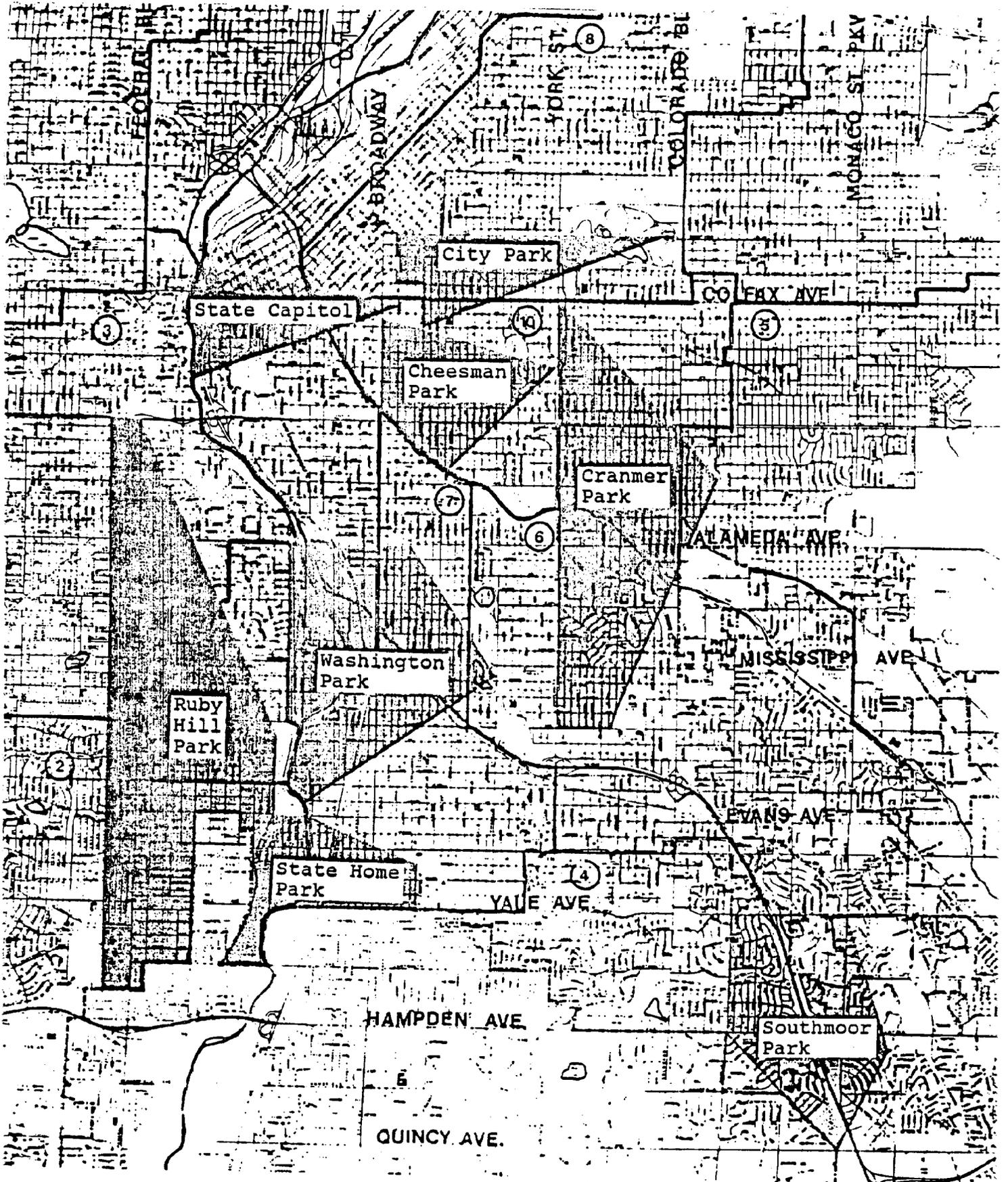


Diagram L-1
MAP 1
MOUNTAIN VIEW AREAS

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-hatching 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 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.

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 thousands 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.

References

Denver Planning Office. 1985. "Building Heights in Denver as Affected by Mountain View Preservation Ordinances," April 17.

_____. 1982. "Denver Mountain View Ordinance: Analysis and Criteria for New Area Designations," July 7.

Reid, T. R. 1986. "Denver Limits High-Rises to Protect Vista," Washington Post, December 5.

Werner, Bob, Denver Office of Planning, interview, July, 1987.

King County, Washington

Demographics: County population of 1.3 million in 1985; Seattle, about 500,000; covers area of 2,131 square miles.

Natural Environment: Bordered on the east by the Cascade Mountain range, on the west by Puget Sound.

Recent Experience: Growth in unincorporated areas has jeopardized farmlands; efforts to protect rural lands began in late 70s.

Distinctive Features of Planning: Purchase of development rights (PDR).

- Tools and Techniques -

- A. Funded by a bond issue, about 33,000 acres (divided into areas by priority) were initially made eligible for PDR; purchases overseen by committee representing farmlands and other interests.

- Observations -

- A. Program felt to be successful in protecting economically viable farming areas.
- B. Program has succeeded in purchasing interest in about 13,000 acres at a cost of \$4200 per acre.

King County, WashingtonIntroduction

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)

<u>AREA</u>	<u>ACRES PURCHASED</u>	<u>NO. OF PARCELS</u>	<u>VALUE</u>
<u>ROUND 1:</u>			
Lower Green	319.62	3	3,075,620
Upper Green	305.55	7	999,483
Sammamish	<u>21.46</u>	<u>2</u>	<u>194,909</u>
TOTAL	646.63	12	\$ 4,270,012
<u>ROUND 2</u>			
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	<u>165.42</u>	<u>4</u>	<u>916,393</u>
TOTAL	1,458.78	31	\$14,263,633
<u>ROUND 3</u>			
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	<u>3,224.98</u>	<u>35</u>	<u>14,645,911</u>
TOTAL	10,552.73	144	\$35,314,672
PROGRAM TOTALS	12,658.14	187	\$53,848,317

Source: King County Agricultural Program

References

Jones, LeRoy A., Manager, Agriculture Program, King County, interview, July, 1987.

King County, WA. 1986 Annual Growth Report, Planning Division, Department of Planning and Community Development, June.

King County, WA. Undated. "King County's Farmland Preservation Program," Office of Agriculture.

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

