

ENVIRONMENTAL PROTECTION AND AFFORDABLE HOUSING:
CAN A RAPIDLY GROWING COMMUNITY HAVE IT ALL?

by

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(1980)

SUBMITTED IN PARTIAL FULFILLMENT
OF THE REQUIREMENTS OF THE
DEGREE OF

MASTER OF CITY PLANNING

at the

MASSACHUSETTS INSTITUTE OF TECHNOLOGY
June 1986

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Submitted to the Department of Urban Studies and Planning on
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ABSTRACT

Rapidly growing communities throughout the United States are facing tremendous development pressures. To protect the environment, local planners have employed a number of mechanisms such as zoning ordinances, environmental regulations, and growth controls. When there is a shortage of land and a strong demand for housing, these strategies may contribute to an escalation in the price of housing. For this reason, many researchers believe that the goals of environmental protection and affordable housing are mutually exclusive.

Three case studies were presented to illustrate ways in which environmental protection and affordable housing goals can be reconciled. Three issues were examined in the analysis of the case studies: the impact of the environmental protection strategy on the supply of affordable housing; the extent to which the community attempted to mitigate any negative impacts on the price of housing; and the ability of the community to create a supply of affordable housing.

By gaining control over the development process, each of these three communities was able to protect its environment and ensure the creation of a supply of lower-cost housing. Three issues emerged which contributed to their success: community-wide involvement in a comprehensive planning effort; cooperation between environmentalists and housing advocates; and a recognition of internally-generated needs.

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ACKNOWLEDGEMENTS

Many people made the writing of this thesis possible:

I would especially like to thank two friends, Avivah Goldman and Jennifer Tully. They shared in many of the highlights of this process and helped me get through many more of the low points.

I am most appreciative of Phil Herr who has provided me with much advice, support, and encouragement, not only in the writing of this thesis, but on numerous occasions over the past two years.

I would also like to thank Larry Susskind and Langley Keyes for their insightful comments.

I am grateful to my parents and to many friends, both in Boston and along the Northeast Corridor, who were understanding when I went underground and welcomed me back each time I resurfaced.

Finally, I would like to thank the DUSP students whose commitment, friendship, support, sense of humor, sense of community, and party-throwing finesse made this entire MIT experience worthwhile.

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Introduction

Rapidly growing communities throughout the United States are facing tremendous development pressures. The sheer rate and volume of development has diminished the supply of open land and threatened ecologically-sensitive resources. An increased amount of commercial, industrial, and residential development has created problems such as traffic congestion and increased air and water pollution. The combined effect of these factors has threatened to change the character of many communities.

In addition to these environmental problems, rapidly growing communities are also experiencing an "affordable housing" crisis. A diminished supply of raw land has caused the price of the remaining undeveloped land to rise dramatically. This has contributed to an escalation of housing prices. Not only are the poor struggling to find housing within their means, but increasingly, the middle-class is being priced out of its own communities.

The juxtaposition of these two issues has presented a dilemma for many communities. To protect the environment, local planners have designed a number of mechanisms. However, these strategies, such as aggressive open space acquisition programs, regulations prohibiting development on ecologically-sensitive lands, and growth controls limiting the rate of residential development, may contribute to a further escalation in the price of housing. On the other

hand, planners' attempts to increase the overall supply of housing in a community may exacerbate environmental problems.

Most of the literature written to date on the relationship between environmental protection policies and the price of housing frames the issue in a zero-sum manner. "Housing advocates" blame environmental regulations and growth controls for their exclusionary impacts. "Environmentalists" decry the environmental deterioration resulting from certain residential developments.

The view that environmental protection and housing affordability are mutually exclusive goals concerns me. Framing the problem in this way often leads to political battles between constituencies who believe it necessary to compete for their share of limited resources. Rather than pitting environmentalists against housing advocates, I believe that planners should be trying to find ways to build coalitions between them.

The reconciliation of these issues does not have to occur at the expense of either goal. I believe that both problems stem from a single source: the inability of the market to adequately respond to societal needs. Therefore, the purpose of this thesis is to reframe the question by expanding the issue in such a way that both environmentalists and housing advocates could work together toward the same goal: community control over the development process so that economic growth serves human

needs and enhances the quality of life for its residents.

When I began this thesis, it seemed logical to me that a community would try to use its land-use regulations to protect its environment. If residents feared that development pressures would destroy its community, then I could understand that the community might react defensively by erecting barriers to development wherever possible. However, my hypothesis was that if a community could get in front of the development process to the degree where it believed that it had control over the rate and type of development, then it might relax certain regulations affecting the supply of housing. In some cases, a concerned community might even go beyond these steps and use its land-use regulations to affirmatively promote the creation of affordable housing.

While I want to focus on strategies designed to protect the environment, I am not overlooking the fact that the same strategies can be used to serve other purposes. For example, zoning has long been criticized as a tool for protecting the property rights and values of those already living in a community at the expense of those wishing to enter. Density controls may be enacted to protect water supplies and open space, but they can also be misused for exclusionary purposes. Finally growth control programs have been used to keep less affluent families, minorities, and families with school-age children out. In sum, while environmental preservation strategies may be adopted for

ecologically sound reasons, they can also be abused or misused by those with exclusionary motives. The fact that such abuses occur, however, is not a reason to abandon the overall objectives.

It should also be stressed that the purpose of this thesis is not to suggest strategies for the maximization of environmental protection or housing affordability, but rather to illustrate methods by which both goals can be simultaneously achieved. In order to demonstrate that environmental protection and affordable housing are not by nature mutually exclusive, I have studied three communities which have succeeded in addressing both issues. In all three communities, Bourne and Lexington, Massachusetts, and Davis, California, extensive citizen participation aided by a sophisticated town agency or outside consultant led to the formulation of a comprehensive plan. In Bourne and Davis, the community chose to adopt a growth control program limiting the rate of residential growth each year. Lexington chose to conduct a detailed study of its valuable and scenic environmental land, followed by an aggressive open space acquisition program to protect those targeted areas.

In all three cases, following the implementation of these strategies the community felt secure enough that development would sufficiently meet its needs that it could turn to the question of affordable housing. Policies aimed at making housing more affordable varied according to the

ability of the community to intervene in the market. In Bourne, the community opted to remove the barriers preventing lower-cost housing from being built. Davis adopted an inclusionary housing provision requiring developers to build a percentage of lower-cost housing units as a precondition to any residential development. Lexington has donated town property to its Housing Authority and to private developers to help subsidize the construction of lower-cost units. In all three cases, the common denominator was the community's recognition that it could use development pressure to help create its own future.

Other communities may follow these approaches. Ideally, a comprehensive planning process should be begun at an early stage in the development process when land is available and choices are possible. Environmentally-critical land should be targeted, as well as land where housing could be allowed at increased densities. Having determined the community's environmental and housing needs, I would recommend a growth control program which puts the community in front, and in control, of the development process. Finally, I would suggest that communities require developers to build low-cost housing and help subsidize the production by donating town land acquired for this purpose. Ultimately, the passage of a real estate transfer tax, such as that currently before the Massachusetts Legislature, would greatly help communities finance land acquisition for both housing and open space needs.

The remainder of this section provides a description of my methodology. In chapter one, I will examine the literature on land use regulations in order to determine the extent to which researchers believe growth controls and environmental regulations affect the supply of affordable housing. Why are housing prices escalating in regions undergoing rapid growth? How have communities used land use regulations to protect their environment? To what extent do these actions cause or contribute to the affordable housing problem?

In each of the next three chapters, I will suggest an approach toward reconciling environmental protection and affordable housing goals. I will follow this with a case study of a community (located in a rapidly growing area and facing tremendous development pressures) which has tried to use this strategy.

In each community, I have presented the growth/environmental issues and described the ways in which the communities have attempted to address these problems. Relying on the impressions of developers, planners, conservation commission members, and concerned residents, I have documented the extent to which the actions taken to protect the environment are believed to have affected the supply of affordable housing. Next, I have described the mechanisms by which the town has attempted to provide affordable housing, the reasons behind the policy and the extent to which it has succeeded in meeting the town's goals.

Several points deserve mention regarding this approach. First, while I discuss the specific problems facing each community in the cases, throughout the thesis I broadly define open space preservation, protection of natural resources and ecologically-sensitive areas, and preservation of community character as "environmental protection." Second, "affordable housing" is an elusive concept which means different things to different people. I do not attempt to impose my own definition of this term, but rather have tried to discuss the issue as it is used in each community.

Finally, in order to obtain an accurate understanding of the relationship between land use regulations and the housing market, one ideally needs to do an analysis of housing prices before and after enactment of the environmental protection program and compare this to the housing prices before and after the program in communities with similar characteristics who have not used the protective mechanisms. These analyses are complex: on what basis does one determine appropriate control communities? How is the program in question isolated from other larger market forces? How does one control for differences in quality of housing being constructed? How does one determine if the effects of the program in question are spilling over into the control communities? Can one separate the degree to which the program itself is contributing to higher housing prices from the added demand occurring because the community

is a more desirable place to live as a result of the program? These questions are raised to cite the complexity involved in doing an analysis of this sort.

A thorough analysis of this kind is beyond the scope of this thesis. Instead, I have relied on the individual impressions of the relevant people in each community to express their view of the relationship between land use regulations and the housing market. Their responses are clearly a function of the sophistication of the individual, the professional or personal biases which he/she brings to the question, his/her attitudes and values, as well as the overall level of awareness in the community regarding these questions.

In chapter five, I will conclude with an analysis of the different approaches taken by each community to protect its environment and provide affordable housing. Why were the particular policies adopted and what were their overall objectives? What were the attitudes and significant socio-economic characteristics of the residents and what role did these play? How did "environmentalists" and "housing advocates" relate to each others' policies? What kind of housing is produced and how affordable is it? What does it mean to be committed to affordable housing? Finally, can these strategies be duplicated in other communities?

Chapter 1: The Impact of Environmental Controls on Housing Affordability

Throughout most of American history, localities have sought to attract new development and population growth. Each municipality attempted to provide the infrastructure needed to entice industrial and residential investments. The more business a community could generate, the greater the range of jobs and the higher the tax revenue it would garner. These benefits and other amenities flowing from an increasing tax base were thought to be the means to a higher quality of life for all residents.

Although these goals are still important, the secondary consequences of rapid development have become a cause for concern. Extensive road networks are now congested; increased automobile traffic is causing serious air pollution; industrial waste is ruining water supplies; prime agricultural land and ecologically important open spaces are being eliminated.

The political atmosphere has shifted. Instead of trying to entice new development, many communities are now seeking to control or even stop growth. They have devised a range of tools to accomplish this goal. The Standard State Zoning Enabling Act, published in 1926, has served as a model for states to grant localities the power to regulate the use of land. In the late 1960s, the emergence of a strong environmental movement led to the passage of numerous laws that allowed localities to regulate still other aspects of growth and development. Finally, in the 1970s, the

growth management movement blossomed and localities sought (and in many cases won) even greater power to restrict the type, style, and rate of new development.

During the mid-1970s, when these environmental protection efforts were increasingly being adopted, the costs of housing were increasing at an alarming rate. Between 1975 and 1977, U.S. home prices rose at an annual rate ranging from 10.3 to 12.8 percent for new houses, 10.8 and 11.5 percent for existing units. These increases were far swifter than those experienced in the late 1960s and early 1970s. For example, the rate of annual increase between 1968 and 1970 was only 5.6 to 7.5 percent for new units, and 7.4 to 8.3 percent for existing units.

(Dowall, 1984, 4-5)

Today, the housing situation in many metropolitan areas has reached crisis proportions. It is not only the poor who cannot find housing within their means. The elderly, hoping to relocate within their communities, first-time homebuyers seeking to remain in their communities, single parent families, and the middle class in general, are all struggling to find affordable housing. The extent to which the environmental protection efforts described above have caused or contributed to the crisis in housing prices and supply is not at all clear.

Many factors have contributed to the shortage in the supply of housing. In his book, The Suburban Squeeze, David Dowall discusses some of these reasons: "Ironically, it was just as restrictive land use and environmental regulations

became more common that demographic forces came more into play." (Dowall, 4) The post war baby boom and growing number of single-parent households has put tremendous pressure on the housing market.

The US housing market is closely related to the growth of the entire economy, urban growth, interest rates, overall housing demand, and zoning and other environmental laws. (Popper, 1981, 171) Even Bernard Frieden, a strong critic of growth controls admits that it is difficult to determine the extent to which each of these factors contributes to rising housing costs. "The housing market of large metropolitan areas responds to many influences at once. There is no sure way to know to what extent shortages and high prices result from the state of the national economy, availability of mortgage money, impact of local growth regulations or other factors." (Frieden, 1979, 139)

During the mid to late 1970s when most of the studies assessing the impacts of growth controls and environmental regulations on housing costs were being done, many of the other factors contributing to rising housing costs were also going up. "Nationally, between 1970 and 1974, wages of construction workers went up 39%, costs of building materials 36% and the price of land 62%. Increases in inflation, equipment prices and overhead costs (especially energy) also took their toll. (Popper, 174)

The extent to which growth controls and environmental regulations affect the housing market has been widely debated. Most observers agree that any action which limits

the amount of housing either through density controls or land restrictions will restrict supply. The precise effects of local land development controls, however, depends on the strength of the demand for land, the supply of developable land available, and the rate at which that supply is being depleted. (Dowall, 115) A diminishing supply of developable land, along with land use controls that limit development can affect land markets. (Dowall, 117) On the other hand, an Urban Land Institute study of Jacksonville, Florida where demand for housing was weak, found that restrictive land use controls did not significantly contribute to housing and land inflation. (Dowall, 135) Unfortunately, rapid growth and appreciating land values, the key factors which cause housing prices to rise, also cause communities to tighten regulations to protect the environment.

Conventional Zoning Ordinances

The Standard State Zoning Enabling Act, published in 1926, provided a model for states to pass legislation giving localities the power to shape their future, both physically and socially. Over the years, zoning has evolved to the point where communities now use their zoning power to achieve aesthetic standards, to control the social composition of their housing stock, and to modify their fiscal status. Although many such ordinances often appear rather crude, few can argue with the fact that large-lot zoning, maximum lot coverages, minimum frontages, distances

between buildings, minimum floor-areas, and limitations on the number of apartment units with two or more bedrooms can contribute to high housing costs. In some instances, less expensive housing, in the form of multi-family dwelling units and mobile homes have been excluded entirely.

Stephen Seidel of the Center for Urban Policy Research at Rutgers University conducted a survey of home builders in 1976 to determine how zoning regulations affected or changed their housing development plans. The major impacts of zoning were to increase the cost of the homes they built and to decrease the density of development. To a lesser degree, developers shifted the location of development to less populated areas in order to build in conformance with less restrictive zoning. (Seidel, 1978, 167) Of the builders Seidel surveyed, zoning regulations caused 60% to build more expensive units and 40% to seek development opportunities in less populated areas. (Dowall, 176)

Density controls and outright exclusion of lower-cost housing are two of the most significant ways in which zoning regulations may have an exclusionary effect.

Density Controls:

Density controls, such as large-lot zoning, have often been used to slow the pace of suburban growth. While this device takes a portion of all developable land off the market, it also ensures the construction of only expensive dwellings, which will enhance the prestige of the community. According to Seidel, appraisers generally value land at 20

percent of the total residential package. Therefore, the larger the lot, the more expensive the house by a 5:1 margin. (Seidel, 175) An oversupply of large lots may also drive up the price of the relatively few smaller lots. "The move to very large lot requirements most often occurs in the high growth areas surrounding metropolitan centers, thus exacerbating an already tight real estate market." (Seidel, 172)

Seidel also notes that lot width increases can affect the cost of housing even more than lot size increases. The cost of many improvements required by local subdivision ordinances, street, sidewalks, water and sewer facilities, is directly related to the number of linear feet of lot fronting the street. Therefore, Seidel asserts that as the lot width increases, the subdivision improvement cost increases proportionately. Seidel does admit, however, that empirical evidence on the degree to which the wide spacing of lots causes greater installations costs is inconclusive. (Seidel, 180) In fact, others have claimed that larger lots may actually lead to cost savings because facilities such as sewerage are provided on-site. (Philip Herr)

Limitations on Lower-Cost Forms of Housing:

While these density controls mentioned above may contribute to the rising costs of housing, a second category of zoning ordinance affects the supply of low cost housing available within the community. Outright prohibitions of certain types of housing, such as apartments, townhouses and

mobile homes limit the opportunities for low and moderate-income people to find housing which they can afford. Mobile homes are the least expensive non-subsidized form of owner-occupied housing and represent the only means of owning one's own home for many people. Similarly, multi-family housing is a less expensive alternative for many people because land costs per unit are typically lower. (Fishman, 1978, 55) By prohibiting residential development which is not single-family, or by overzoning for commercial and industrial uses, some communities have effectively excluded that portion of the population in greatest need of housing.

The number of communities which allow multi-family housing is small and the amount of land allotted for multi-family units within those communities is often quite limited. In a study entitled, Housing Costs and Government Regulations, Seidel found that in 1972, only six percent of the net residential land area in New Jersey was zoned for multi-family use. Of this six percent, almost two-thirds of the land was zoned to permit only efficiency and one-bedroom apartments. (Seidel, 168)

In another national survey of 80 municipalities Seidel found that 34% of residentially zoned land was for multi-family units. However, 72% of this is low-rise developments (2-family homes, townhouses and garden apartments). Only 7% of the residential land was zoned for mid-rise developments (defined as 3-8 stories). Finally high-rises (greater than 8 stories) accounted for only 3% of residential land in the municipalities surveyed. (Seidel, 169)

Environmental Regulations

While communities have been using zoning to limit and control population growth for many years, a widespread national concern over the rapid rate of environmental deterioration led to citizen pressure for more government regulation to protect natural resources, preserve undeveloped areas, and deal more effectively with industrial contaminants. The result was numerous federal and state regulations, such as the National Environmental Protection Act of 1969 and its state parallels. One of the most important outcomes of this legislation was the requirement that an Environmental Impact Statement (EIS) be completed for development projects which could have an environmental impact.

According to a survey of state environmental programs undertaken for the Department of Housing and Urban Development in 1976, state governments have taken an increased role in regulating developments which could impact the environment. All thirty coastal zone states participate in the federal Coastal Zone Management Program. Twenty-six states have adopted wetlands protection programs. Twenty states are involved in regulating floodplains. Fourteen states have legislation restricting development in critical environmental areas and seven states regulate developments of regional impact. (Seidel, 237)

There are two basic ways in which environmental regulations can affect the housing market; through the regulatory review process and through development

restrictions in ecologically-sensitive areas.

Environmental Regulatory Review Process:

According to Seidel, the impacts of the EIS process are the direct costs of EIS preparation, the indirect costs of uncertainty and delays (particularly when dealing with regulatory agencies with overlapping jurisdictions), and the costs of altering the project and mitigating environmental damage. (Seidel, 248)

o EIS Preparation

The cost of preparing for an environmental review depends upon the size of the project, the ecological complexities of the proposed project, and the political pressures being brought to bear on the regulatory agencies. Thomas Muller and Franklin James analyzed a number of Environmental Impact Statements in California in 1974 and found that they cost the developer between \$4,000 and \$10,000 to prepare, or about \$17-\$25 per residential unit. In Florida, where reviews are only required in very large projects, costs ranged from \$50,000 - \$200,000 or about \$30 per unit. (Seidel, 248) At the 1975 annual meeting of the American Real Estate and Urban Economics Association, Muller and James presented their findings. They estimated the cost of the EIS process added about 0.4% to 0.7% to housing prices, concluding that the direct costs of environmental review procedures were insignificant. (Richardson, 1976, 31)

o Uncertainty and Delays

Some critics of environmental regulations state that the costs of uncertainty are high. They argue that developers will not choose to build in localities which are subject to complex review procedures. However, Seidel found that the vast majority of projects are eventually approved, and therefore the risk factor is quite small. (Seidel, 250)

Seidel believes that delay is frequently the most significant factor in the overall cost impact of the EIS review. "An estimate of the cost of delays for private projects in California in 1974 ranged from 3.6% to 6.8% of the selling price of the unit. Based on a \$40,000 home, burdened with an average delay of 3.2 months, the costs were found to range from a low of almost \$1500 to a high of \$2680." (Seidel, 249) Of course, with today's volatile interest rates, delays could actually cause price reductions. It should also be noted that while delays can be attributed to overlapping regulatory reviews and insufficient governmental resources, often they are due to inadequate information supplied by the developer.

o Mitigation and Project Alteration

Finally, the costs of mitigation are addressed by several researchers who believe that the major affect of these requirements is a reduction in dwelling units, with an increase in price of those being built. "Once more, when the developer had to redesign his project to get regulatory approval, the revisions led to a steady reduction in the

amount of housing and a steady escalation of housing prices." (Frieden, 69)

Seidel concludes his discussion of the costs of the EIS process by presenting the results of two case studies conducted by Muller and James in California and Florida. They found delays and mitigation represented the largest portion of increased housing costs, while the costs of overhead and uncertainty were found to be insignificant. In California, the costs resulting from the EIS process amounted to \$165 per housing unit or only 0.6 percent of the average value of a home built during the study period, while in Florida, the compliance was estimated to cost \$386 per unit or 1.4 percent of the average value of new homes. (Seidel, 250)

Seidel concludes that, "There has been very little empirical work to date which has established the actual costs of the state land use regulations. While complaints about unrighteous time delays and extortionary stipulations are commonplace, the two existing studies suggest that the added costs amount to less than two percent of the final selling price of the unit." (Seidel, 250)

In a similar analysis of state land use regulations, Frank Popper concluded that the costs of the state land use programs, although substantial, do not appear to represent a large share of the increments in the overall costs to developers and their customers. However, he maintains that they are often an easy target for criticism. "The young couple unable to afford a first home, the older family

unable to move to a new one...can focus their frustrations on what is wrong with state land use regulations. For the programs, even as minor contributors to overall price increases, are under direct political control in a way that the causes of larger increases-inflation, housing demand, interest rates, energy prices, urbanization itself-all too evidently are not. The programs are visible. They can be influenced and changed more readily than inflation."

(Popper, 184)

Development Restrictions:

In addition to the EIS process, environmental regulations which prohibit or severely limit development in ecologically-sensitive areas can have an impact on housing prices. "It is hard to imagine that any statute which restricts certain types of development, lowers the density of development, and requires additional checkpoints in the development process would not contribute to the rising costs of both developed and the remaining developable sites."

(Mazmanian and Sabatier, 1983, 247) But, to what extent do these regulations actually contribute to rising housing costs?

As part of a study on the California Coastal Commissions, Daniel Mazmanian and Paul Sabatier examined the impact of the commissions' policies on housing costs. This issue was highly controversial in the 1970s because opponents of the commissions have argued that prices for coastal residential sites have risen dramatically because of

the commissions' restrictive policies. Mazmanian and Sabatier claim, "for all the outcry over rising housing costs, there is an amazing lack of good empirical evidence."
(244)

Nevertheless, Mazmanian and Sabatier outline the results which should occur if the commissions' impacts follow simple market economics: First, the value of undeveloped land that have come under the regulations of the commissions should decrease in market value. Second, the price of developed sites, of which sites for housing constitute the majority, should rise in value. This is because as demand continues to grow, the supply of new houses is artificially depressed, and the resale price of existing units is increased by buyers competing for the limited number of resale units. Apparently, stories of drastic escalations in resale value of homes along the coast abound, substantiating this belief. However, Mazmanian and Sabatier maintain that during the commissions' existence, a substantial (though lesser) rise also occurred inland, "...thus leading to the suspicion that something other than the commissions was responsible for the rise in prices on (and off) the coast. The appropriate question, then, is what proportion of the rise is due to the commission and what proportion to other factors?" (245)

To answer this question, Mazmanian and Sabatier present the findings of Robert Kneisel who wrote his Ph.D. dissertation in 1979, entitled, "The Impacts of the California Coastal Zone Conservation Commission on the Local

Housing Market: A Study of the South Coast Regional Commission." Kneisel analyzed all actual resale housing prices for single-family homes in the coastal permit zone, resale prices in a border zone just landward of the coastal zone, and a sample of resales several miles inland from the coast in Los Angeles County.

He found that throughout the entire period (1972-1976) the average sale price of housing in the coastal permit zone was several thousand dollars higher than in either of the two other zones. Furthermore, although there was a "precipitous increase in prices" that coincided with the starting of the commissions in January 1973, prices were rising in all three areas, presumably due to more systematic factors such as inflation. (245)

Next, Kneisel used several regression analyses to gauge the precise contribution of the commissions to the rise in prices in the permit zone. Adjusting for differences in housing characteristics, he examined the contribution of construction costs, mortgage rates, unemployment, population growth, density, and the presence of the coastal commissions on the adjusted resale prices in each area. The analysis showed that after allowing for the impact of construction costs and other factors on prices, there remained a net increase in the permit zone of approximately \$4,000 per house. Kneisel estimated this to be the maximum dollar impact on the sale price of homes in the permit zone that resulted from the various restrictions on development (real and perceived) imposed by the coastal commissions. \$4,000

represents seven percent of the mean sale price of houses in the permit zone from 1973 through 1975. (246)

In addition to this increase in housing prices within the coastal zone, Kneisel also found that the average sale price of homes in the border zone rose by \$1,000 because of the commission. This was attributed to the fact that some people might wish to reside close to the coast but would be deterred by the higher housing prices; consequently they would choose the closest location which in turn would cause a slight rise in the price of houses in those adjacent areas.

Mazmanian and Sabatier conclude their analysis by acknowledging that the commissions (at least in Los Angeles County) had a discernible impact on housing costs. However, they claim, "...it is not the massive transfer of wealth from the "poor to the rich" nor the kind of added cost that generates "class conflict" that the commissions have been accused of." (246)

Growth Controls

In the 1970s, a growing number of localities began to question the benefits of continued, unbridled growth. While conventional zoning ordinances helped shaped the pattern of development and environmental regulations enabled the protection of valuable land, increasingly communities sought greater power to control the rate, type and style of new development.

In 1972, the American Society of Planning Officials

published a study identifying twelve communities which were using growth controls. In 1974, another study found 200 communities were controlling population growth. By the mid-1970s, growth controls were commonplace in municipalities across the country. (Dowall, 3-4) This section discusses the impacts of two forms of growth controls on housing costs; subdivision regulations and growth rationing programs.

Subdivision Regulations:

Subdivision regulations establish the conditions under which a parcel of land may be divided into smaller parcels for development. Historically, town planners have required developers to disclose certain engineering and survey data as a prerequisite to subdivision approval; in recent years approval procedures have become more complex, generally requiring mandatory on- and off-site improvements or fees with which to pay for these improvements. "Sewer, drainage and water lines, streets, curbs, gutters, shade trees and fire hydrants are among the many public improvements which have become the responsibility of the private developer." (Seidel, 119)

Most observers agree that some form of subdivision control is necessary to ensure the adequacy of public services and to avoid completely unguided development. However, the degree of restriction and kinds of requirements which are appropriate are widely debated. Many have argued that excessive subdivision standards have cost homebuilders

(and thus homebuyers) hundreds of additional dollars.

(Seidel, 119)

In The Suburban Squeeze, David Dowall examines this issue. He discusses three ways in which the subdivision process affects residential construction costs: through the actual improvement costs, approval time, and direct fees and charges.

o Subdivision Improvements

Dowall claims that subdivision costs have escalated rapidly over the last ten years in California. Between 1968 and 1976, the cost of constructing a finished lot in a typical Bay Area subdivision rose from slightly more than \$2,300 to over \$6,300. By January 1980, according to the Bank of America, the cost approached \$8,300 per 6,000-square-foot lot. (Dowall, 118)

Dowall discusses the reasons for this escalation and tries to determine what portion of the increase is due to local restrictions. Unlike Seidel, Dowall did not find the actual improvement costs significantly increased the price of housing. He found that the tasks necessary to construct finished lots and make required changes in the Bay Area have hardly varied since the 1950s, nor have they varied much among neighboring communities. "Bay Area builders have been dealing with essentially the same set of subdivision improvement standards for twenty or more years, most have completely incorporated these standards into their design/construction practices." (Dowall, 122)

Dowall found that the actual costs attributed to subdivision requirements were not significant. Rather, he believed the primary reason why subdivision costs have increased so dramatically is inflation. "In 1977, the price (nationally averaged) of a ton of asphalt for street and driveway construction was \$73, delivered. By January 1980, the price of a ton of asphalt had jumped to \$108, a 48 percent increase. During the same period, the costs of the twenty-four inch concrete pipe typically used in the construction of sewer submains jumped 21 percent." (Dowall, 121)

Labor costs also figure into material cost increases. "According to Lee Saylor, Inc., a Bay Area construction estimator, the cost of union labor nationally rose by 36 percent between 1974 and 1977, and by 15 percent between 1977 and January 1980. In total, Saylor estimates that labor and materials costs increased by about 200 percent between 1967 and 1980, which goes a long way toward explaining higher subdivision costs." (Dowall, 121)

Another factor increasing subdivision costs is entirely unrelated to local land use policies. In the 1950s, 1960s and early 1970s, much of the housing built in the Bay Area was constructed on flat, stable bay plains or inland valleys. However, as the available valley and bay plains acreage closer to existing activity centers was developed, builders were forced to construct housing further out or on hills. While this created citizen and governmental opposition, the special work required to prepare these sites

and the extra costs of developing sewer and water lines also led to sharply escalating costs. (Dowall, 121)

In sum, Dowall found that the actual subdivision improvement costs were not significant. "But although some of the Bay Area builders interviewed felt that the costs of producing new homes could in fact be reduced by loosening subdivision standards, most admitted that given current practices and the current market, the reduction would not be that great." (Dowall, 122)

o Approval Time

While Dowall found that the actual subdivision improvement costs were not significant, he argued that lengthy subdivision review periods have caused much of the delay in constructing new housing and therefore have added considerably to housing costs. He cites Seidel's Housing Costs and Government Regulations to show how much the delay problem worsened in a five-year period. "In 1970, 28 percent of the land developers interviewed indicated that they completed their projects in less than four months, 41 percent completed them in four to six months, and 17 percent in seven to twelve months. In fact, no respondent had required more than twenty-four months to complete a project. By 1975, the picture was quite different. Only two percent of builders reported completion of a project in less than four months, eight percent needed between four and six months, and 31 percent between seven and twelve months. Another 35 percent indicated that it took between thirteen

and eighteen months to complete a project, and for over 14 percent it took more than two years." (Dowall, 176)

There are several reasons why delays occur. Communities have increased the scope of project evaluations. Development projects are not being approved as quickly as they were in the past; both because of overlapping reviews and shortage of staff to administer the programs.

Dowall maintains that the increased complexity of development controls has had a major impact on the development industry. Delays affect the cost of producing new homes by adding land-related costs (land interest costs, property taxes, overhead rates); development loan interest costs; inflation costs; and costs of capital tie-up. However, despite numerous studies attempting to pinpoint the costs of delay, Dowall notes that it is difficult to determine because no one knows how long the review and approval process should take nor what portion of delay costs is avoidable. "This is not a trivial criticism. Delay costs are most burdensome when they are unexpected." (Dowall, 125)

o Fees and Charges

Historically, development fees have been assessed to pay for the additional public services a local government provides to buyers of new homes. Many researchers have argued that the increasing planning and development fees assessed by local governments are a major factor driving up the cost of housing and land. Dowall claims that in the Bay

Area in 1979, local government fee assessments per new dwelling units averaged \$4,033—about four percent of the price of a typical new house.

Dowall breaks down these fees into four categories: planning fees which pay for staff review time and administrative work; building permit fees and plan check fees; utility hookup fees; and growth impact fees. He then discusses the degree to which each of these fees has increased over time and the extent to which each has contributed to higher housing costs. He concludes, "...although planning and building permit fees are often seen as excessive, they are for the most part service-related and actually contribute very little to the cost of constructing new housing. Such fees could justifiably be termed excessive only if it were reasonable to believe that comparable service could be provided at a lower cost by a private builder or developer. Otherwise, sewer and water fees should be seen as reflecting the marginal costs of servicing new development." (Dowall, 132)

Growth Rationing Systems:

In addition to stringent subdivision requirements, in the 1970s many communities also began adopting growth rationing systems. The mechanics of these programs vary, but typically communities either place annual quotas on the maximum number of dwelling units which may be authorized town-wide; schedule the number of units which can be built per year in each development; or phase development

according to a specified level of available public facilities. (Growth Clinic Manual, 1985, 10)

An extensive analysis of the ways in which these programs affect the supply and cost of housing is unnecessary as much of the literature repeats the methods discussed above. Basically, however, these programs may increase the cost of housing by limiting the number of units which can be built per year. If there is a strong demand for housing in a community and growth controls have made it impossible to build enough houses to meet this demand, then people who want to move into the area will have to pay a premium for the small number of new houses available each year.

Conclusion

Ever since communities began regulating the use of land, researchers have tried to determine the extent to which these actions have affected the supply and price of housing. Many factors are responsible for rising housing costs; the extent to which land use controls contribute to these costs is widely debated in the literature. Most researchers agree, however, that in areas where land is in short supply and a strong demand for housing exists, anything which restricts the supply of raw land or limits the amount of new home construction will have an impact on housing prices. In addition, outright prohibitions or strict limitations on the supply of lower-cost forms of housing can have an exclusionary impact.

The next three chapters present case studies of communities facing tremendous development pressures. Each community has tried to protect its environment while also encouraging developers to increase the supply of affordable housing. Three issues are examined: the extent to which their environmental protection efforts contributed to higher housing prices, the degree to which they succeeded in mitigating any adverse impacts on housing costs, and the success at which they were able to encourage developers to build less expensive housing.

Chapter 2: Controlling the Rate of Growth and Allowing Multi-Family Housing

One of the most significant ways in which land use regulations may adversely affect the supply of housing is simply by prohibiting, or undermapping, those forms of housing which are the least expensive. Many communities prohibit multi-family dwelling units altogether. This clearly restricts the supply of lower-cost forms of housing. Other communities severely limit the areas in which multi-family units are allowed. This policy pushes up the price of those units which are built because they are in such short supply.

There are several reasons for this zoning practice. First, many communities consider single-family homes more attractive than multi-family: multi-family housing is perceived as a departure from established community character. Second, some communities fear that multi-family housing will result in increased population density and this will have a detrimental impact on natural resources and town services. Third, multi-family housing often carries a racial or socio-economic stigma.

Many of these fears are unfounded. By allowing multi-family units to be clustered in low densities around (or behind) shared open space, environmental and aesthetic concerns can be alleviated. Clustered developments can actually enhance the character of the community by maintaining large parcels of open space. In particular, if the units are located behind the open space, the community

can preserve an open "feel" more than it could with "cookie-cutter" lots spread out throughout the town. Secondly, environmentally sensitive lands can more easily be preserved in their entirety if developers have more flexibility in laying out subdivisions. Finally, because clustered developments require less road paving, less energy to heat, and fewer resources to build, they can actually be more environmentally preferable. "Townhouses or apartments require less land, lumber, steel, copper...than suburban tract houses on one-acre lots. Townhouses and apartments require less gas, less electricity, and less water. (Frieden, 86)

In addition, multi-family housing is fiscally superior to single-family homes because shorter utility and water lines and roads are necessary; often the roads are privately owned and maintained. Racial and socio-economic prejudices are often unfounded. In many communities, it is the elderly and young professionals, not large families who occupy these units.

By allowing multi-family housing to be clustered around (or behind) shared open space, a socially responsible community can help provide affordable housing without harming its environment. First, allowing multi-family units to be built anywhere in town avoids the creation of an artificial increase in price because demand outstrips supply. Second, multi-family units are generally less expensive because developers can save in roads, utilities and materials/construction costs. Third, clustering allows

the developer more discretion in choosing the portion of the land on which to build, allowing the avoidance of environmentally sensitive lands. Finally, state and federal subsidies are often only available for multi-family housing.

In spite of these environmental and fiscal benefits, many communities remain unreceptive to multi-family housing. The fear of increased residential density and socio-economic/racial concerns remain strong. Understanding and attempting to change people's attitudes toward minority groups and lower-income residents is critical, but well beyond the scope of this thesis. However, it is possible that in the process of acquiring tight control over development, a community's fears of dramatic increases in residential density may be alleviated to the point where they are more receptive to multi-family housing.

Examples exist to support the hypothesis that community control over development may lead localities to relax land-use regulations which restrict the supply of affordable housing: Bourne, Massachusetts is one of them. In Bourne, the adoption of a Development Scheduling bylaw, which limits the number of new housing units that can be built each year, increased the community's receptivity to multi-family housing. An Open Space Community bylaw was also passed which allows multi-family units in subdivisions greater than 25 acres, provided that the overall density and amount of open space preserved is equivalent to that which would have been provided in single-family developments. The remainder of this chapter presents a discussion of Bourne's approach

to environmental protection and affordable housing.

BOURNE, MASSACHUSETTS

Bourne, Massachusetts is located 60 miles south of Boston, at the gateway to Cape Cod. It is bordered on the northeast by the Atlantic Ocean and on the west by Buzzards Bay; the Cape Cod Canal also winds through the town. In total, Bourne has approximately 40 miles of shoreline. Near the coast are flat, gently rolling plains with numerous fresh and saltwater marshes. Small forested hills encompass the land area further inland. Cranberry bogs, ponds, streams and sandy beaches are all part of Bourne's natural and scenic resources.

Although Bourne is a scenic, coastal town with a small village atmosphere, the town remained overlooked by tourists and summer residents flocking to other Cape Cod communities, until the early 1970s. This is partly due to its location. Bourne is the first town on the Cape; part of its land area is actually on the mainland. In addition, the presence of Otis Air Force Base, comprising 40 percent of the town's acreage, and one-third of its population, has given Bourne more of a working-class than an affluent leisure-class reputation.

Historically, the median income in Bourne has been lower than the rest of the Cape. In 1970, it was \$8,513, compared with the median income of Barnstable County, \$9,242. (Massachusetts Profile of Bourne, 2) A less affluent community, a slow rate of growth, and thousands of

acres of developable land were factors contributing to less expensive housing. In 1970, the median value of a home was \$17,700, compared to \$23,700 in Barnstable County.

(Massachusetts Profile of Bourne, 3) In 1980, the median value of owner-occupied homes in Bourne was \$45,800; in Barnstable County it was \$53,100. (U.S. Bureau of the Census, 1982)

Growth and Natural Resource Protection

Bourne, like the Cape as a whole, is highly dependent upon tourism and seasonal residents for its economic stability. The community has long realized that its natural resources are a key to its economy. Environmental protection is therefore more than just a pastime of the wealthy.

In 1968, a memo of the Planning Board urged the adoption of a stringent conservation plan to protect the town's resources. "Conservation is particularly important in Bourne - the town's major taxable industry is summer homes. The tourists and summer residents come because of the resources of the town. The shellfish, marshes, beaches and upland areas must be protected." (Planning Board Memo, 1968) Several years later, another report was published emphasizing the importance of environmental protection. "The shoreline, marshes, forests, vistas, and open space provide much of the "rural seaside charm" which attracts summer residents, visitors, and retirees. Directly productive natural resources, such as shellfish areas,

cranberry bogs, and farmlands, are also sources of resident incomes. (Bourne Recreation and Conservation Plan, 5)

Throughout the 1970s, a growing body of studies done by the Bourne Conservation Commission and the Environmental Technical Team of Barnstable County emphasized the impact which intensified land use was having on the town's natural resources. From 1950-1970, the acreage of urban land had more than doubled. The amount of agricultural land had declined from 1277 acres to 384 acres. "As open space, flood plains, wetlands, and recreation lands become even more precious with the passing of time, their very existence will be most threatened by the economics of intensive land-use. Therefore the preservation of tomorrow's functional greenspace depends on today's land-use decisions.

(Conservation of Natural Resources, 6)

However, in spite of the importance of conservation and environmental protection, the town's overall attitude toward growth has always been fairly accommodating. Zoning regulations have historically been less restrictive in Bourne than in other communities on the Cape. Most of the residential land continues to be zoned at two dwelling units/acre. In 1970, 79.1% of the housing units were single family, compared to 88.3% in Barnstable County. While only 6.1% of the dwelling units in Barnstable County were multi-family (greater than 2 units), Bourne had 13.7%.

Furthermore, 2.7% of the dwelling units in Bourne were mobile homes, compared to 0.6% in Barnstable County.

(Massachusetts Profile of Bourne, 3)

In the mid 1970s, the Bourne Recreation and Conservation Plan advocated a responsible approach to conservation. The study found that of the 26,300 acres of land area in 1975, 4,800 were developed and 7,800 were vacant but developable. "At expected rates of land consumption, there will still be a large amount of vacant buildable land by 1995. This means that 1) the town can choose which areas of town to accommodate new development and which to conserve and 2) efforts to conserve critical lands need not interfere with the overall growth of the town and its ability to meet housing and other land use needs." (Bourne Recreation and Conservation Plan, 8)

Acceleration of the Growth Rate

Between 1950 and 1970, growth in Bourne was primarily occurring in residential housing at an average rate of 100 units per year. In 1970, the rate dramatically increased to about 200 units per year. (Growth Policy Statement) In their 1976 growth policy statement required by the Massachusetts Office of Planning, the Bourne Selectmen responded that this rate of residential growth was damaging the present and future available water supply, wetlands, prime agricultural lands, open space, wildlife habitats, and floodplains. The Selectmen expressed concern that Bourne was experiencing suburban sprawl and was becoming a "bedroom community" of Boston and other parts of the Cape. Since industrial and commercial growth was not growing as fast as residential units, there was concern in the community that

population growth would outpace employment opportunities and increase the amount of outcommuters. (Growth Policy Statement)

By 1973, the Planning Board was overwhelmed with development proposals. Applications to construct over 1850 apartment units had been submitted in one year. Until this time, Bourne had had very few apartments. According to Colonel Edward Brady, Planning Board Chairman, this was because few people wanted to live in a tiny coastal town so far from Boston. "Suddenly we panicked. The last thing we wanted was to become another Levittown." (Edward Brady)

The Planning Board Takes Action

In 1973, the town voted to pass a two year moratorium on multi-family units until the Planning Board could decide how to cope with this rate of development. Philip B. Herr, a land use planning consultant was hired to work with the residents and the Planning Board to update the 1966 Master Plan in light of the changes which were occurring. (Edward Brady)

Over the next two years, the residents worked with Philip Herr to articulate their concerns as well as their visions for the future of their community. They discussed the different scenarios which a continuation of the growth rate could imply. Finally, the residents and Planning Board agreed to a set of actions which they judged would alleviate their concerns in a socially responsible manner.

The residents articulated that their major goal was to

"preserve the character of their community and its environment. Recognizing that growth is inevitable, we wish to control the rate of growth so that it has a minimum adverse effect on the community." However, it was believed that the rate of development did not need to be unsupportable or destructive "if the qualities of that new development can be carefully controlled so that they are compatible with the existing character of the town."
(Planning Board Memo, 1975)

The residents wanted a method of slowing growth which would enable natural resources to be protected, open space to be preserved, and which would not restrict the supply of affordable housing. Consequently, the Planning Board rejected the option of controlling growth by requiring very large lots. "Very large minimum lot sizes, even if they are legal, prevent many people from being able to afford a home; in addition, each new unit consumes more land so that open space and natural resources are destroyed more quickly than might otherwise happen." (Planning Board Memo, 1975)

The community decided it wanted an approach to multi-family development in which it would continue to be allowed but under tightly regulated conditions; this would ensure that the rate of development would not reach the peak of the early 1970s and that the units constructed would be well suited to "Bourne's physical and social environment." "The experience of the moratorium showed that multi-family development sometimes allows more sensitive use of land than does single or two-family development at allowable

densities, that multi-family developments are an important means of serving real housing needs which expensive single family development cannot address; and that the economy of the town is significantly impacted by fluctuations in construction trends." (Planning Board Memo, 1975)

In order to gain control over the rate of residential growth, a Development Scheduling bylaw was passed. Developers seeking to build more than 25 units in a subdivision would only be allowed to build 20 percent of the units in the first year. Each year thereafter, they would be restricted to building 10 percent per year.

With passage of this bylaw, the town felt assured that the rate of residential growth would be slowed to a more manageable level. They then turned to the question of how to more directly preserve town character and open space. In addition, the Planning Board sought a more efficient way of protecting environmental quality, particularly their underground water supply. Because the town has no sewerage, protecting the aquifer from where it obtains its drinking water, was a critical concern.

The Planning Board decided that these goals could best be achieved through the adoption of an Open Space Community bylaw. In subdivisions larger than 25 acres, multi-family units would be allowed providing that the overall density and the amount of open space preserved was equivalent to that which would be achieved through conventional single-family developments. In this way, more multi-family units could be built. This was particularly suitable to a

community which has a greater proportion of retirees than the state average.

In addition, because developers were allowed flexibility in choosing the portion of the site on which to build, it was assumed that they could design their units in the most economical manner. The Planning Board encouraged the developers to set aside the most valuable environmental land and to locate the units behind the open space in order to preserve the "open" quality which the residents sought to preserve. Although in general, the amount of multi-family units built was not to exceed the number which would have been allowed with single-family subdivisions, the bylaw provided for density bonuses in exchange for certain amenities, such as better designs and less expensive units.

In order to protect Bourne's water supply, a water resource district bylaw was adopted. In this area, which encompasses twenty percent of the town, the minimum lot sizes were increased from two units per acre to one unit per acre. According to Colonel Brady, Chairman of the Planning Board, downzoning in these areas has further encouraged the use of the Open Space Communities.

Results

In 1975, when the moratorium on multi-family units expired and the new bylaws became effective, Bourne experienced the recession which was occurring throughout the country. High interest rates and construction costs slowed the rate of development to pre-moratorium levels. Those

developers willing to build were undertaking very small projects. Consequently, the Development Scheduling bylaw, applying to proposals greater than 25 units, and the Open Space Community bylaw, applying to subdivisions larger than 25 acres, were seldom used. It has only been in the last five years that the rate of development has accelerated once again. Therefore, the relative impact of these bylaws must be viewed in this light.

Success of the Planning Board in Controlling Residential Growth and Protecting Overall Environmental Quality:

In recent years, the growth rate in Bourne has accelerated once again. The town's year round population of 14,000 swells to 45,000 in the summer. The Planning Board has been overwhelmed with development proposals. However, according to Planning Board member, Donald Ellis, Bourne's growth rate has been much slower than it would otherwise have been without the Development Scheduling bylaw.

Nevertheless, many residents are still concerned about the rate of growth and associated problems. Paul Gately, a reporter with the Bourne Courier, claimed that Bourne is experiencing an "...unparalleled boom. Bourne has just now been discovered. And because of that, the old colony feel and mystique is passing away." Gately believes that the town has been in the forefront in terms of controlling growth, but despite the new bylaws, the town appears on its way to becoming another suburb.

Both "environmentalists" with whom I spoke, Cynthia Smith, Director of the Bourne Conservation Commission and

Stephen Ballantine, Director of the Bourne Conservation Trust believed that the Open Space Community and Development Scheduling bylaws would slow down the process of suburbanization considerably. However, both expressed concern that the town's bylaws would not be able to preserve Bourne's open space and small-town character as much as they would like. This opinion was repeated by a developer, and summer resident, Philip DeNormandie. He believed Bourne should tighten its environmental controls. "Basically, we have the same requirements as those in the rest of the state, but our soils are sandy and more permeable. Distances from water supplies and wetlands should be tighter." Even more surprising, Judith White of the Housing Authority thought tighter controls should be placed on residential development and suggested the town adopt another moratorium.

Colonel Brady is more optimistic about the benefits of the two bylaws. He claimed that, because of the Open Space Communities, the town has managed to preserve many acres of open space, without having to purchase them. This has both saved the town money and caused open space to be preserved without taking developable land off the market, potentially creating higher housing prices in the future. "And the more clusters which get built, the more open space we'll preserve." (None of the Planning Board Members with whom I spoke could give me an exact figure on the amount of open space which has been preserved.) Now that development pressures are mounting, the bylaws will become more

effective; almost all new development proposals are designed as clustered developments.

Impact of the Development Scheduling Bylaw on the Price of Housing:

All the members of the Planning Board with whom I spoke felt that there has been no increase in the price of housing because of this bylaw, particularly since it has only been used in the last five years. Most people asserted that housing prices in Bourne have always been less expensive than in neighboring communities and remain so today. Almost everyone interviewed felt that increasing housing prices were due to market pressure, and not the town's land use regulations. Even a developer, Philip DeNormandie, stated that the town's zoning was having no effect on the price of housing. "The environmental regulations are a nuisance, but they are not causing prices to increase. The cost of land is affected by the demand and that's what is pushing up prices. Developers will sell their units for as much as the market will bear."

Degree to Which the Open Space Community Bylaw Has Resulted in More "Affordable Housing":

Once again, only six or seven Open Space Communities have been built to date in Bourne although another three have been approved. According to Colonel Brady, the bylaw has resulted in more multi-family units than would otherwise have been built. Approximately 400 units have been built in these communities; approximately 160 are multi-family units.

How affordable are the units? Some people felt that

they were just as expensive as the single-family units and were cynical about the ability of this bylaw to create less expensive units. Brady claimed that developers prefer this form of housing because it is less expensive for them to build. However, most people, including Brady believed that the bylaw has cut the developers' costs, but that these savings do not get passed on to consumers. "As long as the current level of demand exists, prices will remain high." (Philip DeNormandie)

On the other hand, the median single-family house in Bourne currently averages \$150,000. (Edward Brady, et al.) While many of the units built in Open Space Communities are equivalently priced, the average multi-family unit sells for \$110,000. (Edward Brady) While one can question the "affordability" of such a unit, a 30 percent reduction is not insignificant.

Occasionally, less expensive units are built. One Open Space Community, Seawatch Village, contains 89 units comprised primarily of four-unit structures. Under the Development Scheduling bylaw, the units are built and sold in phases. Several years ago, the units were selling for \$49,000. Last year's units were sold for \$89,000. Although these developments are rare, it is only by allowing multi-family housing to be built that the opportunity may be grasped. (Note: repeated efforts to talk with the developer of Seawatch were futile; more specific information was not possible.)

In one other instance, Bourne's Open Space Community

bylaw afforded an opportunity for an interested developer to provide less expensive housing. A developer won an award for left-over federal funds to construct 98 units of multi-family housing for the elderly; Bourne happened to be the only community in which the developer was interested that allowed the construction of multi-family housing. (Philip Herr, Donald Ellis)

Brady believes that the increasing development pressure will make their bylaws even more successful. More and more projects will be subject to the Scheduled Development and Open Space Community requirements. Developers will want to take advantage of the lower costs which they can obtain by building multi-family units. Therefore, more affordable units will be built and more open space will be preserved.

Conclusion

In the early 1970s, when the number of residential development proposals was inundating the Planning Board, their reaction was immediate. While plenty of developable land was still remaining and housing prices still less expensive than in neighboring communities, the Planning Board decided to undertake a comprehensive planning process. With the assistance of a professional land use planner, an extensive citizen participation process resulted in a well-formulated plan to shape the future of Bourne.

From the outset, the community was interested in preserving its coastal charm and protecting wetlands and water quality. At the same time, however, an approach to

multi-family housing was sought in order to provide less expensive housing for town residents. Rather than reacting defensively and lowering the allowable residential density, as other Cape Cod communities were doing, the town enacted a growth control program.

Controlling the rate of growth put the Planning Board in the driver's seat. They were then in a position to give developers flexibility in constructing multi-family housing throughout the town. Although environmental concerns remain uppermost among residents, many believe that the Development Scheduling and Open Space Community bylaws have been and will continue to be successful.

Multi-family units have been built, and to some degree, have provided less expensive units. Overall, however, market pressures remain strong and prices continue to increase. In general, this approach to affordable housing is passive; it necessitates a developer who is interested in building this form of housing and who is willing to pass on lower costs to the consumer. Nevertheless, while simply allowing lower-cost forms of housing to be built does not ensure their provision, removing the barriers to multi-family housing is a commendable starting place.

Chapter 3: Limiting the Rate of Growth and Requiring Lower-Cost Housing

Since the 1970s, many communities have adopted formal growth control programs in order to limit the rate of growth over certain time periods. This can be achieved in a number of ways, but typically growth control programs either cap the number of housing units which can be built each year, or link the amount of development allowed to infrastructure capacity. Sometimes proposed projects are judged through a point system which allocates points for meeting both these requirements.

The courts have upheld growth management programs in cases where they have been linked to an established policy and to valid environmental concerns. However, many housing advocates have criticized these programs for restricting the supply of housing. While a growth control program can certainly have this effect, it is also possible that the existence of such a program could actually cause a community to relax certain restrictions which contribute to higher housing prices, as in the case of Bourne.

Using growth controls to remove some of the barriers to the provision of lower cost housing is a positive first-step. However, communities can do even more to provide affordable housing by linking growth control programs to inclusionary housing requirements. Under such requirements, a developer is typically obliged to build a specified minimum percentage (usually 15%-25%) of moderate-cost

housing (affordable to families earning 80%-120% of the county median income) in order to receive development approval for his or her projects. Inclusionary housing programs could also be voluntary; in either case, incentives, such as density bonuses, fee waivers, and fast-track processing may be offered in return for the provision of affordable housing.

Many observers believe that growth controls and inclusionary housing programs are mutually exclusive. "Inclusionary programs are particularly self-defeating when part of a growth control plan. The results of the Boulder and Davis schemes show that limiting growth and expanding lower-cost housing are contradictory goals. A community bent on restricting population is likely to sacrifice affordable housing." (Bauman, et al., 1983, 19)

I disagree with this opinion. To the extent that growth control programs are aimed at limiting the number of housing units built and inclusionary housing programs are directed toward the price of a portion of the units being built, I think that these programs can be complementary. While growth control programs have always allowed communities a degree of control over the development process, with inclusionary housing programs they can broaden the amenities which they have traditionally required to include lower-cost housing. In this way, the community limits growth but assures that a supply of lower-cost housing is built which would not otherwise have been available.

Davis, California is an example of a community which is using a stringent growth control program not only to protect its environment but also to create affordable housing. The program limits the number of single-family homes which can be built per year. Housing units are allocated according to a point system, many of which are related to affordable housing. In addition, several years after the enactment of the growth control program, the community also adopted an inclusionary housing provision, requiring developers to sell one-third of their units below a specified price. While disagreement exists as to whether the program as a whole has increased the overall price of housing, no one argues over the fact that over 1000 lower-priced units have been built since the program was adopted.

DAVIS, CALIFORNIA

Davis, California is a small city located 13 miles west of Sacramento. It is a university town, housing a campus of the University of California (UC Davis). Most of Davis' 36,000 residents are affiliated with the university. Consequently, the population tends to be upper-middle class, highly educated and fairly liberal. (Barry Munowich)

Surrounding Davis, but within its "sphere of influence", are hundreds of acres of prime agricultural land which encase the city in open space. Within the city are bike paths, greenbelts and an extensive park and recreation system. Because of these amenities, Davis is considered an attractive and desirable community in which to live.

It is not accidental that these features exist in Davis. The community is among the most environmentally conscious in the country. Its energy conservation program is perhaps one of the best; using building codes, subdivision design standards and incentives to get builders to design passive solar houses. In addition, the community has a variety of fees: parks, schools, traffic, drainage, and street trees, through which it makes developers mitigate the impacts of their projects. According to Karen Moore of the Planning Department, development in Davis is "not a right, but a privilege. We will get anything from developers that relates to the health, safety, and welfare of our community."

Because of these subdivision requirements and the resulting amenities, the cost of housing has historically been higher in Davis than in surrounding communities. Finished lots sell for \$100,000; the median house is priced around \$130,000. (Tim Lien) Most of the the owner-occupied houses are single-family. The remaining units, dormitories, apartments and condominiums house most of the university's students.

Revision of the General Plan

During the 1960s, the expansion of UC Davis and the high-tech boom in neighboring Sacramento resulted in a tremendous increase in population growth. In 1960, the town's population had been 9,000. Ten years later, it had risen to 24,000 and by 1972, there were almost 32,000 people

living in Davis. (Karen Moore) The city's General Plan showed a population projection of 90,000 by the year 1990.

Residents feared that this tripling of the population would transform their "nice, quiet, university town" into a bedroom community of Sacramento. (Barry Munowich) In addition, people wanted to stop the unnecessary development of prime agricultural land. Because Davis relies on groundwater for its water supply, issues around pesticide and industrial contamination, as well as the quantity of water, were raised.

In the early 1970s, the community pressed the City Council to take action to protect environmental resources and to prevent the unwanted transformation of their community. Residents believed that Davis was at a crossroads and that it was time to prepare a new General Plan. The City Council approved a committee to oversee the work of citizen groups, and directed the Planning Department to provide assistance.

Interested residents organized themselves into ten subcommittees according to various growth related issues. Members of each subcommittee represented a range of interests, including developers, university affiliates, and homeowners. For the next year and a half, the groups met, established goals, researched the issues, and prepared interim reports. Numerous public hearings were held to discuss their findings.

Finally, in 1973, the City Council adopted a new General Plan which incorporated the recommendations of the citizen groups. A population limit of 50,000 by the year 1990 was established; allowing for a much lower growth rate than that experienced during the previous decade. (This limit applies to the city of Davis and its "sphere of influence", the unincorporated areas surrounding the city. In 1980, the population of the entire area was 43,000) (Zorn, 1986, 49)

Adoption of the Growth Control Program

In order to achieve this population limit, a growth control program was adopted which would restrict the building of single-family houses by means of an annual subdivision review process. All proposed construction projects are presented to the Davis Planning Department. The staff rank the proposals according to ten criteria and award points for each proposal. Those with the greatest number of points are recommended to the City Council which grants the allocations.

Davis uses a complex formula for determining the number of housing units to allocate each year, based on its desired population target, assessment of its "internally-generated needs", and a determination of its fair share of regional needs. (Ira Saletin) Until 1980, the number of units approved in Davis has averaged over 300 per year. (Schwartz, 1981, 15) At that time, the City Council reduced the allocation to approximately 200 units per year because

they believed that at the rate at which the city growing, it would have reached its population target much sooner than anticipated. (Barry Munowich)

Inclusionary Housing Provisions

As described above, Davis has had a long history of citizen involvement. While the desire to control growth was the motivating force behind the General Plan update, many people expressed their concern that the community not become an oasis of the middle-class.

According to Fred Costello, Director of Housing for UC Davis, "there are a lot of good liberals and activists here who have a basic notion of fairness. While the growth control program was enacted to restrict access to "all the people living elsewhere who wanted to be in Davis," many people in the community sensed a need to take care of our own "internally generated needs." People who work or attend school in Davis must be able to find affordable housing." Tim Lien, a resident and developer in Davis, claimed somewhat facetiously, "There are a lot of do-gooders in Davis who want to help the poor. These people think everyone should be able to afford his own home."

These concerns, that low and moderate-cost housing be made available in Davis, were incorporated into the growth control program from its inception in 1973. As part of the allocation procedure by which developers obtain approval for their projects, points are awarded for the construction of lower-cost housing. Several of the criteria on which the

Planning Department bases its awards favor the production of low and moderate-cost units. (Schwartz, 16) Among them are the following: how the proposed housing meets the "internal growth needs" of the city, the price at which the units are to be marketed, and the price at which past units built by the developer have been sold. (Bauman, et al., 19)

According to Seymour Schwartz, in his book, Local Government for Affordable Housing: An Evaluation of Inclusionary Housing Programs in California, nearly half of the 275 total points are related "in an important way to the provision of low and moderate-cost units." (Schwartz, 16)

Schwartz evaluated the growth control program in order to determine its success in providing affordable housing. First, he examined the number of single-family units allocated each year from 1974 through 1978 in three price categories, as defined by the city. He concluded that during this five-year period, almost half of the total number of units allocated (767 out of 1,671 units) were low and moderate-cost dwellings. (See Attachment 1) (Schwartz, 16)

Next, he examined the number of low and moderate-income units allocated in 1974 and 1975 which were actually completed and sold in order to determine their affordability. "Using the city's definition of low and moderate cost, the ambitious targets for affordable units set in the 1974 and 1975 allocations were substantially met." In the 1974 allocation, five percent of the units

actually built were low-cost (compared to 19 percent allocated) and 44 percent of the units built were moderate-cost (48 percent allocated). In the 1975 allocation no low-cost units were built (six percent allocated) and 30 percent moderate-cost units were built (41 percent allocated). (See Attachment 2) (Schwartz, 18)

Schwartz observed that the city's definitions of low and moderate cost were slightly lower than those used by the state. If one used the state-defined range of \$20,000 - \$30,000 for moderate cost, the 1974 allocation produced no low-cost and 28 percent moderate-cost units; the 1975 allocation produced no low-cost and nine percent moderate-cost units. (See Attachment 2) Therefore, Schwartz concludes that Davis' allocation system was only moderately successful in getting affordable units built according to state standards. (Schwartz, 18)

The Designated Low-Price Housing Program

Initially, the city relied solely on the evaluation criteria to provide incentives for builders to develop affordable housing. Then, in 1977, Davis adopted an inclusionary housing program which required that a certain percentage of all new homes built be sold at or below a specified price. The price depended on the city's definitions of low and moderate cost which changed every few years. (In 1974 and 1975 the city defined "low-cost" as under \$25,000, and "moderate-cost" as \$25-35,000. Schwartz used these price ranges for the 1976 allocation but adjusted

them for inflation in building costs. In 1977, the planning staff defined "low-cost" as under \$35,000, and "moderate-cost" as \$35-40,000. In 1978, the low-cost cutoff was at \$40,000, and the "low-moderate" category was \$40-60,000.) In 1982, one-third of all units in each development were required to be sold at less than \$60,000. (Schwartz, 16)

Schwartz and most other observers believe that the level of commitment on behalf of the City Council toward the provision of affordable housing has been very strong. "The council monitors the builders' performance and has given builders a clear message that it is serious about the provision of low- and moderate-cost housing." (Schwartz, 18) However, despite their seemingly genuine concern, a number of weaknesses in the program have been observed for which Davis has been highly criticized.

First, while the Council specified the price under which one-third of the new units must fall, they allowed considerable flexibility in "add-ons" which significantly increased the price of many units. For example, some of the allowed "add-ons" were: 1) a yearly inflation correction; 2) \$3,000 of buyer-requested extras; 3) \$5,400 each for solar water and space heating; and 4) added fees imposed by the city. (Zorn, 49) Consequently, many of the units were not actually being sold for the specified amount. In a recent article, "Mitigating the Price Effects of Growth Control: A Case Study of Davis, California," Peter Zorn and Seymour Schwartz found that due to these allowances, in

1982, 25 percent of the units in the Designated Low-Price Housing Program, were actually sold for more than \$80,000. (Zorn, 49)

In addition to Schwartz' concerns that the city's definitions of affordable were too high and that flexibility in the system was diminishing the affordability of many units, a number of additional criticisms have been raised regarding the effectiveness of this program in providing affordable housing. According to Tim Lien, "once they started fooling with the system, the City Council recognized a series of problems." First, investors came in and bought all the lower-cost units and resold them at market values. The City Council responded to this problem in 1977 by passing the Owner-Occupancy Ordinance requiring that purchasers of all single-family dwellings occupy the unit for the first twelve months of ownership. (Zorn, 49)

According to Lien, this merely changed the nature of the speculator from the "honest-to-goodness investor" to the homeowner who moves around from year to year, buying houses and then selling them for a profit. "In this way, some people were able to make more money buying and selling these lower-cost units than they did by working." The City Council tightened the ordinance, requiring two-year occupancy. According to Lien, this has helped the problem, but not entirely.

Perhaps the most significant flaws in the program are the lack of buyer screening and resale controls. "Because buyers were not screened, there is serious doubt whether the

affordable units were bought by low and moderate-income families. The absence of resale controls will probably cause these units to be "lost" from the affordable price categories after resale." (Schwartz, 18) It is common knowledge in Davis that many parents were buying these units for their children while they were attending UC Davis; when the students graduated, the houses were sold at market rate. (Ira Saleten, et al.)

According to Susan Miller, of the Davis Planning Department, the city has taken steps to remedy some of these problems. "Add-ons" are no longer allowed on the designated lower-priced units. In addition, as of 1984, density bonuses (outside of the allocation process) are provided to developers willing to provide a portion of "exceptionally affordable units." To date, one developer has taken advantage of this provision. He proposed to build 80 units, 20 of them at "exceptionally affordable prices." The City Council granted the entire 60 units through the allocation process and then gave him the additional twenty. Resale restrictions on the "exceptionally affordable units are required."

Success of the Growth Control Program and its Impact on the Price of Housing:

Since the inception of the growth control program, in 1973, the growth rate has averaged 3.7 percent per year. (Mike Corbett) While this is considerably lower than previous the rate, it is still higher than that of

surrounding communities. According to City Councillor Dave Rosenberg, the growth control program has met with varying degrees of success. "Historically, Davis has always been the fastest growing community in the region and it continues to be so today." The reason, he claims, is simple: "Davis is a desirable place to live." However, without the program, Rosenberg believes that Davis would currently have a population of 80,000 or 90,000.

According to Fred Costello, "When all is said and done, the growth policies implemented by the city in the last ten years have been generally supported by members of the community and reflect the community bias. When discussing the pros and cons of growth controls, people often tend to forget that fact. The policies are not the creation of the people in power, they reflect the community's desires and expectations."

Community support for growth controls remains strong. In a 1982 referendum, 67 percent of the voters favored making the population limit even more stringent. (50,000 by the year 2000) The City Council agreed and ammended the General Plan accordingly. Currently, there is pressure to further tighten controls. The community has an advisory measure on the ballot this June to decide whether this measure will be adopted.

There is no question that the program is restricting growth. From April 1975 through May 1982 there were requests to construct 4,667 units. During this same time

period only 2,391 units were allocated, an acceptance rate of 51 percent. (Zorn, 49)

What impact has this restriction had on the price of housing? Some people argue that there has been no noticeable impact; housing prices have always been greater in Davis than in surrounding communities and probably would continue to be even without the growth control program.

Councillor Rosenberg articulated the city's position, "I have seen no evidence that the growth control program as practiced in Davis has had any effect whatsoever on the price of housing. In fact, the evidence is to the contrary. Even before the growth control program was instituted, comparable homes were more expensive in Davis than in neighboring communities. Today, that ratio is the same. This is because Davis simply is a desirable place to live. It doesn't take a genius to figure that out."

Mike Corbett, urban planner and City Council candidate, agreed with Rosenberg that the program has had no effect on the price of housing. "Davis is a growth area experiencing a high demand for housing. Even without the growth control program, developers would not lower their prices."

Fred Costello, maintained that it was difficult to determine what the impact has been. "One can't ignore the economic variables; where there is scarcity there is bound to be an impact. There is a difference between Davis' housing costs and those of surrounding communities, however the neighborhoods are different and the amenities the cities offer are different."

While most people agree with the above statements, some are firm in their belief that the growth controls have contributed to these higher housing costs. Tim Lien acknowledged that housing prices in Davis are high because the city offers many amenities. However, he noted that comparable units on comparable lots in neighboring communities are considerably cheaper than in Davis. "Eight miles away, in towns with higher governmental fees, comparable units sell for \$25,000 less. This is due to the basic laws of supply and demand. Davis' allocation system has severely limited the construction of new houses. Consequently, the cost of those units is high. This year, 230 units were allocated to be built in 1986-1987. In a town of 50,000, that's a problem."

Rosenberg argued this point. "Its just a myth that our program has increased prices." He explained that the supply and demand issue is not relevant in Davis because there is an adequate supply of units. Even in the worst months, there are always 250-300 homes on the market at any given time. In the best of months, there are 500-600.

Lien dismissed this argument, claiming that it is a common misunderstanding of the market. "In most communities, a percentage of homes are always on the market, but that is because people are waiting to see if they can get their ideal offers. If one looks at percentages, there are fewer homes available in Davis than in neighboring communities."

Ira Saleten, Director of the Davis Community Housing Corporation, also believes that the way in which the city has limited development has impacted prices. "The city allows a certain number of units and then divides it among developers. People who own land have to wait and thus they lose economies of scale."

The above statements reflect a variety of impressions concerning the impact of growth controls on the price of housing. A more quantitative analysis was presented in Zorn and Schwartz' article, "Mitigating the Price Effects of Growth Control: A Case Study of Davis, California." Zorn, et al. ran a regression analysis to determine the answer to this question. By comparing the price of both new and existing houses in Davis to four control communities before and after adoption of the program, they were able to make several observations.

First, they discovered that the actual price of new housing did not increase in Davis after inception of the program relative to other communities. In fact, the increase in housing prices in Davis was smaller than in the control communities; 27.1% in Davis compared to a 28.5% average increase in the control communities. "These results are different from those found in previous studies of other communities. For example, Schwartz, et al. (1979) found that growth control in Petaluma resulted in a 13%-25% relative increase in the sales price of new housing in Petaluma." (Zorn, 54)

On the other hand, Zorn et al. maintained that this analysis of housing prices is not sufficient. They argue that one must also control for variations in the quality of the housing being built. In this case, they found that the price increase in constant quality, new housing was 32.7% in Davis and 24.0% in the control communities. Therefore, they asserted that, "the combination of no increase in the sales price of new housing and a significant increase in the price per unit of new housing, suggests that, after growth control was instituted, the quality of new housing in Davis declined relative to that of the control communities." (Zorn, 54)

Next, they examined these same questions with regard to existing housing. The sales price of old housing in Davis increased by 29.3%, while in the control communities it increased by 22.6% after enactment of the growth control program. When constant quality prices were analyzed, Davis's old housing prices increased by 27.5% and the control communities increased by 30.1%. "This implies that, after growth control was instituted, the quality of old housing sold in Davis improved relative to the control communities." (Zorn, 54)

This study leads to some interesting conclusions. First, while the actual price of housing in Davis did not increase relative to control communities, the result were smaller, "lower-quality" units being built. When these factors were taken into account, there was an 8.7% increase in the per-unit price of new housing in Davis relative to the control communities.

Zorn, et al. attribute this factor to the inclusionary housing program requiring developers to reduce the sales price of new housing. "Developers' willingness to adjust to growth control by changing housing quality should be noted by communities considering the implementation of growth control programs...Previous work suggested that typical growth control programs, without mitigative measures, created incentives for developers to increase the quality of new houses. The Davis experience shows, however, that with governmental pressure to restrict increases in sales price, developers will respond to the introduction of growth control by decreasing the quality of their units." (Zorn, 56)

A second observation can be made with regard to the existing housing market. Zorn, et al. expected a priori that the introduction of growth control would increase the demand for all housing in Davis, and that the substitution of old for new housing would further increase the demand for existing housing. This would imply an increase in both the sales price and the per-unit price of existing housing. However, while the sales price of existing housing did increase, the per-unit price declined, implying an increase in the quality of the old houses sold.

Degree to Which the Inclusionary Housing Provisions Have Succeeded in Providing More Lower-Cost Housing:

According to Fred Costello, the city has made a genuine effort to provide affordable housing, and "to some extent they have been successful." Councillor Rosenberg agreed

emphatically, "The allocation system works. Davis has made a greater commitment to provide lower-cost housing than any other community."

Tim Lien argued the reverse; because of the inclusionary housing program, fewer lower-cost units have been built. He claimed that Stanley Davis Homes, the biggest low-cost housing developers in the area, were driven out of town because they could no longer build economies of scale.

Members of the Planning Department and Ira Saletan of the Davis Community Housing Corporation all maintained that the city has made a genuine commitment to the provision of lower-cost housing and that more lower-cost units have been produced as a result of the inclusionary housing provisions than would otherwise would have been available. However, they all acknowledged the shortcomings described earlier. According to Ira Saletan, "the city does not really have a below-market program. Developers are producing lower-cost units, (\$65,000) but they are smaller units. They are underpriced but that is because they are also undersized."

Susan Miller of the Planning Department agreed. Both felt this smaller housing was not meeting the needs of the families seeking lower-cost housing because they are too small. Saletan said, "We want a \$70,000 house but we want it for a three-bedroom house."

Who subsidizes the lower-priced units? According to Miller, the City Council has a policy that the new housing constructed is not supposed to subsidize the lower-cost

housing. Developers are allowed to build more housing if they include lower-cost housing so that they will not need to increase the cost of the market-rate units. Miller claims that developers are building smaller units and therefore they are not losing money. They are reducing the amenities of the housing which they build.

Again, Zorn et al. examine this question in their analysis of Davis's growth control and inclusionary housing programs. To measure what they term, the "exclusionary impacts" of growth control, they compared the number of houses affordable to lower-income households before and after the introduction of growth control in Davis and the control communities. "Growth control is said to be exclusionary if there is a significant decrease in the number of affordable houses available to lower-income households in Davis relative to the control communities." (52) They use a formula to determine the maximum amount that a lower-income household could pay for a house: all houses priced below or equal to this value are assumed to be affordable to lower-income households.

Using the same four control communities as above, Zorn et al. conclude that the percentage decline in the proportion of new houses affordable to households earning 80% of median income (low) was less in Davis than in the control communities. For households earning 120% of median income (moderate), the percentage decline in the proportion of new houses affordable in Davis and the control communities was approximately equal. (Zorn, 55) In the old

housing market the percentage decline in the proportion of housing affordable to low and moderate-income households was greater in Davis than in the control communities. (56)

Therefore, they conclude that if the entire housing market is looked at as a whole, the institution of both programs in Davis resulted in a percentage decrease in the proportion of houses affordable to households earning 80% and 120% of median income.

From this analysis, Zorn et al. conclude that the price-mitigating program succeeded in reducing the exclusionary impact of growth control in the new housing market. "Relative to the control communities, there was a 13% smaller decrease in the proportion of new houses affordable to households earning 80% of median income in Davis, and no significant difference in the change in the proportion of new houses affordable to households earning 120% of median income." (56)

"In summary, we conclude that price-mitigating measures such as those adopted by Davis are only partially successful in reducing the price effects of growth control. To a large extent these programs simply shift the impacts of growth control from the new to the old housing market. As a result, when considering the entire housing market, we argue that growth control has a significant impact on the price of housing and that growth control causes a significant exclusionary impact that price-mitigating measures cannot overcome. Although the special aspects of the Davis growth control program did influence the way growth control

affected the housing market, they did not completely mitigate its effect." (57)

Future Prospects

Saletin is convinced that "Davis is wrestling to change the system" and was convinced that the necessary support existed both in the City Council and in the community. "The challenge will be to do something more affirmative to encourage affordable housing without holding developers back. If we could allow enough development, certain builders might move in and specialize in lower-cost housing." Mike Corbett who is running for City Council admits that the program was not as successful as it could have been because of speculation and lack of resale restrictions, however, if he wins he plans to tighten these aspects of the program.

Except for certain developers, such as Tim Lien, even the critics of Davis' program believed that the overall effect has been positive. Saletin said, "growth control is an asset because it gives a community leverage. In Sacramento, there are few restraints on developers and consequently they are running the show. The city has no leverage. In the short run, growth controls can be an obstacle because they create higher housing costs. But in the long run, the policy gives you the leverage because it puts the city in the driver's seat." Rosenberg agreed; "If you leave the system completely free, there is no incentive to build affordable housing. We've given developers

incentives; they compete with each other for a limited number of units and those with affordable housing proposals are selected."

Miller admits her cynicism: "the program is impressive from the outside looking in; we here are more jaded. The City Council is moving in the right direction, but they're taking baby steps and I want them to go in leaps and bounds." She suggests subsidizing units, buyer write downs, housing linkage fees, and resale controls on all units. Lien suggests annexing more of the unincorporated land and developing it for housing.

Conclusion

Growth controls were enacted by the Davis City Council in order to protect the physical and natural environment of the community and to prevent the transformation of the city from a university town into a bedroom community of Sacramento. The impetus for the program came from the community. Today, support remains strong for continuing, if not tightening the controls.

Davis residents and the City Council appear committed to the provision of lower-cost housing in order to meet their internally-generated needs; those who attend UC Davis or who work in the town. Disagreement exists among members of the community concerning the overall impact of the growth control program on the price of housing. Most people believe that housing prices would continue to be higher in Davis with or without the program, because of the many

amenities which the city offers. Despite this disagreement, however, it is true that more lower-cost units were built in Davis because of the inclusionary housing requirements than would otherwise have been built.

Although Davis appears committed to providing these lower-cost units, many flaws exist in the program preventing its overall success. In order to be more effective, resale controls and buyer screening ordinances are necessary. Since these flaws are acknowledged by members of the City Council and Planning Department with whom I spoke, it appears possible that steps may be taken to remedy them in the future.

Overall, the presence of a stringent growth control program has allowed Davis a degree of leverage over the development process which would not otherwise have existed. The community has used this leverage to both preserve a desired level of environmental quality as well as to create at least 1,000 units of below-market housing. Davis has made significant progress in reconciling these issues; if resale controls and buyer screening ordinances are adopted in the future, the program could be used as a model for other communities.

ATTACHMENT 1

Davis Single-Family Unit Allocations (Davis's Price Categories)

Year of Allocation	Number of Units			
	Low-Cost	Moderate-Cost	High-Cost	Total
1974*	65 (17%)	184 (47%)	138 (36%)	387
1975	39 (7%)	245 (45%)	265 (48%)	549
1976	5 (2%)	82 (28%)	211 (71%)	298
1977	23 (7%)	81 (26%)	214 (68%)	318
1978	23 (16%)	20 (14%)	76 (54%)	119
TOTALS	155 (9%)	612 (37%)	904 (54%)	1,671 (100%)

*The allocation actually occurred in March 1975.

ATTACHMENT 2

Davis Single-Family Unit Sales Prices, Number of Units by Category

Year of Allocation	California Categories			City of Davis Categories		
	Less than \$20,000	\$20-30,000	More than \$30,000	Less than \$25,000	\$25-35,000	More than \$35,000
1974	0 (0%)	65 (28%)	168 (72%)	11 (5%)	103 (44%)	119 (51%)
1975	0 (0%)	40 (9%)	403 (91%)	0 (0%)	131 (30%)	312 (70%)
TOTALS	0 (0%)	105 (16%)	571 (84%)	11 (2%)	234 (35%)	431 (63%)

Chapter 4: Purchasing Open Space and Implementing an Inclusionary Housing Policy

According to David Dowall, the preservation of open space has two explicit and not completely separable purposes. "First, open space acquisition is used to ensure and maintain community environmental quality by preventing the development of ecologically or socially valued hillsides, ridgelines, meadowlands, and bay marsh. Secondly, open space acquisition can be used deliberately to limit residential growth by withdrawing specific parcels from the stock of developable land." (Dowall, 95)

When land is in short supply and there is a strong demand for housing, communities who purchase large amounts of open space for preservation may contribute to the shortage in affordable housing. To some extent, housing prices may rise because the supply of land is being restricted. However, open space acquisition programs may also contribute to higher housing prices because conservation land increases the desirability of a community.

The goals of open space preservation and affordable housing do not have to be mutually exclusive. A community could undertake a natural resources inventory to determine which areas are the most environmentally-valuable. Development is then restricted or prohibited in these areas. To the extent that this removes land from development, allowable densities could be increased in other less environmentally-critical areas.

I could not find a community which followed this

integrated approach, simultaneously targeting land for conservation and land for housing development. Instead, I have studied Lexington, Massachusetts, which approached the problem serially. The community had an aggressive open space acquisition program during the 1960s and 1970s. After most of the developable land in town was gone, and housing prices began to rise dramatically, members of the community turned their attention to affordable housing.

The town has since developed a multi-faceted approach to address this issue. It has eight multi-family districts and has rezoned land four times to permit higher-density housing. The town has donated 17 parcels of land for low-income housing, converted four surplus schools into housing units, and formed a nonprofit corporation to develop moderately priced housing. Recently, Lexington adopted an inclusionary housing policy which requires developers who are applying for a multi-family zoning change to include a certain percentage of affordable housing units in their developments. While, in general, I do not recommend a serial approach to the reconciliation of environmental and housing issues, in the case of Lexington, it has resulted in both environmental protection and an unusual amount of relatively affordable housing.

LEXINGTON, MASSACHUSETTS

Lexington, Massachusetts is located ten miles west of Cambridge and Boston. Originally a farming community, it is now well established as a suburb of greater Boston. Most of

the developable land in Lexington is zoned for residential use. Housing, primarily single-family, is evenly distributed in neighborhoods throughout the town. There is little commercial or industrial development; existing facilities are located along the transportation corridors and outskirts of town. Large parcels of reserved open space, also well distributed, comprise ten percent of the total land area. While Lexington is a typical suburb in many ways, its historical heritage and awareness, as well as "New England" character, make it quite distinctive. (Open Space and Recreational Plan, 1984, 1)

Town character, proximity to Boston, and an excellent school system have attracted many professionally-oriented couples with growing families. Historically, the population has had income and educational levels well-above average. Liberal social attitudes and a strong conservation orientation characterize much of the population.

Historical Growth Rates

Until World War II, Lexington was a farming community with a small population under 13,000. Following the war, the town experienced a tremendous rate of growth. Between 1940 and 1960, Lexington's population had doubled to 27,691. By 1975, Lexington had reached its peak with a total of 32,477 people. Since that time the rate of population growth has slowed, although the number of households is still rapidly increasing. Its current population is 29,479. (Open Space and Recreation Plan, 17)

In order to house a growing population, thousands of acres were developed for residential use. The town's zoning has accommodated the suburbanization process; close to the center of town, residential lots are zoned at 15,500 square feet. In the outer portions, minimum lot sizes are zoned at 30,000 square feet. (Open Space and Recreation Plan, 39)

Since 1940, Lexington's gross residential density has more than tripled. It's current density, 2.76 persons per residential acre, places Lexington at a slightly lower average density than neighboring communities. Lexington, and neighboring Burlington, form a "density transition zone" between eastern, urban-oriented and western, rural-oriented suburbs. (Open Space and Recreation Plan, 29)

Since the mid 1960s, the rate of growth has slowed considerably. According to the Open Space and Recreation Plan, this is partly due to escalating real estate prices and partly due to the minimal amount of buildable property suitable for single-family dwellings. Since 1980, development has dropped from about 50 to about 25 new single-family units per year.

Open Space Planning

As Lexington accommodated its suburbanization process, the decline of agriculture and loss of open space accelerated. In 1951, 2,031 acres of land were in active farming. Twenty years later, this amount had been reduced to 454 acres. By 1983, less than 100 acres of farmland were remaining. (Open Space and Recreation Plan, 31)

Between 1950 and 1960, Lexington's population grew by 60 percent. (Open Space and Recreation Plan, 17) As open lands became rapidly developed to provide for housing, a growing number of residents grew concerned. In 1968, a Conservation Commission was formed to address environmental issues in the town. A consulting firm, Metcalf and Eddy, was hired to accomplish Lexington's first comprehensive open space planning effort. Together with considerable citizen participation, they devised a plan for the acquisition of 1080 acres of open land for possible recreation and preservation of critical wetlands. (Open Space and Recreational Plan, 1)

In the mid 1970s, town residents expressed concern that recreational and open space needs had not yet been adequately addressed. The Planning Board and the Conservation Commission responded by forming a Special Advisory Group, consisting of members of the Planning Board, Conservation Commission, Recreational Committee, senior citizens, youth groups and athletic leagues. The Advisory Group inventoried environmentally-sensitive lands and outstanding natural features and made recommendations for their preservation. They circulated a questionnaire to Lexington households and received favorable responses from 56 percent of those receiving them. (Open Space and Recreation Plan, 2)

The Conservation Commission took this information and published a Conservation Master Plan which contained a loose set of objectives and areas to target. To date, they have

succeeded in purchasing or otherwise protecting 1000 of the originally-targeted 1080 acres. In fact, the Conservation Commission now owns roughly 10 percent of Lexington's land. According to Philip Herr, the Lexington Conservation Commission has been one of the most highly-skilled in the state. Charlie Weiman, planner with the Commission, agreed that they were extremely successful, noting that Lexington residents are extremely conservation-oriented and active on this issue.

Over the past decade, the Conservation Commission has been less aggressive in its acquisition program. Only 14 acres have been purchased since 1980. This is partly due to the fact that Lexington has very little undeveloped land remaining and partly due to the escalation in land costs. In addition, since the passage of Proposition 2 1/2, town funds have been limited.

For these reasons, the Commission has changed its approach. They are now focusing on wetlands protection through the vigorous enforcement of the Wetlands Protection Act and local wetlands bylaw. In addition, they are trying to secure backland conservation restrictions and the purchase of several wetland parcels. "The urgency of wetlands protection is underscored by the shrinking availability of open land." (Open Space and Recreational Plan) Most of the remaining undeveloped land contains considerable wetlands and has remained open partly due to its marginal quality. As each development plan comes before the town, commercial as well as residential, the

Conservation Commission tries to persuade the owners to incorporate conservation easements into their plans. (Dave Williams)

The Need for Affordable Housing

Land conservation, an active concern of many residents, has not been the only priority in Lexington. According to Robert Bowyer, Director of Planning, the community has been committed to the provision of affordable housing for the past fifteen years. "Lexington has had a longstanding commitment to population diversity. Many community leaders are genuinely worried, and express themselves about it, that the town will become a one-class, upper-income suburb. They believe that it is healthy and desirable for children growing up in the town and for townspeople to have a variety of income, class, ethnic and racial groups in the population."

Concern around the issue of affordable housing stems from two sources. First, the price of housing in Lexington has skyrocketed. The median-priced home sold for \$210,000 in 1984. This reflected an increase of 22 percent from 1983 and 54 percent from 1982. New homes are selling for \$350,000 - \$500,000. Even condominiums sell for \$175,000 - \$250,000.

These prices have made it extremely difficult for young people seeking to return to Lexington or elderly people desiring to remain. At a workshop on growth management and affordable housing techniques in the fall of 1985, Bowyer

emphasized, "Affordable housing is not a code word for minorities, welfare mothers, or some of the other behind the scene words which are whispered. Affordable housing has become a code word for the middle-class because the middle-class can't afford to live here."

In addition to the rising cost of housing, dramatic changes in demographic trends over the last decade have created a need for diverse housing forms not widely available in the town. Lexington is no longer a young, family-oriented community. Non-family households have risen 64 percent in the past ten years. Barely one-third of all households in town are families with children, and almost two-thirds of all households in town have fewer than four members. In addition, the over-55 population increased 39 percent and the town's median age rose 20 percent from 30.7 to 36.8 years. Finally, the number of people living in "extreme poverty" (as defined by the federal government) in Lexington increased eight percent in the last decade. Lexington's, primarily single-family housing stock, built during the 1950s and 1960s no longer meets the needs of today's population.

Housing, the first volume of the report, Socio-Economic Characteristics of Lexington, states that the general decline in the number of large tracts of land suitable for single-family subdivisions and the preference for smaller accommodations by the increasing number of smaller households has "ushered in a decided trend toward multi-family housing construction." (83) According to Bill

Spencer, of the Lexington Housing Authority, the lack of developable land remaining in Lexington has pushed the town into evaluating its housing needs. "The town has to make choices: does it want the little remaining land to go toward luxury single-family homes which sell for \$500,000, or toward less expensive multi-family units which better meet the needs of today's population?"

The Provision of Affordable Housing

Lexington's approach toward affordable housing has evolved in a piece-meal fashion over the last fifteen years. They started in 1970, by creating a subsidized housing district which enabled a local church and a non-profit organization to build subsidized housing units for 22 low and moderate-income families. One-fourth of the units owned by St. Brigid's Church and one-third of the units owned by Interfaith, Inc. are operated by the Lexington Housing Authority.

In addition to these units, the Housing Authority operates 208 subsidized units for the elderly and the handicapped. They are currently in the process of building two group residences, one for handicapped people and the other for mentally retarded.

While most of the subsidized units in Lexington have been targeted for the handicapped and elderly, some low-income family units have also been provided. The town donated 17 lots scattered throughout the town which had been taken for tax title to the Housing Authority. The Housing

Authority built single-family homes and rents them to low-income families for \$167 a month.

In addition to these 17 lots which the town has donated toward affordable housing, it also has a "surplus school" program through which it attempts to create additional affordable units. To date, four schools have been converted; three include rental units and three include home ownership opportunities. The success of this program in providing affordable units has varied but reflects a steady progression toward more skilled policies.

In 1977, units in the Hancock School went on the market. The units were intended for moderate-income people and sold for \$40,000 - \$50,000 (moderate-income is defined as people making between 80% and 120% of the median-income for the Boston area) However, lack of buyer-screening, owner-occupancy requirements, and resale restrictions, negated their "affordability." First and second buyers have reaped huge windfall profits; the units are currently selling for \$150,000.

The Parker School was sold to a developer for one dollar. Twenty-one market-rate condominiums were developed; seven more were given to the Housing Authority to manage for low-income families. Because Lexington virtually gave the school to the developer, the town was, in fact, subsidizing the seven units.

Seventy units in the Muzzey Junior High School have just been completed. Sixty were sold to moderate-income people for \$40,000 - \$65,000, and the additional ten were

rented to low-income families. The Planning Board, learning from the Hancock School experience now requires owner-occupancy and income qualification. Prospective buyers submitted financial statements to prove they qualified. In addition, owners will not be able to achieve a resale price greater than an increase of four percent, or the increase in the Consumer Price Index for the Boston area, whichever is less, per year.

The fourth school, Franklin, will consist of 100 percent affordable rental units. The Greater Boston Community Development Corporation is using the MFHA SHARP program to finance the units.

Lexington has taken another step to ensure the provision of affordable housing. In 1984, they created the Lexington Housing Assistance Board (LEXHAB). This is a non-profit corporation for moderate and middle income people (middle-income is defined as people making between 120% and 150% of the median-income for the Boston area) which will operate much like the Housing Authority does for low-income housing. LEXHAB's responsibilities are to monitor and enforce compliance with the provisions of Lexington's affordable housing program. In addition, LEXHAB is a partial owner of Muzzey's units, managing the ten rentals. Like the Housing Authority, they can become a development entity.

The most recent effort to encourage affordable housing was the establishment of an inclusionary housing policy which requires every new development applying for a zoning

change to include some affordable housing. Lexington has eight multi-family districts, but all are fully developed. Therefore, if developers want to build this type of housing they must apply for a rezoning. The Planning Board will not make a favorable recommendation on a rezoning proposal or on a special permit, unless the developer provides the required number of affordable units. The percentage of units that he/she must provide depends upon the price level at which the other units will be sold:

<u>% of all units</u>	<u>Type of units provided</u>
5%	Low-income units donated to LHA; or
15%	Low-income units purchased by LHA at HUD allowable cost for Boston metropolitan area; or
25%	Moderate income units to be purchased or rented by eligible households; or
40%	Middle income units to be purchased by eligible households (does not apply to rental units); or

After efforts to provide the type of housing units indicated above have proven fruitless, a developer may request that the town allow the following:

100%	Units not provided directly; financial contribution made to LEXHAB or LHA in lieu of providing units equal to 3% of sales price of all units.
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(Draft Housing Element of the Comprehensive Plan, 13-14)

Lexington's experience with this process is still being refined. So far, four zoning changes have been approved which have involved this requirement. The first, Potter

Pond, was approved in 1979. The developer agreed to make ten percent of the 100 units available for the Housing Authority to purchase. However, the Housing Authority could not obtain the necessary funds with which to purchase the units because neither HUD nor the State would participate in a program in which the Housing Authority only owned ten percent of the units in a market rate development. They feared a situation in which the Housing Authority would be a minority shareholder in a condominium association that might vote for amenities such as swimming pools or other luxuries. Consequently, the developer made a cash payment of \$700,000 to LEXHAB, in lieu of building the units. LexHAB used the money to purchase the ten condominiums at the Muzzey School.

The second development, Morrow Crossing, will consist of 21 units. The developer has agreed to provide the required ten percent (2) units off-site in existing housing. Lexington is still negotiating with him, but it appears likely that he will buy an existing two-family house and give it to the town.

The third developer will build 51 privately financed apartments. Half of the units at Countryside Manor are to be rented at market rates, \$1,200 a month and the other half will be rented for \$500-\$675 a month.

Finally, a fourth rezoning, Choate Symms was recently approved. This will be a congregate retirement community with a nursing home consisting of approximately 205 units. The developer will give Lexington approximately \$400,000 for the use of affordable housing elsewhere in town.

In December 1985, the Planning Board prepared a draft Housing Element of their new Comprehensive Plan which outlines the policies which they would like to adopt in the future. Four objectives were suggested: Preserve residential character, encourage diversity of housing opportunities, promote equity and fairness in offering housing choices, and take affirmative actions to meet their regional responsibility. The report outlines a variety of strategies to meet these objectives.

Impact of Lexington's Open Space Acquisition Program and Wetlands Protection Policies on the Price of Housing:

None of the residents or town officials with whom I spoke believed that the high cost of housing in Lexington was a result of actions taken by the Conservation Commission. Dave Williams, former Conservation Commission Chairman, acknowledged that the town is very conservation-oriented and that it has spent a great deal of money buying open lands. However, he did not believe that the town's open space acquisition was driving up the price of land. "Land prices are high because Lexington is close to Boston, housing is attractive and the community is a desirable place to live."

Joel Adler, member of the Conservation Commission, Housing Needs Advisory Council, and Interfaith, Inc. responded that Lexington's open space policy is a two-pronged sword. It adds mystique to the town and makes it countrified, but then because of these qualities, the community becomes a more desirable place to be and the cost

of housing increases.

Robert Bowyer agreed that the community's open space policies were not responsible for the high price of housing. "Housing prices are exorbitant because supply and demand are way out of balance. We need more housing production."

Relationship Between Open Space Preservation and Affordable Housing Goals:

In the Draft Housing Element of the Comprehensive Plan, a range of housing objectives is outlined. Many policies address the need to balance continued open space needs with those of affordable housing. "Preservation of character cannot be used as a reason to ignore responsibilities for affordable housing; the creation of affordable housing cannot ignore criteria for scale, character and sensitive site planning." (2) Under density requirements, the plan states that increased density is essential in providing affordable housing, but advocates that consideration be taken on a site-by-site basis of the natural features on the site and the relationship to adjacent land. (4) Finally, with regard to town-owned property, the report states, "When the transfer or acquisition of land is being considered for conservation or other purposes, the site's suitability for affordable housing should be weighed with those other needs." (11)

Williams stated that there are occasional conflicts between conservation and development goals. Because there is little developable land remaining in Lexington, land which used to be uneconomical to build on, because it is

wetlands or steep slopes, has recently become more attractive to developers. Sometimes this creates tension between the Conservation Commission and developers, but because Lexington has a master plan, Williams asserted that it is no secret which land the Commission intends to buy.

"Some people think open space planning is a form of snob zoning. In Lexington, it simply is not true. I was Chairman for ten years, and any land that wasn't on our master plan, I didn't go after. But for any land that was, I'd fight tooth and nail. Lexington is open-minded; we are not out to stop developers. This has always been regarded as a suburban town and we try to accommodate growth. But we are interested in planning; we want a well-balanced community."

According to Bill Spencer, of the Housing Authority, Lexington has a good system of checks and balances, and therefore the community does not experience many serious conflicts. Certain committees operate on a consensus basis, and some, such as the Conservation Commission and Housing Authority, operate on a special interest basis. For example, when the scattered site housing was being developed on tax title lots throughout the town, it was necessary to cull out those lots which were buildable, from those which were under water or on steep slopes. Only seventeen to twenty lots were deemed developable. The Housing Authority took the position that every possible site should be developed for housing knowing that the Conservation Commission would remove certain parcels from the list. In

the end, they removed three lots. "We're all friends and neighbors. Sometimes we argue for development knowing the Conservation Commission will take the opposing view. The checks and balances work out very well."

Degree to Which Lexington's Inclusionary Housing Policy Has Been Effective in Creating Affordable Housing:

Most residents and town officials with whom I spoke believed that the town was genuinely committed to the provision of affordable housing and has been successful in providing housing for the elderly and the handicapped. They have not been as successful in creating affordable units for low-income families. Of the roughly 10,000 residential units in Lexington, so far only 500 are subsidized affordable units; approximately 100 of these are homeownership units. However, while this does not represent a high percentage of affordable units, Lexington has used many opportunities to secure low and moderate-priced housing. The town has donated land and surplus property to subsidize the cost of constructing affordable units; an inclusionary housing policy will enable it to exact more units or payments to be used for future development; and finally the creation of LEXHAB should facilitate more moderate-priced housing in the coming years.

Lexington has received considerable praise for its inclusionary housing policies. John Kieth, housing contractor for the converted Muzzey School, stated that, "Lexington is the only affluent community in the Boston area which has an open housing policy." According to Joel Bard,

general counsel for the Metropolitan Area Planning Council, Lexington has been "very conscientious" about providing affordable housing. "Lexington is among the best in the region. We would like to see more communities doing what Lexington is doing." (Sleeper, 1986)

Conclusion

Lexington's approach toward environmental protection and affordable housing has evolved in two stages. During the 1960s and 1970s, the town purchased large amounts of open space for the purposes of conservation and recreation. Later, rising housing prices, changing demographics, and a lack of developable land underscored the need to provide smaller, less expensive, multi-family units. The town did not consciously link open space preservation and affordable housing together. However, the acquisition of large amounts of conservation land allowed the residents to be more open toward affordable housing--development would not threaten Lexington's character or open lands.

There does not appear to be much conflict in Lexington between environmentalists and housing advocates. Residents are very conservation-oriented, but also appear liberal in their views on housing needs and population diversity. According to Robert Bowyer, the town does not look at town property in terms of the highest and best use, but rather in terms of their social objectives.

Lexington has made a strong effort to provide affordable housing, particularly to elderly and handicapped

residents. They have used town property to subsidize the construction of lower-cost housing. In addition, Lexington is one of the few suburbs in the Boston area with an inclusionary housing requirement, as well as a nonprofit corporation formed to assist the development of moderately priced housing. Other communities ought to follow their strategy; the challenge for Lexington is whether they will be able to move beyond elderly and handicapped housing to the production of more low-income family units.

Conclusion

Much of the land use literature criticizes environmental protection strategies, such as development restrictions, open space acquisition and growth control programs, for their exclusionary impacts. This is particularly a concern in rapidly growing communities where there is a strong demand for housing. The environmental protection strategies in Bourne, Davis and Lexington did not have this result. In Lexington, the acquisition of large amounts of open land assured the community that further development would not threaten to change the town's character. In Bourne and Davis, the adoption of a stringent growth control program led to the provision of more units of lower-cost housing than would otherwise have occurred. In all three communities, attention was given to affordable housing because planners and community residents were assured that they had sufficient control over the future development of their community, that they could "afford" to promote lower-cost housing without risking further environmental deterioration.

I chose the three communities presented above because they had tried to reconcile environmental and housing concerns by gaining control over the development process. While these cases illustrate that it is possible to use land use regulations to meet both goals, it is not my intention to conclude that all communities adopting growth controls or purchasing open space will also provide affordable housing.

What were the special circumstances that caused these communities to try to reconcile these issues?

Community-Wide Involvement in a Comprehensive Planning Effort

One of the most significant factors leading to a balanced approach toward environmental protection and affordable housing goals was the awareness in each community that development could be controlled and not merely accommodated. This realization evolved out of an extensive planning process in which residents participated in the development of a comprehensive plan. In addition, the presence of a staffed and highly-skilled Planning Department in Davis and Lexington, and the expertise of the land use consultant in Bourne, most likely contributed to the success of these communities' policies.

In Bourne, the Planning Board hired a land use planning consultant to assist the town plan for future growth. For two years, various groups of residents met, articulated their concerns, and expressed their ideal visions for the community. While environmental concerns were the motivating force behind the planning effort, many people expressed concern during the process that the strategies chosen should not contribute to a shortage in affordable housing. Residents equated "affordable housing" with multi-family units because they tend to cost less to construct than single-family homes and thus may be less expensive. One outcome of the planning process was the adoption of a growth control bylaw which would lower the peak rates of

residential growth, by spreading out the construction of housing units in large developments over a period of years. Once this bylaw was agreed upon, the community decided to allow developers flexibility in siting multi-family units throughout the town.

Davis residents initiated the decision to update the General Plan. With the support of the City Council and assistance of the Planning Department, residents formed committees to work out strategies designed to protect their environment and preserve town character. The need to provide affordable housing was an important consideration from the outset. After one and half years of data-gathering, generation of alternative policy options, and public hearings, a growth control program was adopted limiting the number of residential units built each year. However, rather than adopting a numerical limit, as was done in Bourne, Davis awarded points to developers who met specific criteria and then allocated units according to a ranking system. Many of the criteria related to the affordability of the housing units proposed. Several years following the inception of the program, the City Council passed another ordinance requiring developers to provide one-third of all their units at a specified below-market price.

Lexington residents also undertook a comprehensive planning process, focused on open space and recreational needs. Land was inventoried and valuable and scenic parcels were targeted for acquisition. Although affordable housing

was not raised as an issue during the planning process, in later years, residents became increasingly concerned over the rising cost of housing. Due to the success of the open space program in saving most of the targeted land, the community was not overly concerned that efforts to provide affordable housing would be environmentally destructive. Consequently, the town began to donate land and surplus property to the Housing Authority and to private developers to subsidize the cost of housing production. Eventually, an inclusionary housing policy was adopted, similar to the one in Davis, requiring developers to provide a percentage of units at below-market rates as a precondition to zoning change approvals.

Cooperation Between Environmentalists and Housing Advocates

I had expected to find some degree of antagonism between environmental and housing interest groups. However, I did not discover any major conflicts in the communities. Instead, environmental groups and housing advocates worked together to create comprehensive policies rather than reacting separately to each others' policies.

In Bourne, neither the developers with whom I spoke, nor the Director of the Housing Authority, believed that the growth control program was limiting the supply of housing or causing the price of housing to rise. In fact, everyone with whom I spoke was sympathetic to the town's environmental concerns to the point of asserting that controls should be tighter. Many people believed that

allowing multi-family units to be clustered around open space would actually lead to environmentally superior site designs and open space preservation.

In Davis, the growth control program was widely accepted by housing specialists, although it was criticized by the developers. Some people believed that the program may have contributed to rising housing costs, however, everyone qualified their opinions by explaining that housing prices had always been and would probably continue to be higher in Davis than in surrounding communities even without the program. This is because Davis offers many amenities and people want to live there. However, rather than criticizing the impacts of the growth control program and suggesting its abolition, most housing advocates instead criticized the flaws in the inclusionary housing program. Suggestions were aimed at achieving tighter controls over the affordability of units through resale restrictions and buyer-screening ordinances.

In Lexington, Conservation Commission members and housing advocates repeatedly stressed that "people in this town work together." Several members of the Conservation Commission have also participated in the Housing Needs Advisory Committee. It was assumed that the Conservation Commission and the Housing Authority would take opposing sides on certain development proposals; this was not seen as a problem, but rather as the appropriate "checks and balances" approach to town government. None of the housing advocates expressed beliefs that the town's open space

acquisition program was having an adverse impact on housing prices. If this program were contributing to rising prices, it was because open lands were making Lexington a desirable place to live. This was not seen as a sufficient reason to discontinue the program or sell any of the conservation land.

Recognition of Internally-Generated Needs

Affordable housing was a concern in Bourne because many residents feared that they would not be able to continue living in their town. The Cape was under pressure as a second-home market; Bourne residents were fighting to preserve their community. Along with the desire to preserve town character, residents also wanted Bourne to continue to be a place where they, and their children, could afford to live.

Residents in Davis were committed to maintaining a supply of affordable housing in order to meet the needs of those attending UC Davis or working in the community. The residents did not want to encourage migration into their community, particularly those people working in other towns, but they did believe they had a responsibility toward meeting their own "internally-generated" needs. Many people attributed Davis' attempt to provide affordable housing to the liberal attitudes of many residents; the desire "not to become an oasis of the middle-class," was a frequently-stated opinion.

The change in demographics was probably the most

significant factor leading to Lexington's approach to provide affordable housing. As the population grew older, and the number of non-family households increased, it became increasingly apparent that the the large, \$350,000 single-family homes which predominate would no longer meet the needs of many Lexington residents. With some exceptions for low-income family housing, most of the town-subsidized units have been used for elderly and handicapped residents. According to Robert Bowyer, the adoption of an inclusionary housing policy in Lexington was due to a "critical mass of guilt-stricken liberals." (Sleeper)

Other questions need to be addressed when one is evaluating the success of these communities in providing affordable housing. What kind of intervention has resulted from these approaches? What kind of housing gets built and how affordable is it? What does it mean to be "committed" to the provision of affordable housing?

Bourne used its zoning bylaws to address the affordable housing need. Its approach was a passive one: developers were not required to build affordable units. Instead, the community simply removed the barrier preventing multi-family housing from being built. In general, this approach allows the market to dictate the supply of affordable units as well as their prices.

However, by allowing multi-family housing to be built essentially town-wide, approximately 160 multi-family units were provided which would otherwise not have been built. Many of these are priced at \$110,000, 30 percent less than

the median-priced single-family home. In two instances, developers have built even less expensive multi-family units. One opportunity arose because a developer had won federal funds to build subsidized housing. Because Bourne's bylaws allowed multi-family housing, the developer chose to site his development in this town.

Davis had an inclusionary housing policy built into its growth control program, as well as an additional ordinance requiring developers to build one-third of their units at below market rates. In 1982, the "designated" units were required to sell for \$60,000. Since they are no longer allowed to use "add-ons," units will be sold at very affordable prices, currently \$70-80,000, almost half the price of the median new single-family home. Most people claimed that new housing prices did not actually go up, as a result of this program, but instead developers built smaller houses with fewer amenities.

There are a number of flaws in the Davis system: lack of resale controls, lack of buyer screening, and a short-time span requiring owner-occupancy. These flaws are significant. What is the point of forcing developers to sell low-cost housing only to have it removed from the affordable price range after two years? As Schwartz comments, these flaws are due to a hesitancy on behalf of the City Council to "tinker" further with the market. The City Council must address these problems, but people with whom I spoke, City Councillors included, acknowledged the flaws and indicated a willingness to remedy the situation.

The Davis program is criticized for these flaws, but they are merely "leaks" in the system and not inherent in the program.

Lexington also has an inclusionary housing policy, but it is a policy and not part of the bylaws. Although 65 percent of the Town Meeting consistently vote for affordable housing measures, policies which are not incorporated into the town's bylaws could be ignored more easily if the political base of the town were to change.

More importantly, policies in Lexington are limited to case-by-case decisions. The actual inclusionary requirements take effect only when a developer applies for a rezoning. However, in a town with minimal developable land left (and most of that is wetlands and hills subject to environmental regulations) this is significant because developers need rezonings to build any multi-family housing.

Lexington has also made a commitment to using town-owned property, 17 lots and four surplus schools, to help subsidize affordable housing. Much of this is rent-subsidized and not home-ownership. Most of it is for the elderly and handicapped, not low-income families. To some extent Lexington can afford to be "inclusive" because with such little developable land remaining in town, there is hardly a chance that the town character will suffer.

Lexington has received considerable publicity for its efforts. Perhaps, when those people who still resist the notion of affordable housing see exactly what has and has not happened in Lexington as a result of its inclusionary

policies, a broader constituency can be built. Furthermore, while the number of affordable units in Lexington is still a small percentage of its overall housing supply, if other communities made similar attempts, a definite contribution toward easing the housing crisis would result.

Overall, I believe that the growth control programs, and Lexington's open space acquisition program, were instrumental in formulating the towns' affordable housing policies. While I would hesitate to recommend Lexington's approach to other communities, because of its serial, rather than comprehensive, approach, I would urge more communities to use development control to ensure an adequate supply of affordable housing. Barriers to lower-cost housing can be removed, requirements that developers build a portion of lower-cost housing can be stipulated, and town property can be donated for the construction of lower-cost housing; all of this can be done in ways which will not harm the environment. Ultimately, a tax on real estate transfers, if passed by the state legislature, could provide funds for communities to purchase land for both conservation and housing development.

This thesis has not addressed the critical issue of how to convince more communities to remove the barriers to lower-cost housing and to use their regulatory power to create more affordable housing. Instead, it has illustrated ways in which communities, who are interested in providing affordable housing but are concerned about the environmental consequences, can achieve both goals. Problems existed in

each of the three approaches illustrated above, and the amount of affordable housing provided was only a small portion of the vast numbers which are needed. Nevertheless, if every community followed similar strategies and, at least, met its own internally-generated needs, the housing crisis would be lessened.

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PERSONAL COMMUNICATIONS:

Bourne, Massachusetts

Stephen Ballantine, Executive Director, Bourne Conservation Trust, April 15, 1986.

Colonel Edward Brady, Chairman, Bourne Planning Board, April 10, April 17, and April 29, 1986.

John Corcoran, Developer, John M. Corcoran Co., (Bourne summer resident), April 18, 1986.

Philip DeNormandie, Developer, Bourne summer resident, Founder of the Bourne Conservation Trust, April 18, 1986.

Donald Ellis, Planning Board Member, April 29, 1986.

Paul Gately, Reporter, Bourne Courier, April 15, 1986.

Cynthia Smith, Director, Bourne Conservation Commission, April, 15, 1986.

Judith White, Director, Bourne Housing Authority, April 18, 1986.

Davis, California

Mike Corbett, Urban Planner and Candidate for City Council, April 26, 1986.

Fred Costello, Assistant Director of Housing, UC Davis,
April 24, 1986.

Pat Kahn, Citizens for the General Plan, April 24, 1986.

Tim Lien, Developer, Walker Donant and Company, April 28,
1986.

Susan Miller, Planner, Davis Planning Department, April 29
and May 8, 1986.

Karen Moore, Planner, Davis Planning Department, May 9,
1986.

Barry Munowich, Planner, Davis Planning Department, April
23, 1986.

Dave Rosenberg, City Councilor, April 25, 1986.

Ira Saletan, Director, Davis Community Housing Corporation,
April 24, 1986.

Lexington, Massachusetts

Joel Adler, Member, Lexington Conservation Commission;
Member, Housing Needs Advisory Committee; Member,
Lexington Interface Corporation, May 1, 1986.

Robert Bowyer, Chairman, Lexington Planning Board, April 3,
May 1, 1986. Also, a tape recording of a speech given
in November 1985 at a growth management and affordable
housing workshop sponsored by Philip Herr.

John Kieth, Developer, May 1, 1986.

Bill Spencer, Member, Lexington Housing Authority, May 1,
1986.

Charlie Weiman, Planner, Lexington Conservation Commission,
May 1, 1986.

Dave Williams, Former Chairman, Lexington Conservation
Commission, May 2, 1986.

Other Communications

Cathy Bartolini, Agricultural Preservation Program,
Massachusetts Executive Office of Communities and
Development, February 2, 1986.

Dave Cherrington, Trustees of the Reservations, January 14,
1986.

- Shawn Dahlen, Duxbury Conservation Commission, April 30, 1986.
- John Feingold, Trust for Public Lands, January 9, 1986.
- Michael Frank, Director of Community Planning, Bucks County, May 9, 1986.
- Dan Greenbaum, Massachusetts Audubon Society, January 8, 1986.
- Irene King, Secretary, Duxbury Planning Board, April 30, 1986.
- Kelly McClintock, Environmental Lobby of Massachusetts, February 21, 1986.
- Jean Van Ormand, Executive Office of Communities and Development, February 2, 1986.
- Douglas Porter, Urban Land Institute, May 2, 1986.
- Caroline Pryer, Land Trust Exchange, January 15, 1986.
- Mark Rasicott, Director, Vinyard Open Land Foundation, April 29, 1986.
- Mary Jane Sperry, Director, Duxbury Housing Authority, April 30, 1986.