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GOALS AND POLICIES FOR THE TOWN OF BARNSTABLE:

A GUIDE TO DECISION MAKING

grand.

FINAL REPORT March 28, 1983

Prepared under the auspices of the Barnstable Planning Board and the Barnstable Master Plan Steering Committee

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March 24, 1983

Mr. Robert Brown, Chairman Barnstable Planning Board Mr. Michael Stusse, Chairman Master Plan Steering Committee Town Hall, 367 Main Street Hyannis, Massachusetts 02601

Gentlemen:

I am pleased to submit to the Barnstable Planning Board one hundred copies of the final report, <u>Goals and Policies for the Town of</u> Barnstable: A Guide to Decision Making.

The guide sets forth a series of goals, policies, and actions that provide a framework for making decisions about the location, quality and quantity of future growth. Use of this framework can help the town preserve its unique lifestyle and fragile environment.

The guide calls for some changes in the way the town deals with growth: new tools, more reviews and different standards. I believe that the town must make these changes in the way it deals with growth in order to avoid unwanted change in the town itself. Many citizens and officials have expressed a desire to chart a different path toward the future in their work on this project. This document can help serve as a guide.

I wish to express my thanks and appreciation to all the town boards, committees, and residents for their participation in this project. Their interest, assistance, and hard work over the past year reflect the town's deep committment toward its future.

We have enjoyed working on this project and appreciate the opportunity to have served you.

Sincerely, , loran

Eduardo E. Lozano, Ph.D Partner

EEL/ka

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AN INTRODUCTION

Residents of the town of Barnstable share a basic desire to preserve the unique quality of life in their town. Barnstable comprises seven small villages, and is bordered by the sea to the north and south. The centers of these villages contrast with the town's beaches, woods and fields, marshes and ponds, and create a lifestyle that is distinctly rural. The town's atmosphere varies between quiet winters and busy activity in the summers.

Because of its unique quality of life, the town has experienced dramatic growth in population, housing, services, and commercial development in the past twenty years, with accompanying changes in its size, scale, visual appearance, and character. Residents are concerned that their quality of life may be threatened by uncontrolled growth and that serious damage may be done to critical environmental resources.

At the 1981 Town Meeting, the town appropriated funds to prepare a plan that would help address its growth-related problems. In seeking consultants to help prepare a plan, the Planning Board stated, "The Town is experiencing rapid growth without the benefit of any overall planning considerations. The Town needs a long-range planning guide to serve as a frame of reference for the many decisionmaking boards and commissions in town." Lozano, White and Associates was subsequently engaged to help the town in a nine-month period of discussion, analysis, and policy formulation that began in the spring of 1982. This document, a guide to decision making for the town, is the result of that process.

Preparation of the Guide

Fundamental to preparation of this document has been the premise that if the guide is to be used by the community it must not only be realistic but also reflect the ideas and goals of the town. To this end, an extensive process of community participation took place throughout preparation of the plan. This process had two functions:

1) to obtain ideas, and 2) to obtain reactions to proposed policies and actions. The process included:

- three formal workshops--the first in May, 1982, to elicit community concerns and initial ideas -- the second in September, 1982. to respond to goals and statements--the third in February, 1983, to respond to the draft of the final document;
- newsletter to a mailing list of over 300 residents;
- a three-month series of regular weekly meetings of the Master plan Steering Committee;
- meetings and interviews by the consultant with town boards and officials (including the Board of Selectmen, the Planning Board, the health agent, the Conservation Commission, the Finance Committee, and others), private groups, and individuals, and;
- wide distribution of all draft reports for review and comment to town boards, the Master Plan Steering Committee, and the public.

This report is therefore based both on what the town wants for its future and what is possible given the problems to be faced and the resources available to solve them.

Scope and Organization of the Report

Based on the process of public participation described above, this document presents goals, policies, and recommended actions to guide future population growth and its attendant development. It presents a broad framework for decision-making about location, type and quality of major types of land use--residential, commercial, industrial, open space--and the resources and facilities that will be most affected by growth. It is not meant to cover every topic at issue in the town, nor every type of development or facility. Further, detailed planning for major facilities, such as the landfill, the airport, and the hospital, are covered by other in-depth studies already completed or underway, and so are not discussed here.

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The guide is divided into nine sections, each covering a topic of importance. The sections sometimes overlap; preserving undeveloped land, for example, is as important to the purity of the water supply as it is to maintaining the visual quality and rural appearance of the town. The overlap is intentional. Policies have been formulated with the aim of achieving multiple objectives.

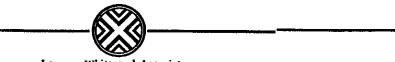
The first section, growth policy, is an overall approach to the projected amounts of population and other growth in Barnstable in the next twenty years. It lists first implications of growth under existing town policies, and then suggested alternative goals, policies, and actions to preserve the town's unique character and limited resources. The second section deals with an issue of fundamental importance to the town: water. Water supply will establish an upper limit to the amount of growth the town can support. The guide sets forth measures to insure that development does not exceed the capacity of the water supply nor damage its quality. The following sections deal with residential development, open space and natural resources, economic development, transportation and traffic, and the policy planning process.

It is important to stress that this document, though formulated through the ideas, needs, and wishes of the Town of Barnstable, is a planning guide, to be used, indeed, but also to be discussed, modified, and revised as conditions warrant. To this end, this document presents policies for a planning process. These policies are intended to help establish an ongoing process through which priorities are established, policies are carried out, and goals and policies are reviewed and updated periodically.

An appendix contains expanded presentations of two recommendations made in the body of the report, tables, and an outline of fiscal considerations.

Preparation of the Final Report

Special efforts were made to obtain widespread community participation in development of this final report. In January, 1983, 150 copies of the draft final report were given to the Town Hall for distribution to



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the community. In addition, the Barnstable Patriot carried the full draft as a supplement in its February 10, 1983 issue, supported by the Merchants Bank and Trust Company of Hyannis. Following distribution of the draft, the report was reviewed at three community meetings sponsored by the Planning Board, two meetings of the Planning Board with Lozano, White, a public workshop, and at meetings of the selectmen, Conservation Commission, Community Development Department, and others.

Written comments on the draft report were submitted to Lozano, White and Associates by the Community Development director; the Cape Cod Planning and Economic Development Commission; the Hyannis Area Chamber of Commerce; the Conservation Commission; the Barnstable Housing Authority; the Barnstable Fire District; several village associations; and private citizens. All of these comments, as well as comments received orally, were carefully considered in preparation of the final report. Among the modifications made to the draft based on the comments from the community were:

- greater emphasis on water supply as a growth limiting factor;
- clarification of the limited potential of additional multi-family housing in the town, primarily due to wastewater disposal limitations;
- strengthening of water quality considerations regarding development of Independence Park; and
- correction of various technical inaccuracies and elimination of recommendations that were shown to be impractical.

Several recommendations in the draft generated considerable controversy, particularly those for 1) increased use of open space residential development (OSRD) as the form for single family housing, and 2) the eventual development of new neighborhoods. Many of the objections appear to have been based upon misunderstanding and misinformation. Recommendations concerning these two issues have been clarified and retained in the final document because in the long run they will be invaluable tools in guiding development to prevent urban sprawl, destruction of community character, and loss of open space.

Among t he objections raised to open space resuld ential develop ment were

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that more and faster development would occur, that the open space preserved could eventually be built upon, that damage to water quality would occur, that multi-family housing would be developed, and that property values would decline. As pointed out in the growth policy and residential sections of the report, OSRD is unlikely to generate more development. than conventional development since no increase in overall density would be permitted. Hence, damage to water quality from excessive density would be avoided. Multi-family housing need not ever be permitted in OSRD. Further, more rapid development is unlikely because the savings in per unit costs that developers could achieve by shortening roadways would be offset by higher borrowing costs needed to complete the project as a single unit. Open space saved under OSRD would be protected by covenants that run with the land in perpetuity specifying the land can never be built upon. Property values would undoubtedly be enhanced rather than reduced with OSRD because of the amenities of permanent Open space.

Among the objections to the recommendation for new mixed_use open space neighborhoods was that they would weaken the commercial viability of existing village centers. However, the timing and location of new neighborhoods could be controlled to insure that their commercial portions do not draw business away from existing village centers. As settings for commercial activity, these neighborhoods would have less impact on existing centers than continued development of strip shopping centers. Other objections were that new neighborhoods would damage water quality and that the proposed densities would be incompatible with the town's character. Public sewerage or other acceptable means of wastewater disposal would be required for new neighborhoods. Density could be similar to those of existing village centers, so these small scale neighborhood developments need not be inconsistent with the character of the town.

The consultants believe that Barnstable can preserve its character and its environment, even as growth pressures continue, by taking a more active role in conserving land, protecting the environment, and in monitoring and guiding growth. In the long run, some new and different approaches, such as OSRD, and eventually, new neighborhoods, will prove valuable.

This plan represents both a beginning and an end. As a product, it represents the end of the consultant's work. However, the guide's effectiveness will be measured by the extent and success of its implementation. This stage has just begun. Literally hundreds of citizens and officials contributed ideas and information during the guide's formulation. The same level of committment is required for implementation. Town boards and commissions will need assistance in evaluating options discussed in the guide, and adopting those that are timely. Townwide support will be needed for required zoning changes. Developers, too, will need time to evaluate and adopt new ideas. Public discussion and debate must continue, for planning is a continuous process. If the town is to preserve its unique character and quality of life, in the face of future large scale development, citizens and officials must continue their interest and committment.



SUMMARY OF GOALS AND POLICIES*

Growth Policy

GOAL: Maintain the rural scale and quality of life in Barnstable as growth continues: preserve the quality and supply of water resources; prevent urban sprawl; preserve natural and built environment. "Quality of life" refers to the town's seven villages, each with its own identity, physical attributes, sense of place, community activities, and culture; the contrast between the village centers and surrounding open areas; the many opportunities for recreation and enjoyment of the outdoors that the town's beaches and open spaces provide; the economic opportunities the town can provide for young people and adults, to be able to live, work, and remain in Barnstable; and a distinctly non-urban lifestyle.

- POLICY #1: Recognize that the capacity of the Cape Cod aquifer to supply drinking water will eventually be reached and that this capacity will ultimately limit the amount of growth the town can support.
- POLICY #2: Prevent adverse impacts of development on natural resources--particularly the water supply--and the environment by directing most growth to suitable areas and applying strict control over the impacts of all major developments, and of development in all environmentally sensitive areas.

POLICY #4: In order to maintain the town's environment and character, even as growth takes place in areas now open, and to avoid low density "urban sprawl", 1) preserve certain areas as open space using a wide range of conservation and preservation mechanisms, and 2) allow development of other areas to occur at somewhat higher concentrations than now permitted, consistent with environmental constraints.

The body of this report contains goals, policies, recommended actions for implementation, and background material on each topic.

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POLICY #3: Maintain the character of existing village centers by measures which preserve their economic viability and avoid congestion from excessive growth.

- POLICY #5: Encourage residential and commercial development of the highest quality planning and design.
- POLICY #6: Encourage the development of jobs and housing to meet the needs of residents of all ages and income levels.
- POLICY #7: Recognizing an upper limit to population exists, maintain a stable rate of growth until that limit is achieved.

Water

- GOAL: Since the town's only source of drinking water is the Cape Cod Aquifer, a sole source aquifer and the region's only source of drinking water, preserve the quality of the ground water, and recognize that the water supply will ultimately limit the amount of development the town can support.
- POLICY #1: Use all town powers to protect the quality of Barnstable's drinking water, including restrictions on land use.
- POLICY #2: Recognize that the water supply is finite and will ultimately place a limit on the population that the town can support. Since data is not yet available to establish this limit, regularly monitor water consumption; evaluate water supply data as it becomes available; and, if findings warrant, limit the amount of development that can occur.
- POLICY #3: Recognize that because the Water supply is limited, immediate actions must be taken to ensure that supplies are in balance with demand.
- POLICY #4: Establish a coordinated means of managing water quality and quantity, both in the town and the region.

Residential Development

- GOAL: Meet the housing needs of current and future residents of all income levels by providing a variety of housing types in a way that maintains the scale and quality of life in Barnstable and preserves the visual and natural environment.
- POLICY #1: Meet both housing and environmental needs by encouraging less dispersed development, where possible and consistent with water resource protection, to preserve open space and avoid "sprawl".
- POLICY #2: Where water supply and environmental conditions permit (see below), encourage development of alternatives to single family homes on relatively large lots, including smaller units that better meet the emerging market demand for compact units.
- POLICY #3: Insure that residential developments--particularly multi-family developments-do not adversely affect the environment. Of chief concern are impacts on water quality and traffic.
- POLICY #4: Insure that additional multi-family residential development is of high design quality and is consistent with the scale, density, and rural quality that composes part of Barnstable's quality of life.

Open Space and Natural Resources

GOAL: To conserve areas of the town that are most significant to protection of natural resources--particularly the ground water supply, visual quality, and outdoor recreation. In light of anticipated development and fiscal constraints, the town must focus its efforts on areas where preservation will be most beneficial (i.e. serve multiple purposes) rather than On maximum numbers of acres.

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- POLICY #1: Base open space conservation efforts on a system of varied types of Open space located throughout the town and, where possible, linked together for visual impact.
- POLICY #2: Conserve the system of priority Open spaces through a wide variety of techniques.
- POLICY #3: Use the system of priority open space areas to evaluate the retention or sale of lands currently owned by the town. Sale of lands that do not meet open space criteria, or benefit the town in other ways, could generate revenue to acquire more valuable areas.

Economic Development

- GOAL: Expansion of existing industries and development of a variety of new ones that provide jobs and incomes for town residents and do not adversely affect natural resources and the town's quality of life. The types of jobs needed are:
 - better paying
 - year round, or counter-seasonal, to take up the winter slack; and
 - suited to the existing or upgraded skills of town residents.

Implicit in this goal is not only that development not harm the environment, but that there be an ultimate limit to the amount of development in order to perserve the town's character and environment.

- POLICY #1: Take town actions to provide a suitable environment for and help meet the basic requirements of the types of businesses and industries most promising and most realistic for the town.
- POLICY #2: Insure that the location and impacts of economic activity do not damage the visual and natural environment, in particular the water supply, nor contribute to urban sprawl.
- POLICY #3: Aggressively yet selectively promote economic develoment by emphasizing the unique advantages of the town.



- GOAL: Improve and strengthen tourism and commercial activities so that they contribute to the economic well-being of Barnstable residents, but only to the extent that the quality of life for residents and visitors is maintained. This goal can best be achieved not by encouraging more tourists but by providing facilities and a high quality environment to draw higher levels of spending.
- POLICY #1: Promote a viable tourist-commercial economy by carrying out the policies set forth elsewhere in this document for preserving the town's natural environment and quality of life.
- POLICY #2: Take maximum advantage of Hyannis Harbor as a place for people to enjoy.
- POLICY #3: Focus public and private resources on ways to improve the efficiency and attractiveness of downtown Hyannis, so that it can become a more viable retail and commercial area.
- POLICY #4: Work in partnership with the private sector to develop facilities geared to recent and emerging market demands.
- POLICY #5: Encourage (and require) high standards of site design and architectural quality of commercial facilities throughout the town.
- POLICY #6: Insure that commercial uses pose minimal impacts on the built and natural environment.
 - GOAL: To diversify the town's economic base, develop new and expanded yearround industries at Independence Park, in a manner consistent with the environmental and other goals of the town.
- POLICY #1: Take town actions to insure that industries in the park cause no damage to the environment.

- GOAL: Expand commercial fishing to improve the town's economy, and do it in a way that is compatible with and supportive of tourism and the character of the town.
- POLICY #1: Encourage the expansion of the commercial fin fishing industry.
- POLICY #2: Encourage development of the shellfishing industry.

Transportation and Traffic

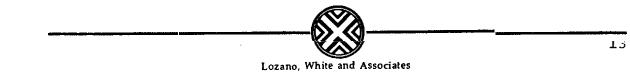
- GOAL: In the short term, improve existing transportation deficiencies, including circulation, parking, and access in and around Hyannis so that the downtown can function as a viable commercial and tourist center. In the long run, provide for expanded transportation needs with emphasis on low capital solution, reducing reliance on autos, and land use practices consistent with transit and para transit (van pools and car pools).
- POLICY #1: Take immediate steps to relieve congestion in Hyannis by better managing the traffic flow and reducing the number of cars that travel in and through the village.
- POLICY #2: Make parking more accessible and convenient for downtown shoppers, visitors, and workers, by better management and use of existing parking facilities.
- POLICY #3: Avoid further increases in congestion on major routes leading in and out of Hyannis center, and relieve existing sources of congestion.
- POLICY #4: Adopt land use policies that will help reduce reliance on autos and be most conducive to the long run use of transit and paratransit.
- POLICY #5: For the longer term, develop a series of low capital measures that will help the existing road system handle increased amounts of traffic.

- POLICY #6: Evaluate the provision of new and improved capital facilities from the standpoint of benefit to traffic flow, impacts on neighborhood and the environment, and cost to the town.
- POLICY #7: Take Measures to improve safety at high hazard intersections.

The Policy Planning Process

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- GOAL: Successful implementation and continued evaluation and updating of all town goals and policies concerning future development, preservation, and conservation by consistent, coordinated actions of all affected town boards and authorities.
- POLICY #1: Give official status to all goals and policies of this plan. Take town actions to carry them out by assigning responsibilities to relevant town boards and authorities, and establish a system for reviewing, updating, and modifying goals and policies as needed.
- POLICY #2: Continue the role of citizen involvement in development and implementation of policy plans for growth and conservation.
- POLICY #3: Review, evaluate, and modify or readjust development and conservation goals and policies at least once every two years.



GROWTH POLICY

Barnstable has a unique environment and quality of life. The town comprises seven villages, each with its own character. Small village centers provide a sense of community; marshes, ponds, fields, beaches, and the ocean provide a setting of natural beauty. The rural scale is in harmony with the capacity of the natural environment, particularly the ground water supply, to support population. The town, located in the middle of Cape Cod, has long been the Cape's activity center. It contains many regional services and facilities: the Cape Cod Hospital; the Barnstable Municipal Airport; ferry docks to the islands; a community college; and regional shopping facilities. The town is also the county seat.

Because of both its unique environment and its role as the hub of the Cape, Barnstable is an attractive place to visit and live. Consequently, Barnstable's population has grown, and growth pressures continue. If the quantity and quality of future growth is uncontrolled, the town could face severe problems: damage to its water supply, destruction of its natural environment; erosion of the quality of life.

Population Growth

According the latest population figures from the Barnstable town clerk, as of the fall of 1981 the town's population was 31,039. The 1980 US Census placed the population at 30,898. Hyannis and Centerville were the town's largest villages; West Barnstable and Cotuit, the smallest.

Village	1981 Population
Barnstable	2,289
West Barnstable	1,387
Hyannis	11,961
Centerville	7,015
Osterville	3,162
Marstons Mills	3,274
Cotuit	1,951
Total	31,039

The 31,039 figure represents only the year-round population. When residents of second homes and summer visitors who stay in hotels and motels are added, the "peak summer" population totals 63,000,¹ according to the Cape Cod Planning and Economic Development Commission (CCPEDC).

Most of the population growth since 1940 has taken place in the last 20 years; from 1970 to 1980 the population grew by 50 percent. Continued growth is expected, consistent with nationwide trends that show that rural counties adjacent to metropolitan areas are growing fastest. Projections by CCPEDC indicate that, if the town maintains the zoning policies in place in 1983,

- by the year 2000, some 51,000 people will be living in Barnstable year round, up from 31,000 in 1980;
- in addition to the year-round population, the second home population will increase by 11,000 (or 44 percent) to 36,000;
- the non-dwelling population will increase by 2,600 (or 40 percent) to 9,200 by the year 2000.2

Residential development will take place at an even faster pace than population growth because of declining household sizes. CCPEDC estimates project that by the year 2000 there will be a total of 12,000 more housing units in Barnstable than in 1980, or a total of 28,436 units, up from 16,436.³

Impact of Projected Growth Under Current Policies

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The projected growth would have significant impact, including the following. First, the limits of the Cape Cod Aquifer, the town's source of drinking water, would, in all likelihood, be reached if development proceeds under current zoning. Severe environmental and economic problems would result.

Second, projected growth would affect the visual and natural environment of the town. Under present zoning policies for development of most open land in single family houses on one-acre lots, projected growth would use up virtually all the remaining developable land in the town. This can be seen



by comparing the amount of land required by projected development with the amount of developable land. Approximately 15,600 acres will be required for the additional 12,000 units projected for 1980-2000 (based on 1.3 acres/unit).4 This acreage is equal to virtually all the land available for development as of 1980.⁵

Most of the land available for development and zoned residential is interior land. Although the "hottest" real estate is now nearer the beaches, in Osterville and Centerville, single-lot sales activity (as opposed to bulk or house sales) is greatest around Marstons Mills. Lot sales are usually followed by development. If the long-term pattern of development moving inland and westward continues, Marstons Mills can expect more of the town's development than it has had in the past. Further, if town zoning policies are maintained, single-family residential development will gradually cover the remaining now open land, with the following results:

- A "suburban" character of the landscape, rather than the present pattern of contrasting rural areas and small settlements.
- Increasing commercial development on highway strips, and scattered convenience stores, to serve the spread out development.
- Possible pollution of ground water, the town's only source of drinking water. Significant portions of now open interior land contribute absorbed water from precipitation to the underground water supply. Residential development may mean pollution from runoff from the new and extensive road systems, paved driveways, and parking lots. Another impact of development would be lessened surface area for ground water recharge. Pollution can also occur if on-site septic systems are inadequately installed or not properly maintained.
- Destruction of unique and irreplacable natural resources, such as rare plant and animal communities, and prime agricultural soils. Barnstable County is second only to Berkshire County in its number of rare plant species, and also has a significant amount of potentially agriculturally productive land.

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Another effect of the projected growth will be the need for additional facilities and services. The population will contain a growing proportion of elderly persons. Special services -- medical, transportation, social -- will be needed, as well as low and moderate income housing. As to other facilities, the landfill is already nearing capacity, and some roads, such as routes 132 and 28, handle existing traffic volumes with difficulty.

In meeting needs for additional services and facilities, a balance between the needs of the year-round and the tourist/summer population will have to be struck. Both populations are vital to the town, and both should have adequate access to town facilities, such as beaches, boat docks, parking, and the landfill. Because the town's population increases during the summer, and hence, demand for services is uneven throughout the year, emphasis will be needed on methods of providing services with the flexibility to adjust to changes in demand (using school buses as peak hour shuttles in the summer, for example).

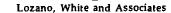
Projected population will induce additional commercial development. Assuming that Barnstable continues to be the Cape's service and retail center, some 1.6 million square feet of commercial space could be developed (equivalent to the amount of space that would be required by three regional shopping malls such as the Cape Cod Mall).

The location of future commercial development will depend on town policies. Current policies permit strip development at relatively high densities. Alternatively, new commercial development could be concentrated in small scale new neighborhoods, and in upgraded and revitalized existing commercial areas.

Alternative Approaches to Growth

Some of the effects of growth under current town policies would be undesirable, particularly the effects on the water supply, open space, natural environment, and the very quality of life that makes the town so attractive a place to live.

A different approach to growth is needed. Two approaches are conceivable. One is to attempt to stop or limit growth, primarily by increasing lot size



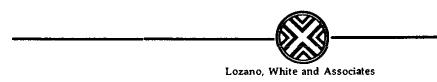
requirements. While this approach appears simple, it has important deficiencies:

- Suburbanization and the loss of open space would not be prevented; the suburban pattern would merely be duplicated on a larger scale.
- Land prices, and hence, housing prices would increase, making affordable housing harder to find.
- The town still would not have adequately delt with its water supply limit - larger lots would not necessarily insure that consumption did not exceed capacity.
- Strong market forces limit the possibility of adopting and maintaining large lot zoning.

A second approach is to manage growth. More comprehensive than increasing minimum lot sizes, this approach requires active town investment in monitoring, evaluating, and controlling the impact of growth so that:

- the quantity of growth does not exceed the capacity of its chief resource, water.
- the location of growth avoids critical environmental areas and valuable open spaces.
- the quality of growth is such that the natural and built environment is enhanced, not damaged.

Policies for managing the quantity, location and quality of growth are presented below.



GROWTH POLICY

GOALS AND POLICIES

- GOAL: Maintain the rural scale and quality of life in Barnstable as growth continues: preserve the quality and supply of water resources; prevent urban sprawl; preserve the natural and built environment. "Quality of life" refers to the town's seven villages, each with its own identity, physical attributes, sense of place, community activities, and culture; the contrast between the village centers and surrounding open areas; the many opportunities for recreation and enjoyment of the outdoors that the town's beaches and open spaces provide; the economic opportunities the town can provide for young people and adults, to be able to live, work, and remain in Barnstable; and a distinctly non-urban lifestyle.
- POLICY #1: Recognize that the capacity of the Cape Cod aquifer to supply drinking water will eventually be reached and that this capacity will ultimately limit the amount of growth the town can support. Although (at least in theory) the town can expand some of its capacity to handle growth-larger sewer and solid waste plant, more roads--the water supply cannot be expanded.
 - ACTIONS: Work with regional agencies to develop a water quality and supply plan, and to ascertain the limit to development imposed by the capacity of the Cape Cod Aquifer.
 - Establish an upper limit based on the capacity of the aquifer.
 - Institute coordinated townwide procedures to annually monitor water consumption and its impact on supply and quality.
- POLICY #2: Prevent adverse impacts of development on natural resources -particularly the water supply -- and the environment, by directing most growth to suitable areas and applying strict control over the impacts of all major developments, and of development in all environmentally sensitive areas.

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Suitable areas for development include areas with favorable soils and slopes for building; proximity to existing roadways; no impairment of views; location outside well recharge areas and outside recharge areas of surface water resources; areas where development would not cause congestion problems in immediate or adjacent neighborhoods. Unsuitable areas from the standpoint of congestion would be those already developed portions of town — such as Craigville — where congestion already exists and where additional traffic generated by new development would have to pass through residential neighborhoods.

 ACTIONS: • Recognize that sewer lines increase the development capacity of adjacent areas, and, therefore, use sewer line location as a growth policy tool. Extend sewer lines in areas that are suitable for the most extensive growth; do not extend them in areas where growth is undesirable. If such areas have problems due to malfunctioning on-site systems, attempt to deal with those problems by assisting owners in financing the rebuilding of individual systems or the construction of small community septic systems.

> The policy to direct growth to suitable areas implies that running sewer lines west from Hyannis toward open land in Marstons Mills would not be acceptable, because such lines would have to pass through public well recharge areas. These areas must be protected against intensive development.

- To protect public well recharge areas, permit only low density development in these areas. Current zoning standards are adequate but a watershed protection overlay district should be considered.
- Prevent development in environmentally critical areas such as wetlands and surrounding ponds and marshes by conservation restrictions and other techniques.
- Institute a review procedure to evaluate the possible impacts of major developments (such as open space residential development) in public well recharge areas, and multi-family and commercial projects wherever they are to be located (see Special Recommendations).

- POLICY #3: Maintain the character of existing village centers by measures which preserve their economic viability and avoid congestion from excessive growth.
 - ACTIONS: Maintain existing zoning density standards in village centers.
 - Do not extend sewer lines to village centers, except Hyannis. Sewer lines increase development capacity.
 - Once present capacity is reached in village areas, direct growth to other areas (see below).
 - Do not permit strip commercial development, which competes with and destroys village center establishments.
- POLICY #4: In order to maintain the town's environment and character, even as growth takes place in areas now open, and to avoid low density "urban sprawl", 1) preserve certain areas as open space using a wide range of conservation and preservation mechanisms, and 2) allow development of other areas to occur at somewhat higher concentrations than now permitted, consistent with environmental constraints.

Widespread low density development of open land, now permitted by zoning, could destroy many of the most valued attributes of the town: the visual contrast between the villages and open areas; open and unobstructed views of salt marshes, fields, and the ocean; open spaces and wild-life areas. Urban sprawl has other disadvantages, such as the need for extensive road systems and paving which increases surface water runoff, and the growth of decentralized commercial activities to serve scattered residential uses.

Less dispersed development, if combined with open space preservation, need not allow more development than present zoning permits. However, if combined with open space preservation, it will prevent urban sprawl and will also help fulfill town goals for water quality, open space, affordable housing, and transportation. Development more concentrated than current zoning permits can take place to varying degrees, ranging from single family homes in Zone RF, on half-acre lots with the remaining half acre retained

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as open space, to multi-family housing. However, because of environmental conditions in the town, only limited amounts of multi family housing will be possible. Because this development strategy minimizes the amount of land used for building, concentration and preservation are mutually reinforcing elements.

This less dispersed development strategy, particularly increased use of OSRD, should be used as much as possible, accompanied by preservation of some amount of open space. Otherwise, open space could disappear given the extent of expected development. Open space preservation efforts must focus on the most important types of open spaces, such as highly visible areas, key views, and multi-purpose areas such as scenic wetlands. Because of fiscal constraints, preservation techniques other than town purchase must be used.

The following are general types of actions which can be taken to carry out the policy for less dispersed development and open space preservation.

- ACTIONS: Encourage greater use of open space residential development (OSRD) for single family dwellings than now permitted by the zoning bylaw (see Housing Section for recommended bylaw change). With OSRD, smaller house lots, but no more of them, are permitted if open space is retained.
 - In addition, encourage some multi-family development, primarily where public sewerage is available, by zoning suitable areas for multi-family and providing public services (see Residential Development section). Some areas now zoned for multi-family --strip business zones--are unsuitable.
 - Encourage the formation of new open space neighborhoods that could accommodate residential and commercial development of the same scale as the town's village centers and, at the same time, provide dedicated open space (see Special Recommendations).
 - Make an assessment of the limits of growth, particularly in the commercial, service, and tourism sector, that Hyannis can accommodate. To that extent, encourage concentration of those sectors in Hyannis rather than in the other six village centers, by permitting higher densities, making better use of the harbor, and making improvements in



circulation, parking, the visual environment.

- Restrict industrial development to industrially zoned areas.
- Limit additional "strip" commercial development by permitting no further extensions of commercial strip zones.
- Encourage preservation of open areas in a linked system of high priority open spaces through public and private actions that include methods other than purchase by the town.

Maximum emphasis should be placed on the extension of the use of OSRD as a way of carrying out the town's general policy to avoid sprawl in newly developing areas.

POLICY #5: Encourage residential and commercial development of the highest quality planning and design. Developments can-and should-add to, rather than detract from, the visual quality of the town. Precedent for design review in Barnstable exists in the King's Highway Regional Historic District.

> Since some judgements as to what constitutes good design are subjective, a town - wide design review policy can best be carried out with advisory, not mandatory standards. Other issues such as safety and efficiency can be handled with mandatory standards.

- ACTIONS: Upgrade zoning requirements for multi-family and commercial development: prevent incompatible uses (such as adjacent multi-family and highway business zones); and require better standards (such as side yards to serve as buffers, more adequate frontage, etc.).
 - Develop advisory design standards for multi-family and commercial uses, and establish an advisory design review procedure.
 - Institute a jointly sponsored public-private campaign to improve the visual quality of existing development, including the addition of landscaping and improved signage. The campaign should focus on convincing businesses that profit will result from improved appearance.

- POLICY #6: Encourage the development of jobs and housing to meet the needs of residents of all ages and income levels. Among the town's attributes is the diversity of its population. To avoid becoming homogeneous, jobs and affordable housing must be available to retain young people and people with modest incomes.
 - ACTIONS: Promote development of more jobs and jobs that are less seasonal and better-paying (see Economic Development section).
 - Where environmental conditions permit, encourage a variety of housing types, including town houses, attached houses by pairs or small groups, small houses on small lots, and multi-family units, which can sometimes be provided more economically than single family houses on lots of 1 acre or more.
- POLICY #7: Recognizing an upper limit to population exists, maintain a stable rate of growth until that limit is achieved. Rapid rates of growth can cause fiscal problems because they require new and expanded capital facilities in a short time. Even though surplus capacity exists in some town facilities (school plant, sewer plant), rapid growth could unduly tax the capacities of others (solid waste). With less and less federal assistance available for capital projects, the town must make special efforts to plan for an even rate of capital spending.
 - Provide no undue incentives to residential developers such as extensive areas accessible to sewerage, or zoning incentives — that would make Barnstable more attractive to developers than it is today. (The recommendation for increased use of OSRD is not such an incentive. Even though some reduction in site development cost per lot is possible, up front costs are much higher than in conventional development.)



Cape Cod is a peninsula surrounded by salt water. All of the region's drinking water comes from one source: the Cape Cod Aquifer, an underground body of water. It is a "sole source" aquifer, replenished only by absorbed precipitation. Because the aquifer is the region's only source of natural potable water, it is essential that both its quality and quantity remain intact: 1) that it be protected against contamination from development, hazardous materials, and other pollutants, and encroaching salt water; and 2) that it be protected against depletion due to insufficient recharge and/or overuse.

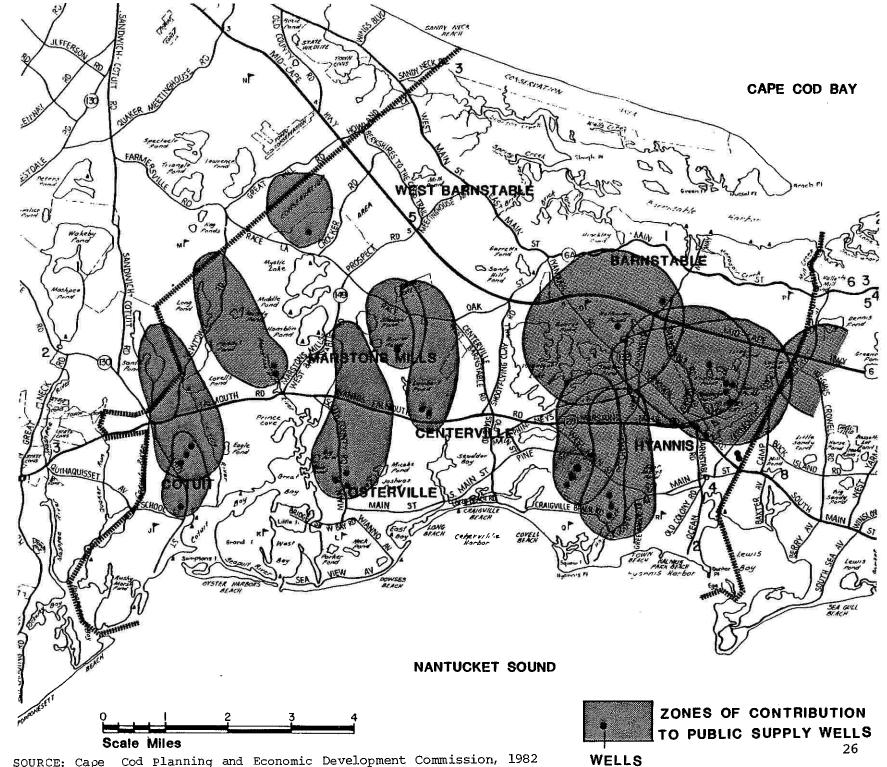
Large areas of Barnstable's land surface contribute absorbed precipitation directly to the aquifer. These regions are known as recharge areas, or Zones of contribution to public supply wells (see following map). Incompatible development of these areas, most of which are not sewered and are Zoned residential or industrial, can damage ground water quality if sources of contamination, such as hazardous waste, highway run off, and sewage effluent are not identified and controlled. Major development is expected in the next 20 years, particularly residential development. Because of the sensitivity of the aquifer, the town and the entire region must face important issues related to growth location, waste water disposal, the landfill, hazardous waste disposal, and run-off of major contaminants.

Water supply is an equally significant issue. The town's population is expected to grow, and demand on the drinking water supply will accompany growth. The number of gallons pumped by the four Barnstable water districts in 1976 was one and half billion gallons; by 1980, it was up to almost two billion gallons. Though the aquifer is a replenishable source of water, desirable water table levels must be maintained by way of an appropriate management plan so that water can be provided for present and future residents and visitors. This plan ideally should be worked out on the regional level.

Barnstable has already begun to deal with some of the important water issues. In 1980, the town passed a bylaw for the control of toxic and hazardous substances, which provides for local regulation of handling, storage and, disposal of hazardous materials and wastes. Since even small amounts of hazardous wastes are potential contaminants, the bylaw is an important step in protecting the town's water supply. The key to making the process work is

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SOURCE: Cape Cod Planning and Economic Development Commission, 1982

adequate staffing of the Board of Health and town support for thorough enforcement. The town also has regulations to prevent leakage of underground fuel and chemical storage tanks, and prohibits uses in the industrial park which carry on significant activities involving toxic or hazardous materials, except by special permit.

Most of Barnstable's well recharge areas are located in unsewered areas zoned for one-acre or one and one-half acre residential lots and in the industrially-zoned Independence Park. In contrast to Several towns on Cape Cod with extensive well recharge areas which have established special overlay zoning districts to place special controls on development in those areas, Barnstable's well recharge areas are generally zoned for one-acre lots. According to water quality specialists of the CCPEDC, densities of one unit per acre are sufficient to accommodate septic fields with the capacity needed to adequately process domestic wastewater, as long as septic systems are adequately maintained. Although densities are adequate, existing zoning does not provide a way to control runoff from residential use. An overlay district could provide that protection.

As to industrial development, existing controls are inadequate. The town's major industrially zoned area, Independence Park, is located almost entirely in a public well recharge area. The Independence Park Corporation, a private corporation, imposes requirements as covenants to cover wastewater treatment and disposal, runoff, and other issues, but no town review process exists in which public water supply concerns can be addressed. Even if stringent wastewater disposal requirements were imposed on industries in the park, development of industries with more than minimal disposal needs could not be handled with on-site disposal. Extension of town sewerage to the park may not be feasible because of limitations of the treatment plant to process industrial wastes. Water quality concerns affect the park in another way as well: development of any new access roads to the park must take place away from the well recharge area.

The landfill and the sewer treatment plant pose additional water quality problems due to their location in possible recharge areas and the possibility that leachates or effluent from these sources could at some point enter well field zones of contribution. The town should continue to monitor the landfill and sewer treatment plant to assess their possible impacts on the drinking water supply.



WATER

Goals and Policies

- GOAL: Since the town's only source of drinking water is the Cape Cod Aquifer, a sole source aquifer and the region's only source of drinking water, preserve the quality of the ground water, and recognize that the level of the water supply will ultimately limit the amount of development that the town can support.
- POLICY #1: Use all town powers to protect the quality of Barnstable's drinking water, including restriction on land use. Although the town's water supply is controlled by four individual water companies, not the town itself, the town must take responsibility for protecting this vital resource. Land use impinges on water quality in many ways; for example, pollutants from residential and industrial development could enter into the ground water supply; large areas of pavement--roads, driveways, parking lots--prevent water from re-entering the ground water supply; contaminants, such as grease and oil, can enter into runoff from roads, which can pose a threat to the ground water.
 - ACTION: Designate public well recharge areas as overlay zoning districts to protect well recharge areas.
 - Encourage OSRD in well recharge areas, by special permit, as long as the overall density does not exceed 80 percent of that allowed in the underlying district. Permit septic fields in the common open space, if necessary, to prevent contamination of the ground water. This action will mean less overall paving and road surfaces, and, therefore, less contaminated run-off returning to the groundwater supply. Permits for OSRD in unsewered areas could require the developer to first present the town with a thorough assessment of potential impacts on the water supply (e.g., nitrogen loading analysis, simulation of groundwater contamination) before approval to develop.
 - Monitor septic system construction, and require periodic maintenance and monitoring after construction, to ensure that systems are adequate to deal with amount of septage. This requires full town support of the Board of Health.
 - Enforce the toxic and hazardous waste bylaw, which also requires full town support of the Board of Health.
 - Require that all development in the Industrial Park be subject to site plan review and occupancy permits to insure proper control of runoff, disposal of wastewater, and other potential threats to the environment.

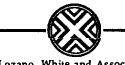
- Require special permit for change of use of motels (such as for residential uses) to ensure that septic systems are adequate for the new use.
- Increase public awareness of the sensitivity of the water supply through public education (e.g., leaflets, a series of newspaper articles, posters).
- POLICY #2: Recognize that the water supply is finite and will ultimately place a limit on the population that the town Can support. Since data is not yet available to establish this limit, regularly monitor water consumption; evaluate water supply data as it becomes available; and, if findings warrant, limit the amount of development that can occur.
 - ACTION: Review the impact of major new developments and the cumulative impact of additional individual single family homes on water consumption. Charge each water company to annually report to the town on the number of new hookups and their impacts on consumption and water quality.
 - To make use of the now emerging data on water supply capacity, the town, through its Water Quality Advisory Committee, should review and monitor the activities of all federal, state, and regional agencies for study and recommendations with regard to the capacity of the Cape Cod Aquifer.
 - When and if studies and data provide a quantitative estimate of water supply capacity, the town water officials should recommend, and the town should establish, an upper limit to the number of building permits that can be issued.

Although the legality of limiting ultimate population is not established, the towns on Cape Cod are in a special situation of having a limited supply of a good that is essential to health, safety, and welfare - namely, water. The federal government, by designating the water supply a sole source aquifer, recognizes that no alternative source to this aquifer exists. Therefore, from a common sense standpoint if not an established legal foundation, the town would be justified in limiting its ultimate population when numerical data supporting it is available.

POLICY #3: Recognize that because the water supply is limited, immediate actions must be taken to ensure that supplies are in balance with demand. Although the ultimate capacity of the aquifer is not jet known, measures to conserve water and planning for adequate future supplies, until capacity is reached, should be undertaken now.



- ACTION: Encourage OSRD in well recharge areas to minimize the area of impermeable surfaces and therefore allow greater amounts of unpolluted rainwater to return to the groundwater supply.
 - Plan in advance for any needed additional wells and wellfields and plan their location carefully in areas that meet public Water supply criteria. For example, the Barnstable Water Company, Which serves Hyannis, has just bought one new well site and is testing another, and is planning purchase of additional property to handle what engineers project to be a 66 percent increase in gallons per day by the end of the century. The water Quality Advisory Committee, responsible for townWide Water quality planning, should assemble data from the independent water companies on the capacity of existing wells, and determine how expected future demands can be met, such as through additional wells and acquisition of wellfield areas and by interim measures such as transfer from companies with surplus to those with deficits.
- POLICY #4: Establish a coordinated means of managing water quality and quantity, both in the town and the region. Four individual companies manage the town's water supply. Cooperation exists on an informal basis, but there are no formal means of coordinating planning.
 - ACTION: At the least, ensure that representatives of the four town water districts continue to meet, perhaps on a more regular basis, to discuss issues critical to the overall town water supply.
 - . Water districts should continue to work with the Cape Cod Economic Development Committee to identify potential sources of problems, both regional and local, with the water supply, and to develop measures to deal with water supply issues on a regional basis.
 - The Water Quality Advisory Committee should work closely with the town water companies to identify Water-related concerns, and move into a more active role in water quality management in Barnstable and the region.



RESIDENTIAL DEVELOPMENT

Housing is and will continue to be the major type of development in Barnstable. Between 1971 and 1981, fully 95 percent of all building permits issued for new construction were residential permits. Housing is predominantly single family: 80 percent of the permits issued between 1971 and 1981 were for single family dwellings, and most older housing consists of single family homes. Among the issues that the town must address for the future are the type, quality, and location of housing to be developed.

Reflecting the preferences of most town residents, and the constraints of the environment, the housing policy of the town set forth by zoning bylaw is to encourage single family homes. Areas zoned for single family residential cover most of the town. Multi-family housing is permitted in only a small section.

Most future residential development will continue as single family units. If this takes place under the zoning standards now in place, the result will be large amounts of land consumed, because most new housing will be constructed in areas of town zoned in one acre lots. Only in two areas, zoned RF (43,560 sq. ft. minimum lots) in the western portion of town, is variation in lot size permitted (Precinct 6 in' Marston Mills and in West Barnstable north of Race Lane). Clustered development may be allowed on these areas by special permit: lot sizes may be reduced by 50 percent from the minimum required in the underlying district, provided that the remaining land is permanently preserved as open space through deed restriction, dedication to the town, or other means approved by the town. The total number of units permitted is 80 percent of those allowed in the underlying district.

This form of development, known as Open Space Residential Development (OSRD), is permitted only on parcels of forty acres or more. Its advantages are that more open Space is preserved than under normal development, and better siting of units on individual lots is possible. No more development than Would occur under conventional development is permitted. The town could obtain more of the advantages of OSRD by expanding the permitted areas and by reducing the minimum parcel requirements. OSRD could be used even in the public well recharge



areas where much of the town's remaining open land exists, as long as overall densities do not exceed those in the underlying district.

Although most new housing will be in the form of single family units, some amounts of alternative housing types may be appropriate to meet growing markets. The amount will be small, however, because of wastewater treatment requirements. Household size is shrinking; the numbers of retired persons and two-worker households are growing. The result is a need for smaller, easier-to-maintain units than those of the past. Economic trends, such as higher construction and heating costs, also favor small units.

Smaller units can be provided at a range of price levels and in many forms: small houses on small lots; attached units in groups of twos and fours; townhouses; and multi-family complexes. Such units, in addition to meeting market demand at varied income levels, have another advantage: less land per unit is consumed and hence more open space can be preserved,

Several developments in Barnstable show that multi-family housing can be attractive and consistent with the character of the town: for example, Colony House apartments on Old Colony Road, and Adams Court, at 200 Stevens Street. In other cases, the town's experience with multi-family housing has not been favorable. Among the concerns have been poor architectural quality and poor site design. An important reason for this poor quality is that multi-family is now permitted only in areas zoned for business some of which are Unsuitable for housing. Multifamily is permitted in Business, Business A, Highway Business, Urban Business and Professional-Residential zones which are located in downtown Hyannis, along sections of Routes 132 and 28 leading into Hyannis, in two small business areas west of Hyannis, and in Osterville Center.

Although downtown Hyannis is appropriate and desirable for multi-family housing, other business areas are not, particularly highway business locations where traffic is heavy and some businesses generate noise and odor. Better locations would be in downtown Hyannis, areas between business and single family zones, and in the form of small portions of new open space neighborhoods. Better locations for multi-family housing of all types, plus new design and site review procedures to insure quality, would help the town meet current housing needs as well as its goals for open space preservation.



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RESIDENTIAL DEVELOPMENT

Goals and Policies

- GOAL: Meet the housing needs of current and future residents of all income levels by providing a variety of housing types in a way that maintains the scale and quality of life in Barnstable and preserves the visual and natural environment.
- POLICY #1: Meet both housing and environmental needs by encouraging less dispersed development, where possible, consistent with water resource protection, to preserve open space and avoid "sprawl".
 - ACTION: Encourage the use of Open Space Residential Development for single family dwellings by permitting it in all areas of town on parcels ten acres and greater by special permits. Overall densities in the underlying districts should be retained so that no increase in the overall amount of development will occur. OSRD is now permitted in only two sections of town and only on parcels of forty acres or greater, which limits its use.

OSRD will not result in more development than permitted in underlying zoning, nor will the open space in an OSRD project subsequently become available for development. Deed restrictions will prevent this. OSRD will not provide incentives to developers that result in more rapid growth. Although site preparation costs will be lower in an OSRD than in a Conventional development, this advantage will be offset by the much greater up front Costs involved in planning and developing the entire OSRD as a single unit.

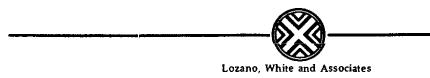
OSRD will be one of the most important tools the town has to preserve open space and avoid sprawl. However, OSRD will be beneficial only if the open space preserved is valuable to the town (i.e. is visible, conserves environmentally critical areas, etc.) The town can assure that valuable open space is preserved by using as criteria for special permit that the open space to be preserved meets the conservation goals and policies of the town and is part of the system of linked open spaces to be developed by the Conservation Commission. (See Section On Open Space and Natural Resources).



- Focus some new development in "open space neighborhoods" rather than in the currently authorized sprawled pattern of growth. These would include single and multi-family housing, small scale shopping, and would be surrounded by Open space dedicated to the town. (See Special Recommendations).
- POLICY #2: Where water supply and environmental conditions permit (see below), encourage development of alternatives to single family homes on relatively large lots, including smaller units that better meet the emerging market demand for compact units.
 - ACTION: Permit greater variety of housing types than the single-family/multifamily distinction: townhouses, attached houses in pairs and groups; small houses on small lots. Within these general housing types can be a range of price and finish, from luxury to "basic" units.
 - Establish new multi-family zones in suitable locations. Maintain multi-family as a permitted use in downtown Hyannis, but eliminate it as a permitted use in existing highway business zones. Multi-family housing can serve as buffers between single-family and business uses, and can contribute to the vitality of Hyannis Center. Possible new locations include portions of routes 28 and 132 at the edges of commercial zones.
 - In the future, consider allowing multi-family townhouses, etc., in open space residential development areas, as long as overall density requirement is maintained and adequate methods of wastewater treatment are provided.
- POLICY #3: Insure that residential developments--particularly multi-family developments-do not adversely affect the environment. Of chief concern are impacts on water quality and traffic.
 - ACTION: Require all multi-family development to be subject to special permit: A special procedure wherein the Planning Board Would coordinate review by all town agencies of aspects such as the extent of paving, runoff control, entrance and egress on major roadways, water, compatibility

with the existing character of the community, and other impacts.

- Require that multi-family development be served by public sewerage, or on-site "package" treatment facilities if they become permitted in the CommonWealth. Since public sewerage is likely to be available only in the environs of Hyannis, most multi-family development will take place in Hyannis. Package treatment plants offer more flexibility in location. While not common in Massachusetts, these plants are accepted in other areas, and technologies are improving. The town will have to review any such proposed plant carefully.
- POLICY #4: Insure that additional multi-family residential development is of high design quality and is consistent with the scale, density, and rural quality that composes part of Barnstable's quality of life.
 - ACTION: To insure good site use with adequate open space, upgrade zoning standards for multi-family dwellings, including setbacks (to 100 feet), increased sideyard requirements (to 50 feet); reduced coverage by building and paved areas (to 25 percent).
 - Institute a design review procedure for all multi-family projects. The review process will be mandatory, but the opinions rendered by the design board will be advisory.



OPEN SPACE AND NATURAL RESOURCES

Open space and natural resources are essential elements of the quality of life of Barnstable. To a large extent, the town's natural resources -clean air, fresh and salt water, and many types of wildlife -- depend on the existence of the town's natural open space -- beaches, dunes, marshes, bogs, fields and woods. Therefore, the futures of the two types of environmental resources, open space and natural resources, are closely related.

While open space serves as a wildlife habitat, it is also important to town residents in many direct ways: for recreation, agriculture, as a filter for ground water, and views. Taken together, the different types of open spaces are largely responsible for the town's rural character. Preservation of this open space, and thus the town's unique character, is a goal strongly held by the town. Other, more urban open spaces may be developed, areas such as parks, gardens, and playing fields, as the town's population grows.

The foremost problem regarding open space and natural resources is clear: if anticipated population growth and development occurs, open space will be lost. The issue is how the town can conserve open space to protect its character and its natural resources. Given budgetary constraints, selectivity, efficiency, and creativity will be essential.

In 1981, the town's Conservation Commission completed an Open Space Policy, which was adopted by the town in August of that year. This is a useful starting point for a comprehensive open space plan for the town, and its existence should be made widely known so it can be used where appropriate.

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OPEN SPACE AND NATURAL RESOURCES

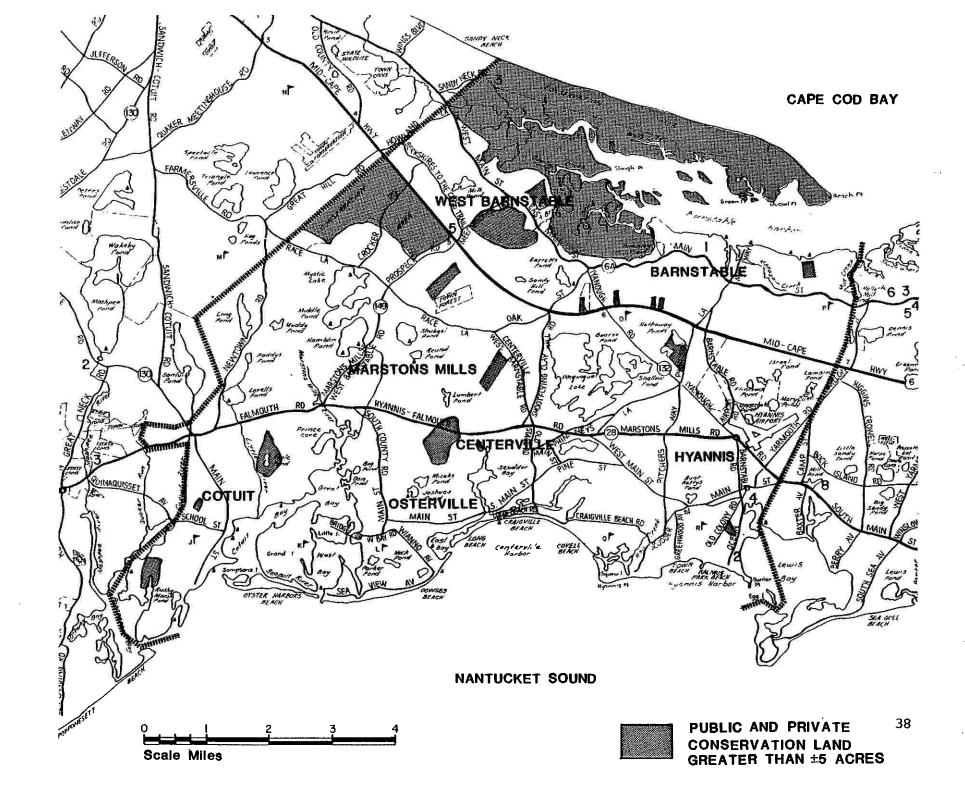
Goals and Policies

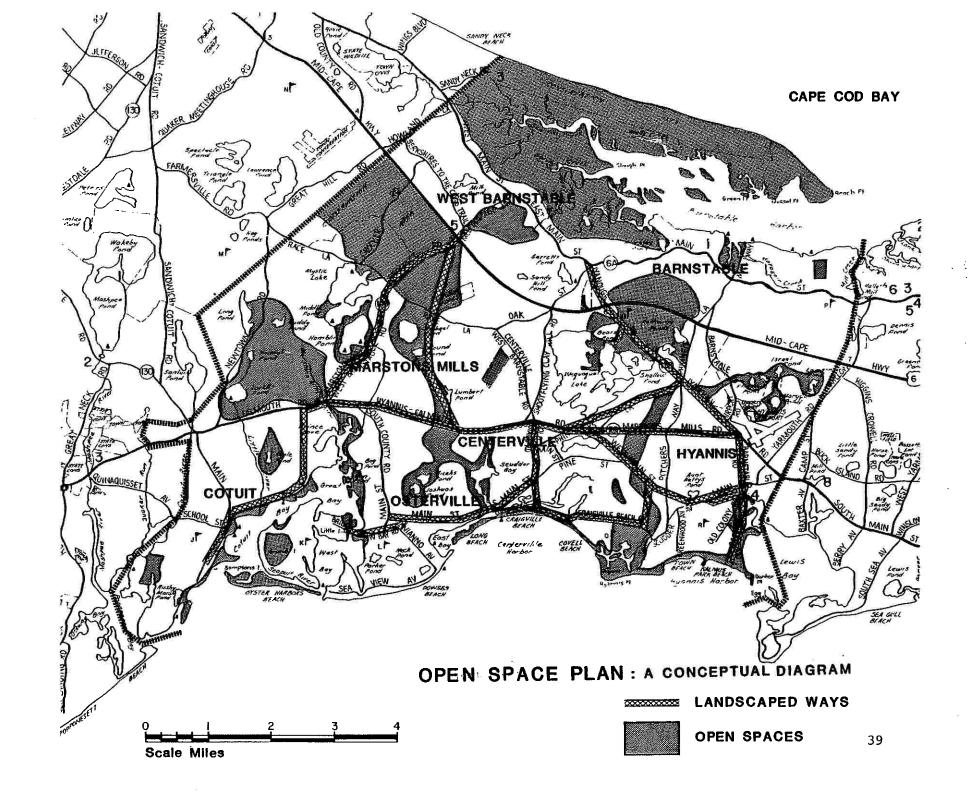
- GOAL: To conserve areas of the town that are most significant to protection of natural resources--particularly the ground water supply, visual quality, and outdoor recreation. In light of anticipated development and fiscal constraints, the town must focus its efforts on areas where preservation will be most beneficial (i.e. serve multiple purposes) rather than on maximum numbers of acres.
- POLICY #1: Base open space conservation efforts on system of varied types of open space located throughout the town and, where possible, linked together for visual impact. Optimal use of open space would benefit many people and serve multiple purposes: open spaces between developed areas, which can serve as buffer zones; areas around ground water ponds that provide wildlife habitats, scenic Views, and recreation areas; beaches; areas that afford good views and are Very accessible to large numbers of persons; or strips along widely-travelled roadways, to create the illusion--if not fact--of open spaces.
- ACTIONS: Identify for preservation those open space areas that are consistent with the policy above.

The town's present open space consists of land already owned by the town, such as the 1776 land (336 acres) and the West Barnstable conservation area (1114 acres); beaches and marshes (including the Great Marshes) which are unbuildable; privately-held conservation land; and other private lands, such as golf courses and agricultural land (major conservation areas are shown on the following map). The proposed open space system, shown on the conceptual "Open Space Plan" map, includes links between all present open spaces, to provide a continuous system of undeveloped land. The linkages are proposed as landscaped ways, perhaps purchased by the town through right-of-way agreements, that the town would maintain as pedestrian paths or, perhaps, bike paths.

• Formulate the open space system by setting priorities for important areas based on numbers of persons who will benefit, cost, and purposes served. The selectmen, Conservation Commission, Parks and Recreation Department, water companies, and the public should be involved in this plan. (A valuable information source for this effort will be the section on Barnstable in the Cape Cod Oil Spill Contingency Plan, by the CCPEDC.)

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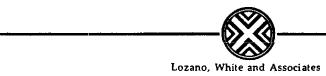




- Conservation Commission and Department of Parks and Recreation should work together to formulate plans for public areas that provide both an adequate mix of uses and maximum natural resource and recreational benefits.
- POLICY #2: Conserve the system of priority open spaces through a wide variety of techniques.
- ACTIONS: Encourage owners of agricultural land to maintain their land open and in agricultural use, by use of the Farmland Assessment Act (Ch. 61A) designation and the agricultural development rights program.
 - Work with individual owners of critical open space areas to obtain conservation restrictions.
 - Establish a conservation trust in the town to encourage private citizens to preserve the natural environment of the town.
 - Use, when possible, grant programs that will match town funds for purchase of priority open space, such as the Federal Land and Water Conservation Fund, the Commonwealth Self-Help Fund, etc.
 - Obtain scenic easements from owners of land with access to prime views.
 - Take actions recommended elsewhere in this document to obtain open space along with less dispersed development, using OSRD and other techniques. Permanent open space can be obtained at no public cost.
 - Make OSRD subject to special permit, as recommended above, with one of the criteria that the open space to be preserved be consistent with the open space system outlined in the preceding policy.
 - Acquire easements from the Commonwealth along the edges of rights-of-way or state roads, to plant trees, landscape, and maintain as "boulevards." These green strips can link open spaces throughout the town.
 - Designate roadways as scenic highways to protect against unwanted widening and tree cutting.



- POLICY #3: Use the system of priority open space areas to evaluate the retention or sale of lands currently owned by the town. Sale of lands that do not meet open space criteria, or benefit the town in other ways, could generate revenue to acquire more valuable areas.
- ACTION: Inventory and evaluate the retention of all town-owned lands, including tax title lands (see fiscal considerations); Conservation Commission could work with the town assessor to determine the value of town lands to be disposed of.



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ECONOMIC DEVELOPMENT

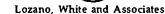
Goals and policies for the economic development of Barnstable are presented in several sections below in order to deal with both general policies that apply to all aspects of economic development and issues specific to individual economic sectors. First is a brief sketch of the town's economy, and general goals and policies. These are followed by sections dealing with tourism and commercial development, new industries, and commercial fishing.

Overview

In contrast to many areas that depend on industry for outside income, the entire Cape Cod economy is largely dependent on "household" incomes: incomes of tourists, second home owners, and retired persons. The result of this dependence is that the economy is dominated by commercial trade and service enterprises. (See Table I in Appendix.)

The prevalence of tourism and commercial activities reflect the town's popularity as a vacation and retirement area and its role as the commercial and services center of the Cape. Although the tourist and economic sectors contribute to the economy, dependence leads to some serious economic problems because jobs are frequently seasonal and low paying. The result is that many town residents are unable to earn sufficient yearly income in local industries. Some work outside, others leave the area, still other stay and exist on marginal incomes. Unemployment is high; in 1982, Barnstable's annual unemployment rate was 9.3 percent, while the Massachusetts rate was 7.9 percent.⁸ Despite these problems, tourism and retail are likely to remain important parts of the economy.

Some diversification of income sources could be obtained if other types of businesses were encouraged by the town. First, office-based industry (such as "back office" financial operations), small manufacturing firms, and specialized firms might be attracted to the town's environment. Industrial growth has taken place only slowly to date but could pick up if the town takes steps to develop a skilled labor force and makes land and capital available. Further diversification could stem from medical, accounting, and legal services, which have been growing



rapidly in the recent past. Growth is likely to continue since Barnstable, and Hyannis in particular, is the major service center for the entire Cape. These activities are non-seasonal and "clean". The town, in order to promote growth of service industries, will have to see that traffic circulation and parking are adequate. Higher permitted densities may be needed in Hyannis, along with a plan for its future growth and growth limits.

The commercial fin and shell fishing industry is small in Barnstable compared with other Cape Cod ports. Future expansion of the local fishing fleet is possible, if docks, on-shore facilities, and other support are provided. In addition, the construction industry is an important economic sector, due to the amount of residential development in the town. The industry is likely to maintain its strength due to the expected residential growth.

Tourism and commercial activity will continue to be major economic sectors in the town. Actions are needed to improve these sectors, and to protect the natural environment and other aspects of the town that draw tourists, second home owners, and retirees in the first place. Actions might include ways to encourage better quality, rather than more, commercial and tourism activity, and ways to draw from the town's own assets, such as agricultural land and proximity to the ocean. In addition, efforts are needed to attract to the town less seasonal and better paying industries; such as small manufacturing industries, offices, commercial fishing, and specialized agricultural ventures such as greenhouses, fish hatcheries, fruit cultivation. These should all be integrated in a way that preserves the town's character and natural environment. Agriculture and fishing in particular can both stimulate the economy and enhance the rural, scenic, and seaside qualities of the town.

GENERAL GOALS AND POLICIES FOR ECONOMIC DEVELOPMENT

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GOAL: Expansion of existing industries and development of a variety of new ones that provide jobs and incomes for town residents and do not adversely affect natural resources and the town's quality of life. The types of jobs needed are:

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- better paying;
- year round, or counter-seasonal, to take up the winter slack; and
- suited to the existing--or upgraded--skills of town residents.

Implicit in this goal is not only that development not harm the environment, but that there be an ultimate limit to the amount of development in order to preserve the town's character and environment.

POLICY #1: Take town actions to provide a suitable environment for and help meet the basic requirements of the types of businesses and industries most promising and most realistic for the town.

> The town must maintain a high quality natural environment (of particular importance to tourist based sectors), provide sites by maintaining zoning in certain areas of town for various kinds of business and industry, and provide adequate infrastructure and services such as roads and sewerage. One such possible action is development of a new roadway from Route 6 to Independence Park. The town must encourage development of a qualified labor force by supporting sound public education, both in the schools and in working with Cape Cod Community College, including development of new programs to help students adjust to emerging technologies. The town Must help meet capital requirements by working in partnership with the private sector to use the full range of available public programs (UDAG, CDAG, etc.).

Amont the promising types of industries and business for the town are:

- small processing and manufacturing based on local resources such as fish smoking and boat repair and building;
- fin fishing, shell fishing, and support facilities (see below);
- agricultural and horticultural operations;
- family-run tourist facilities, in existing dwellings, such as bed and breakfasts or "country inns";



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- medical (including expansion of the Cape Cod Hospital), legal, accounting, and other services;
- financial and insurance processing operations; and
- cultural activities: music, film making, theatre, arts.
- POLICY #2: Insure that the location and impacts of economic activity do not damage the visual and natural environment, in particular the water supply, nor contribute to urban sprawl. This policy implies that the town must apply strict standards, requirements, and review procedures to industrial and commercial activities and must take steps to locate major activities in concentrated rather than scattered or strip areas. For small contractors, builders, carpenters, and the like, permit storage and other facilities not normally located on residential lots by special permit (under Section P, zoning bylaw) when it can be shown the use will be screened from abutters, not generate noise, odor, or traffic, and have any other adverse effect.
- POLICY #3: Aggressively yet selectively promote economic development by emphasizing the unique advantages of the town. Almost every city and town in the Commonwealth needs economic development of some type, so the competition is stiff. Among the aspects the promotion efforts should emphasize are lifestyle, skills of retirees, resources of the community college, an active tourist trade, and a growing rather than declining population.

TOURISM AND COMMERCIAL DEVELOPMENT

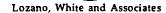
Issues and Opportunities

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Barnstable serves as the "hub" of the Cape, providing commercial services to most of the Cape as well as to its own residents. In addition, town establishments provide a wide variety of goods, services and facilities to tourists.

The importance of tourists and second home residents to retail-based activity in Barnstable is illustrated by retail trade statistics. Measures of retail sales per year-round resident show that spending levels



are very high in Barnstable when compared with the state as a whole for most types of goods--reflecting the contribution of tourists and summer residents. The figures are shown on Table 2 in the appendix.

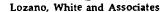
While commercial activities and tourism dominate the area's economy, and some establishments in these sectors are thriving, there is cause for concern. Tourism is not a stable source of income because of its seasonal nature and its sensitivity to economic factors and the weather. In addition, retail trade in an area heavily dependent on retirement incomes suffers when incomes do not keep pace with inflation.

The seasonal nature of tourism is evident from the high seasonal fluctuations in employment in sectors that cater to tourism. Statistics from the Mass. Division of Employment Security show that in 1980, the number of summer jobs, retail and services, in Barnstable was higher than the number of winter jobs by 27.3 percent and 25.3 percent respectively. While increases from winter to summer were shown in all sectors except local government, tourism and retail changed the most and together accounted for fully 84 percent of the total winter/ summer change in the town's employment.

The year-to-year instability of tourism and retail is illustrated by recent data, shown on Table 3, for Barnstable County (town data is not available). Spending on meals in Barnstable County varied between 1977, '78 and '79 as follows: \$86.8 million, \$129.0 million and \$117.8 million. In addition, these recent trends show tourist spending is not keeping up with inflation, even though individual establishments are prospering.

Table 3 also shows that:

- Tourist spending, as indicated by room sales, declined in "real" terms (that is, when inflation is taken into account) between 1975 and 1979.
- Retail sales grew by only 3 percent between 1976 and 1980.
 In contrast, the average rate of population growth during that three year period was 24 percent.
- Incomes of Barnstable County residents did not keep pace with inflation (retail sales did not show a corresponding drop because of spending



by off-Cape visitors).

The causes for the drop in tourist spending, slow growth of retail sales, and the declines in income include:

- lack of facilities that cater to new trends in market demand;
- congestion and environmental problems such as heavy traffic, unattractive signs, poor building design, and other visual factors that discourage tourists from coming to the area; and
- heavy reliance on retirement incomes, many sources of which do not keep up with inflation.

The fall of 1982 closing of four Hyannis restaurants and stores was in part due to these factors, though competition from elsewhere in the town may have also been a factor.

Improvements in overall performance of commercial and tourist enterprises are possible. Environmental and congestion problems can be dealt with; new and improved facilities can be provided; and new jobs can be generated. Goals and policies to this end are presented below.

GOALS AND POLICIES

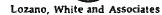
- GOAL: Improve and strengthen tourism and commercial activities so that they contribute to the economic well-being of Barnstable residents, but only to the extent that the quality of life for residents and visitors is maintained. This goal can best be achieved not by encouraging more tourists but by providing facilities and a high quality environment to draw higher levels of spending.
- POLICY #1: Promote a viable tourist-commercial economy by carrying out the policies set forth elsewhere in this document for preserving the town's natural environment and quality of life. Visitors will not come to Barnstable if open space disappears, congestion increases, and building is unattractive.

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- POLICY #2: Take maximum advantage of Hyannis Harbor as a place for people to enjoy. Now heavily used for parking and loading related to the Island ferryboats, the harbor has great potential for recreation but is underused. The private sector is likely to bring new tourist-related development, such as hotels and restaurants, to the area. The public role in making the harbor area more attractive to visitors, and, therefore, to potential developers, will be to take actions to provide more green spaces along the harbor, better views of the water, and pedestrian access along the shore. New development would greatly improve the area's potential as an economic resource.
 - ACTIONS: Require through zoning that any new developments provide for public access along the shore and unobstructed views of the water.
 - Improve the town-owned waterfront areas, Bismore and Veteran's Parks and the Town landing, in ways that will improve the harbor's visual and economic potential; in particular, develop the Town landing for commercial fishing (a tourist attraction as well as an economic benefit) and make Veteran's Park into an open space area.
 - Work with the Steamship Authority and other agencies to assess the feasibility of relocating the ferry docks (and, if warranted, the commercial fishing fleet) to the outer harbor. Since the Steamship Authority is expected to continue to expand its Hyannis operations, the traffic and parking needs will become more severe and the harbor more congested.
 - Relieve traffic and parking uses in the harbor area by providing parking for boat passengers at the railroad land and by working with the Steamship Authority to run shuttle bus services between the lot and the docks. The Authority now provides this service to the Woods Hole docks and passengers accept it.
- POLICY #3: Focus public and private resources on ways to improve the efficiency and attractiveness of downtown Hyannis, so that it can become a more viable retail and commercial area.

All the villages have a stake in the viability of downtown Hyannis; from an economic standpoint, its health will expand the town's tax base. From a village identity standpoint, Hyannis, which is already highly developed but not used to its full potential, is attractive for redevelopment and may divert commercial growth pressures in other areas. Improvements and upgrading of existing development, rather than expanding to new areas, will both revitalize the area and concentrate growth. Needed actions include parking and traffic circulation improvements, design improvements, and a comprehensive plan for the future of Hyannis' commercial and tourism future, since there will be a limit to how much Hyannis can grow.

- ACTIONS: Provide adequate parking for workers and shoppers in the village by better management of existing parking area; provide adequate Signage to short-term spaces in area lots, such as the North Street and West End lots, which are now underused; use Ocean Street for long-term parking for downtown employees, thus cutting down on traffic on Ocean Street; provide extra East End parking at the railroad property; improve existing lots in terms of lighting and access.
 - Improve the visual environment of the village and its link to the harbor by developing a visual and/or pedestrian link to the water. Possibilities include a pedestrian way along Ocean Street and/or a pedestrian link through the Common. A strong visual link will be difficult to achieve because of the physical distance and the existing buildings, which block the view. Any new development should be encouraged to provide unobstructed views.
 - Strengthen the entrance to the downtown at the corner of Old Colony Road and Main Street by providing good signage, perhaps with a directory to local businesses and public facilities.
 - In the long term, consider consolidation of the developed section of Main Street by permitting the change of use of some retail buildings at the west end to multi-family and/or



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office. Main Street may be too long to be a pedestrian oriented retail area, and may contain more retail space than the downtown can support. Further, consolidation would make possible a pedestrian area at the east end of Main Street.

- POLICY #4: Work in partnership with the private sector to develop facilities geared to recent and emerging market demands. Every economic sector experiences changes that result in outmoded facilities, and tourism is no exception. Cottage type motels may be less successful now than bed and breakfast facilities and specialized retail complexes.
 - ACTION: Enable development of a private campground by a Zoning amendment to make campgrounds a permitted use.
 - Give full support for suitable private sector commercial and tourist projects, particularly in Hyannis Harbor, by obtaining state and federal loan and grant programs to leverage private investment. Suitable projects are those that would be consistent with town goals and standards.
- POLICY #5: Encourage (and require) high standards of site design and architectural quality of commercial facilities throughout the town.
 - ACTION: Require that all new commercial developments and significant alterations of existing development be subject to design review. To do this, institute a design review procedure by establishing design review boards in each village (by Selectman and village association appointment) and charging each board to develop design guidelines appropriate to each village. While the review would be mandatory, the recommendations would be advisory.
 - To improve the visual quality of the extensive amount of development now in place, mount a campaign, to be sponsored jointly by the Selectmen, the Chamber of Commerce, and the various village associations, to bring signage into conformance with current zoning requirements and to improve



landscaping. Business organizations' support for these measures would be invaluable in convincing individual establishments that better visual quality will result in higher profits.

- POLICY #6 : Insure that commercial uses pose minimal impacts on the built and natural environment.
 - ACTIONS : Establish standards and review procedures more stringent than in the current zoning bylaw for all new commercial developments and major expansion of existing development. These standards and review procedures would deal with potential impacts on the toWn such as traffic congestion, the visual environment, and water supply and quality. General standards (such as for setbacks, on-site parking, etc.) in the zoning bylaws are needed, as Well as project-by-project review for specific factors such as location of entrances and egresses.
 - In business districts, require site plans to show that adequate access exists for service and fire vehicles and that adequate public parking exists close enough to serve the site.



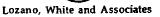
NEW AND EXPANDED INDUSTRIES AT INDEPENDENCE PARK

Issues and Opportunities

Industries in Barnstable other than business, tourism and fishing are for the most part located in Independence Park. Issues dealing with the park are of special importance because it is the only industrially zoned area of significant size and because of environmental concerns such as the town's water supply. Development of the Park has proceeded slowly in the nearly twenty years of its existence: of the 800 acres in Independence Park, only 30 have been developed to date. According to officials at the Park, employment stands at between 800 and 1000, 4 to 6 percent of the 16,932 total employees in the town.

The perception by industry that the Cape in general is a resort area unsuited for industry may be part of the reason for the modest industrial growth. Nevertheless, the major reason is that the entire Cape is relatively remote from major markets, suppliers, and labor. Despite these factors, there are indications that some additional development is possible. A growing number of industries, for example, do not need to be close to supplies, markets, or highway and rail access, industries such as research or communicationshased firms that rely on high-speed telecommunications as opposed to product-oriented industries that require transportation to and from physical plants. The town may be able to attract some of these industries and, in light of environmental considerations, these types of industries should be encouraged, as they are relatively "clean".

The town's work force (residents who work) is relatively small because of the large retirement population (45 percent work, as opposed to 55-60 in other areas of the state). Many of these residents work outside of town. The 1980 census showed that out of the 12,520 residents with jobs, 22 percent, or 2,750 people, worked outside the town. Of those 2,750 people, one third, or 919, worked off-Cape, and the remainder worked elsewhere on the Cape. Some of these 2,750 people might be drawn to new local firms, given appropriate work opportunities and competitive wages. In particular, the town is a net exporter of jobs in the fields of fishing, construction, and finance, insurance, and real estates. While this datamust be used



with caution, the conclusion could be drawn that there are workers in these fields who could work locally if jobs were available (see following section on fishing). The surplus of construction workers is not significant for these purposes because job locations change frequently.

Another source of potential workers is the unemployed; Barnstable's unemployment rate is high relative to state rates. In addition, workers now holding seasonal or low-paying jobs may be drawn by new firms. The experience of local firms in finding employees has been successful, and employment agencies report that they have numerous clients looking for work.

Despite evidence that growth of certain industries is possible, the potential should not be overestimated. Only a limited number of industries can ignore access and location, and the town's excess labor supply is not overly large. While some 900 residents commute off-Cape, there appears to be a net deficit of workers; that is, more jobs than residents who work.¹⁰ Though not strictly comparable, the data indicate that large supplies of excess labor do not exist and, hence, large labor-intensive operations are unlikely to be attracted to the town. Further, full development of the Park will involve substantial costs, in promotion, planning and review, and municipal services. Large amounts of industrial growth would also be inconsistent with the goals of maintaining the town's scale of and quality of life. In summary, some growth, though limited, in new and existing industry appears likely, and is consistent with the fundamental town goal for growth only to the extent that the quality of life--natural resources, scale, open space, small villages--is maintained.

A second issue deals with the location of industrial growth. Independence Park, now the location of most industries, is the only area of town where additional growth is permitted. Concentrating growth in the park is consistent with the town's goals for preventing urban sprawl, for the 800-acre park has an excellent mid-Cape location and good access to Route 6. The park is, however, located in a public well recharge arca. If additional growth of the park is to occur, measures must be taken to preserve the ground water.



GOALS AND POLICIES

GOAL: To diversify the town's economic base, develop new and expanded year-round industries at Independence Park, in a manner consistent with the environmental and other goals of the town.

As indicated above, the most realistic potential industries for the town and for Independence Park are relatively small firms that do not require large numbers of workers, that benefit from or value highly a pleasant, semi-rural environment, and that do not need immediate access to markets and suppliers.

In addition to the general economic development policies at the beginning of this section is the following policy:

- POLICY #1: Take town actions to insure that industries in the park cause no damage to the environment.
 - ACTION: Establish through the zoning bylaw a special review process that would apply to all new development, expansions, and public projects that take place in the park, in order to prevent adverse environmental impacts, particularly on the public water supply.

Although the Park Corporation now conducts thorough reviews, a town procedure would give all affected town boards and the public an opportunity to review projects and establish mitigating measures. The public interest in the park is clear, both from its potential as an economic resource and its location in a public well recharge area. Project-by-project review is needed because the requirements and effects of each type of industry that might locate in the Park cannot be foreseen. (For example, runoff generated at particular sites, oil spills generated by vehicles, waste water disposal, etc. See Special Recommendations.)

• For the long term, evaluate connecting Independence Park with the public sewerage system if warranted by the amount of development that occurs. Just as developers are required to pay the cost of sewer line extensions to residential projects, the Park could be required to pay for extending the line into the Park. Study is essential to determine if the sewer plant could process industrial waste.



- Carefully evaluate the possibility of a direct interchange to the Park from Route 6. Plans would be subject to site plan review and should be carried out only if an environmentally acceptable location and runoff containment can be provided, and if planned industrial development warrants it.
- Establish a town advisory board under the direction of the Board of Selectmen to work with the Independence Park Corporation to develop solutions to issues involving the Park and other agencies, and to plan the future of the Park. Issues such as airport runway expansion, a new interchange, public sewerage, and promotional techniques could be addressed.

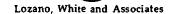
COMMERCIAL SHELL AND FIN FISHING

Issues and Opportunities

Commercial fin fishing and shellfishing have recently been small in Barnstable. According to local fishermen, there are now but ten commercial fishing vessels that use Hyannis Harbor as their home port. The major reason is the lack of berthing space and onshore support facilities. Shell fishing, too, is a small industry. Other Cape Cod ports, such as Provincetown, Sandwich, and Harwich, have far larger commercial fishing industries, with a total of 125 boats.

Market conditions for expanded commercial fishing in Barnstable are favorable and commercial fishing may have the potential to provide an important source of revenues for the town. Hyannis Harbor is far closer to major fishing areas than New Bedford and other major fishing ports. High costs of fuel makes this a major advantage, since vessels from Hyannis could market their catch at lower costs than their competitors.

The economic benefits to the town would be considerable. Most fish and shellfish taken on Cape Cod is sold off-Cape, but most suppliers and support services are bought on-Cape. Thus, income from fishing has a strong "multiplier" effect, which greatly extends local economic benefits. Expanded commercial fishing has other advantages. The shell fish industry is not capital intensive



and is affected only by the coldest weather (fin fishing is somewhat seasonal). Further, commercial fishing can be a tourist attraction, if good maintenance practices are used to keep the area clean and odor free. The presence of fishermen and scallopers adds to the seaside ambience of the town.

GOALS AND POLICIES

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- GOAL: Expand commercial fishing to improve the town's economy, and do it in a way that is compatible with and supportive of tourism and the character of the town.
- POLICY #1: Encourage the expansion of the commercial fin fishing industry.
 - ACTIONS: Provide dock facilities for 18-20 commercial fishing vessels at the town-owned beach at the end of Lewis Bay Road. Plans exist for berthing of both commercial and recreational boats; these plans should be revised to provide for exclusive use by commercial fishermen. State funds to assist this project may be available with passage of a \$40 million pier improvement program Now before the legislature.
 - Work with legislators and federal representatives to obtain support for Corps of Engineers dredging to deepen the channel between Kalmus Park and the inner harbor.
 - Encourage development of private on-shore service facilities adjacent to the Lewis Bay Road Park (ice, gas, storage, etc.)
 - In the long run, if commercial fishing expands and study warrants, relocate fishing (and ferry) docks to the outer harbor, to provide additional facilities and relieve inner harbor congestion.

POLICY #2: Encourage development of the shellfishing industry.

ACTIONS: • Provide areas for shellfishing by designating areas of water bodies for commercial use, thus reducing conflicts between recreational and commercial fishermen. The Board of Selectmen has the power to do this.

Insure that fishermen are aware of the provision that they -



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be able to reach the water through privately-owned land if they are carrying fishing equipment (rakes, poles, etc.). This can be done by public education (e.g., letters to the editor from selectmen or the shellfish warden).

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• Encourage development of mussel and oyster culture by working with the state Executive Office of Environmental Affairs, Division of Marine Fisheries, Woods Hole Oceanographic Institute, and other informed bodies.



TRANSPORTATION AND TRAFFIC

Transportation problems in Barnstable are serious. Traffic congestion, inadequate parking, noise, inconvenience, and lack of safety are all detrimental to the town's environment and to its tourism industry.

In general, these problems are most serious now in and around Hyannis. If they become worse, Hyannis will become "strangled" with traffic and unable to serve as the town's commercial and tourist center. This would damage not only Hyannis, but the other villages as well, for they would experience unwanted commercial and tourist growth.

These problems must be addressed immediately. Many of the problems occur at "peak" times--mid-day in summer, at weekend ferry departure time, for example. Further, problems do not exist all year long. Traffic counts show that traffic volume often more than doubles in the summer on major roads such as Route 6A and Route 28. Therefore, solutions that do not impose excessive costs on year-round residents are needed.

Broader, local term issues must be addressed as well. The expected population growth will place major demands on existing transportation facilities. By the year 2000, the year-round population is projected at approximately 50,000--only 13,000 less than the current peak summer population. Peak summer population is projected at 96,000. Problems will become more widespread than they are now.

It is unlikely that major new facilities--such as major roads to intersect with Route 6, or other east-west routes--will be built. The town will need to take a low-capital approach to meeting transportation needs, focusing on ways of making better use of existing facilities and reducing reliance on autos.

GOALS AND POLICIES

GOAL: In the short term, improve existing transportation deficiencies, including circulation, parking, and access in and around Hyannis so that the downtown can function as a viable commercial and tourist center. In the long run, provide for expanded transportation needs with emphasis on low capital solutions, reducing reliance on autos, and land use practices consistent with transit and para transit (van pools, car pools).

- POLICY #1: Take immediate steps to relieve congestion in Hyannis by better managing the traffic flow and reducing the number of cars that travel in and through the village. Cars travel through or stop in Hyannis for various purposes: shopping; island ferries; beaches; the Cape Cod Hospital. Some of this volume could be reduced by re-routing traffic around the village and providing centralized parking at locations outside the immediate downtown, with shuttle busses to common destinations.
 - ACTIONS: Purchase the 10.8 acre "railroad property" from the Commonwealth (negotiations are underway) and, in the near term, develop centralized parking facilities for ferry passengers and shoppers. (In the long term, this area can serve as a multi-modal transfer point for the entire region.)
 - Work with the Steamship Authority to develop a shuttle bus service to the ferry dock using school busses, similar to the service available to the Woods Hole dock. Experience there proves this service is workable and accepted by boat passengers.
 - Support the recently instituted shuttle bus service through downtown Hyannis to other areas being provided by a consortium of private bus companies.
 - Re-route certain major traffic flows to avoid downtown Hyannis. Possibilities: for Craigville Beach traffic, Shoot Flying Hill Road to Centerville; for airport and hospital traffic, Exit 7. This would divert traffic from heavily congested Route 132. Re-routing can be accomplished with signage clearly identifying 'best routes.'
 - To improve traffic flow, improve signage to parking lots and individual establishments, so that drivers unfamiliar with the area will be able to go directly to their destinations rather than circling downtown in search of parking or specific businesses.
- POLICY #2: Make parking more accessible and convenient for downtown shoppers, visitors, and workers, by better management and use of existing parking facilities.
 - ACTIONS: Improve signage at automobile access points to parking lots, particularly on North Street, including directory of establishments in the block.



- Improve and create walkways to back parking lots, including landscaping, lighting, paving and signage.
- To alleviate congestion at entranceways, establish systems to inform drivers as soon as downtown parking lots are full, perhaps by posting signs.
- Improve enforcement of existing parking regulations. Employees tend to occupy prime parking spaces that are then unavailable for shoppers.
- Establish incentive practices in cooperation with downtown merchants, to encourage employee parking in designated areas.
- POLICY #3: Avoid further increases in congestion on major routes leading in and out of Hyannis center, and relieve existing sources of congestion. Hyannis's problems are not confined to the downtown, but exist along routes 132 and 28 as well.

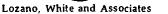
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- ACTIONS: Prevent increases in strip commercial development by allowing no extensions of the highway business zones. Auto-oriented strip commercial is a major cause of congestion.
 - Prevent congestion from additional driveways that are constructed in existing highway business zones by working with the Mass. DPW to improve the curb cut permit process, so that the town's concerns can be taken into account. In addition, consider requiring a minimum distance of 200 feet between driveways and encouraging common driveways; or basing lot frontage requirements on the amount of traffic generated by the individual establishment.
 - Examine the possibility of retiming and/or reducing the number of traffic lights on routes 132 and 28.
 - Expand the role of the Parking Commission to include town-wide traffic circulation issues.
- POLICY #4: Adopt land use policies that will help reduce reliance on autos and be more conducive to the long run use of transit and paratransit. Low density dispersed development is not conducive to transit. The general growth policies in this document for

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concentrated development, particularly in new neighborhoods and clustered development areas, will be far more conducive to reduced auto reliance.

- POLICY #5: For the longer term, develop a series of low capital measures that will help the existing road system handle increased amounts of traffic.
 - ACTIONS: Develop a system of alternate routes from Route 6, identified by clear and effective signs, with emphasis on reducing volumes using Route 132. Utilize Exit 7 for the hospital, steamship docks, downtown, airport and Yarmouth. Utilize Exit 6 and Route 132 for the mall and some downtown traffic.
 - Utilize central parking facilities outside Hyannis, at places such as the Route 6 interchange, school parking lots (unused during the summer), drive-in theatres (unused during the day), and Kennedy Ice Skating Rink, and provide shuttle bus service to major destinations downtown--during the the summer months. Frequency of service, clear signage, landscaping, protected waiting shelters, and security will be key components of this option.
 - Establish commuter parking lots at each Mid-Cape Highway interchange with reliable and frequent shuttle bus services.
- POLICY #6: Evaluate the provision of new and improved capital facilities from the standpoint of benefit to traffic flow, impacts on neighborhoods and the environment, and cost to the town.
 - ACTIONS: Evaluate the need for a new Route 6 interchange and access route to Independence Park. Such a road could relieve congestion on Route 132 if Independence Park development increases. Impacts of a new road on the public well recharge areas, and the costs of avoiding those impacts, should be major concerns.
 - Consider removal of the airport rotary and rebuilding the intersection with proper traffic lights to relieve a major bottleneck.
 - Consider relocation of ferry and commercial docks to the outer harbor, with consideration for appropriate provisions of nearby parking lots and suitable access.



 Establish a priority list of needed road and highway projects including resurfacing, bridge repair, signage, bikeways, reconstruction, intersection improvements.

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POLICY #7: Take measures to improve safety at high hazard intersections.

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ACTION: • Place high priority on improving intersections on the federal aid highway system and local routes that have been identified as most hazardous.



THE POLICY PLANNING PROCESS

Goals and policies regarding the location, types, and impacts of development and conservation in this plan will help the town guide growth in a way that maintains its quality of life. However, in order to use these fundamental growth and preservation policies, a planning process is needed that will establish responsibilities for carrying out the policies and a method for reviewing and updating them.

Implementation, involvement, and improvement are the crucial elements of this planning effort. The process must be realistic, build upon the decentralized structure of town government, and recognize the broad range of actions needed to carry out the policies. The many town boards, which have diverse responsibilities, must be able to implement the policies in a consistent, responsible, and predictable manner. Further new conditions, unforeseen opportunities, and experience with the planning process will suggest modifications to, and, perhaps, reconfirmation of the plan. It is therefore essential to establish a method to continuously update and improve goals and policies. Only a plan that stays current remains viable and useful.

Under the current structure of town government, no single entity has the authority or responsibility to implement or modify an overall plan with many different elements. Each element in this plan, though it may be linked to another, needs approval by a different part of town government. For example, a typical development project requires numerous reviews by such diverse authorities as the Planning Board, the Conservation Commission, the Board of Health, the building inspector, the Historic District, and the Board of Appeals. Each unit of local government with legally mandated authority must play a role in plan implementation and improvement over time. The town must have a process whereby all affected boards and departments have ongoing input into the implementation, review, and revisions of the goals and policies for the Town of Barnstable.

GOALS AND POLICIES

GOAL: Successful implementation and continued evaluation and updating of all town goals and policies concerning future development, preservation, and conservation by consistent, coordinated actions of all affected town boards and authorities.



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- POLICY #1: Give official status to all goals and policies of this plan. Take town actions to carry them out by assigning responsibilities to relevant town boards and authorities, and establish a system for reviewing, updating, and modifying goals and policies as needed.
 - ACTIONS: Adopt, by formal resolution of the following boards, the goals and policies in this document as guides to be used in planning and actions that affect the future of the town:

The Board of Selectmen The Planning Board The Conservation Commission Department of Public Works Commissioners Board of Health Board of Appeals Office of Community Development

- Establish a "growth policy cabinet," consisting of the Chairman of the Board of Selectmen, Planning Board, Water Pollution Control Board, Conservation Commission, Office of Community Development and Finance Committee. This body would meet at least quarterly to exchange information about problems, to develop strategies, and to coordinate activities among departments.
- Insure that major capital improvements are made in accordance with adopted town growth policies by requiring, for each major facility proposed, that the Capital Outlay Committee present an analysis of the effects on the policies. Projects not consistent with the plan would require a 3/4 vote of town meeting for approval.
- Institute a procedure requiring town boards and departments to notify at the initial planning stage all other boards and departments of proposed projects.
- POLICY #2: Continue the role of citizen involvement in development and implementation of policy plans for growth and conservation.
 - ACTIONS: Establish (or reinstate) a committee of citizens representing various interests in the town, such as the Master Plan Steering Committee, to advise and monitor the planning process.



The first task of the committee will be to work with each board listed above in adopting the goals and policies as guides. The committee should then monitor implementation of the plan, and provide assistance to town boards as needed. The committee should assist in the review and evaluation of the goals at the end of two years, and help develop a process for continued review.

POLICY #3: Review, evaluate, and modify or readjust development and conservation goals and policies at least once every two years.

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ACTION:
 The Committee of Citizens (or Master Plan Steering Committee), in coordination with the chairmen of the Boards of Selectmen, Planning Board, Conservation Commission, Department of Public Works Commissioners, Board of Health, Board of Appeals, and Office of Community Development, or their designees, should work together to review implementation progress and to evaluate the policies in light of newly-emerged problems and needs. Modifications should be made only in those policies that need to be updated or improved.



FOOTNOTES

- 1 Cape Cod Planning and Economic Development Commission (CCPEDC) Population Estimates and Projections for Barnstable County, 1980-2000 2 Cape Cod Planning and Economic Development Commision. Population Estimates. 3 Ibid. 4 Cape Cod Planning and Economic Development Commission (CCPEDC), Water Quality Management Plan, March, 1978, p. 5-13 5 These calculations are based on estimates in Water Quality Management Plan. Total acreage in Town: 38,400 acres Unbuildable: Wetlands 8,000 acres Reserved open space 2,000 acres Buildable : 27,800 acres Developed by 1980 11.505 acres (16,436 units x .7 acres/unit) 15,600 acres (12,000 units x 1.3 acres/unit) Projected Development 27,105 acres
 - ⁶ In contrast to Barnstable's summer population increase, the town experiences a decline in population in the middle of winter. A recent Cape-wide survey for the Association for the Preservation of Cape Cod (Philip B. Herr and Associates, <u>Occupancy Survey Results, APCC Growth Study</u>, October 1, 1982) showed the February population was 10% below that at census time in April. Applying that estimate to Barnstable would place its winter low population at approximately 27,000.
 - That same survey found the Cape's population in mid-summer was larger than the CCPEDC estimates by 10 percent. If the Cape-wide pattern holds true in Barnstable, the peak summer population would be 69,300.

These fluctuations in population are important to note because of the uneven demands they place on public service and facilities. This problem is likely to continue.

Assuming the ratio of commercial/service sector employment to total town population remains constant,

1980 commercial/service employment=2000 commercial/service employment1980 population2000 population

or,

 $\frac{11,436}{30,000} = \frac{x}{50,000}$ where x=2000 commercial/service employment

The change in commercial/service employment between 1980 and 2000 is approximately 8,000. Assuming 200 square feet of commercial/service space per employee, there would be an additional 1,600,000 million square feet of commercial/service space.

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Massachusetts Division of Employment Security.

⁹ U.S. Bureau of the Census, 1980 STF3 printout, item 29, and DES.

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U.S. Bureau of the Census, op.cit., items 32 and 35, and DES. This finding is based on a comparison of the 1980 Massachusetts Division of Employment Security data (employees by place of work, a total of 16,932) with 1980 U.S. Census data (employees by place of residence, 12,974). The comparison should be used with caution, since the data are not complete nor are they strictly comparable (for example, since DES counts only the establishments covered by the Massachusetts DES, all the workers in firms with fewer than three employees, or one employer who accounts for more than 80 percent of the industry's employees, are not included). The Census is based on a sample and does not count persons who have left the labor force, or not entered it, for lack of jobs.

APPENDIX

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SPECIAL RECOMMENDATIONS Open Space Neighborhoods Special Review Procedures

SUPPORTING TABLES

FISCAL CONSIDERATIONS



SPECIAL RECOMMENDATIONS

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Open Space Neighborhoods

POLICY #1 : Encourage the formation of new open space neighborhoods where water quality and other environmental requirements can be met, which could accommodate residential and commercial development at the same scale as the existing village centers and would provide permanent open space.

DESCRIPTION OF OPEN SPACE NEIGHBORHOODS:

Settlements, or neighborhoods, within the greater area of the seven villages, which would be of the same scale and character as the smaller existing village centers. They would contain a mix of residential and commercial facilities, and possibly institutions such as churches and post offices, as found in the existing centers, and would be surrounded by open space. Building would also be concentrated as in the existing village centers, with similar overall densities. Housing could be exclusively single family detached, or a combination of detached and attached houses with separate entrances. Because of the small scale of these neighborhoods, they will not have an "urban" character.

The neighborhoods would be true neighborhoods — that is, they would contain several different types of uses at pedestrial scale, and would not contain strip shopping centers or groups of auto-oriented convenience stores. The less dispersed the development form, the greater the pedestrian orientation can be.

Hypothetical Project:

Let us assume an area of buildable land of 370 acres. A "core" would consist of 200 separate entrance townhouses, small scale small commercial uses such as stores, and possibly a church and post office. The townhouses would occupy 25 acres, with a density of 3 units per acre; the commercial, 5 acres, for a total core area of 30 acres. Some 170 units of single-family housing would surround the core, On 43 acres.

The developed area would total 73 acres. The remaining 297 acres would be preserved as open space.

PURPOSE: The purposes of new open space neighborhoods include:

- to prevent the widespread urban sprawl usually associated with population and related commercial growth by providing a structure of concentrated development and contrasting open space;
- to protect open space and the environment by permanently preserving open areas;
- to provide housing that meets market demands for smaller units by making available sites for multi-family housing and smaller homes on relatively small lots;
- to locate commercial developments efficiently, within the neighborhoods they serve rather than in isolated highway locations. Neighborhood locations will be a far better way to locate the commercial development that is inevitable as the town's population grows; and
- to encourage land use patterns that reduce reliance on the auto and are consistent with public transit use. Concentrated, rather than spread out development, can reduce travel distance for convenience trips (shopping, post office), and establishes the common origins needed for transit.

All these purposes are consistent with the town's policies regarding development and conservation.

Open Space Residential Development, a zoning provision allowing Smaller lot sizes if open space is preserved, is intended to meet these purposes. It is now permitted in limited areas of the town. This document recommends the concept be extended to all areas of the town.

However, open space neighborhoods will also be important. Even if OSRD were extensively used, some of the town's goals would not be met. Development would be only somewhat more concentrated than under the traditional pattern--on one-half rather than 1-acre lots. Only single family units would be built, a housing type which does not satisfy the

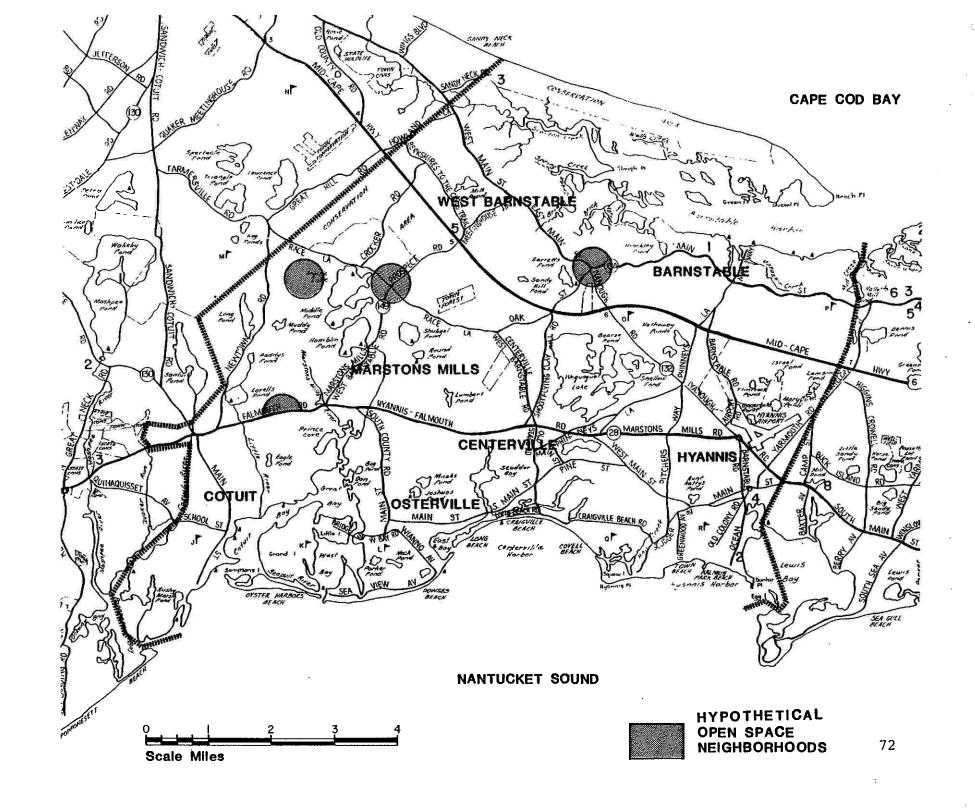


needs of all residents. Neither significant concentration nor significant amounts of open space preservation would be achieved. Open space neighborhoods would be more concentrated, therefore saving more open space (see below) in larger areas.

- LOCATION: Selection of locations for open space neighborhoods should be based on environmental and planning considerations. Included are:
 - areas that are currently not developed, to avoid impacts on existing neighborhoods;
 - areas not part of public well recharge areas;
 - areas not owned by the town for conservation or other purposes;
 - areas with suitable soils and slopes for building; and
 - areas located off now-congested major transportation routes, but with access to the Mid-Cape Highway and north-south routes.

For illustration, hypothetical locations that appear to meet these criteria are shown on the accompanying map. These locations are all in the western portion of town, where most of the open land exists and where growth pressures are strongest.

These areas are not accessible to public sewerage. To extend sewer lines from the plant in Hyannis, however, would require passing through public well recharge areas. Because sewered areas are more developable, this step would be unacceptable; well recharge areas are environmentally sensitive areas that cannot afford the excess or unchecked development sewer lines might bring. In order to develop new neighborhoods of sufficient size and concentration to result in significant amounts of preserved open space, densities will have to be high enough to require some type of wastewater treatment. "Package" wastewater treatment plants are an alternative to public sewerage. These are facilities designed to serve relatively small complexes. The technology has improved considerably in the past decade; these plants are gaining acceptance in many areas. The feasibility of such plants in Barnstable



will depend on project-specific factors such as effluent disposal, arrangements for plant maintenance, etc. These elements can be covered in the review process described below.

IMPLEMENTATION: Current zoning regulations do not permit the establishment of open space neighborhoods. In order to bring about such new neighborhoods, zoning changes will be needed. Zoning must reflect policies regarding several fundamental issues:

- What incentives should be provided so that developers will build new neighborhoods rather than conventional single family homes?
- 2) Where should new neighborhoods be permitted?
- 3) How should proposals for new neighborhoods be evaluated?

Incentives: Developers can be encouraged to make the investments needed to develop new neighborhoods with the incentive of higher densities than permitted for other types of development. The incentive of higher density would be coupled with the requirement to permanently preserve open space. Suggested below is a density bonus of approximately 10 percent. Density standards, which are similar to those of existing development in built-up portions of town, can be as follows:

Gross density: 1 unit per acre Minimum lot size: Single family residential: 1/4 acre (4 units per acre) Multi-family residential: 1/8 acre (8 units per acre) Maximum coverage: Multi-family, 7.5 percent of total area; total residential, 20 percent; commercial, 2.5 percent.

Location: The town can choose between two approaches to establish the locations of open space neighborhoods. One is to locate potential areas on a map, and establish those areas as zoning districts in which open space neighborhood regulations apply. The second approach is to establish zoning criteria setting forth the characteristics of areas where open space neighborhoods can be located, and then to use the criteria in evaluating individual locations as proposals are submitted. This second, or "floating zone" approach, has advantages over the first. For instance, by giving the private sector the initiative to find developable land, new and appropriate areas for this type of development may be found. Again, all development proposals would be reviewed by the town.

Evaluation: The issues concerning evaluation include the process by which projects are evaluated, and the criteria used.

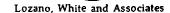
Since open space neighborhoods will be significant projects with potential major impacts, a project-by-project special review and permit procedure will be needed. Town boards and the public should formally participate. Project plans would be submitted to all relevant town boards for formal response. A public hearing would be held on the project. The Planning Board, or the Board of Appeals, could be designated as the special permit granting agency. The designated agency would be responsible for issuing/denying permits based on its own evaluation and that of other boards. To ensure the findings of other boards were taken into account, the review process could specify that the permit granting authority must submit a written report with its decision, and that when its findings differed from those of other boards (for example, the Conservation Commission's), an explanation would have to be given.

Criteria to be used in evaluating open space neighborhoods could include:

- Locations: privately-owned undeveloped areas, not part of public well recharge areas, with suitable soils and acceptable access (see above).
- Types of use: a mix of uses would be permitted, with residential use composing at least 80% of the built area. Multi-family uses could not exceed 50% of the units built.
- Densities: see the above section.

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• Waste water treatment facilities: a method of wastewater treatment acceptable to the Board of Health and, possibly, the Water Quality Advisory Committee.



• Open space: a minimum of 70% of the buildable area would have to be preserved as open space in a manner acceptable to the Conservation Commission.

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Open space to be preserved would have to be consistent with the town's open space policies, i.e. Visible to the public from road-ways; preserving views and/or important natural resources; etc.

- Distance between developments: no open space neighborhood would be permitted to be less than one mile from another, in order to maintain the distinction between developed and undeveloped areas.
- Buffer zones: a buffer strip, or a minimum of 100 feet, will be required on frontages along all public roadways.
- Site design: one basic structure for an open space neighborhood is a core consisting of multi-family housing, stores, and possibly a church and post office, with an outer ring of single-family housing, and surrounding open space, with a buffer between single- and multi-family uses.
- Traffic impacts: access to congested routes, such as Route 28, would not be permitted. Provision for entrances and egresses to minimize impact on traffic flow would be required.
- Runoff: methods to insure that runoff from the site was not increased as a result of development would be required.
- Parking: adequate provision for landscaping and parking.



Special Review Procedures

POLICY #2: The town should establish special processes to review the impacts of projects proposed for critical areas of the town and all major projects.

THE NEED FOR SPECIAL REVIEWS

PURPOSE: To meet fundamental goals of the town--preservation of the environment and quality of life--the town needs to control the effects of new development. Some of these effects are cumulative, such as those of individual single houses over time. These effects must be controlled by general policies and standards. Other effects can stem from individual projects, such as shopping centers and motels, and from projects in sensitive areas, such as well recharge areas.

> Sometimes, these effects can be controlled with standards established before projects occur-for example, the density suitable for an area, the side yard distance needed between dwellings for passage of fire trucks, the amount of parking area needed.

In other cases, general standards are not sufficient, because the impacts of projects vary according to type of project and specific site. Examples include the wastewater treatment needed for an industrial building, the runoff from a residential development in a well recharge area, or the design of vehicle circulation and access for a commercial project. In these instances, case-by-case review is needed. In addition, standards can sometimes be established in advance, but review is needed to insure that standards are complied with. For example, a standard specifying that runoff from the site be no greater after development than before would require reviews of individual projects to see that measures were adequate.

Though the town has extensive zoning and other regulations, these do not always provide for adequate reviews. Because regulations are already numerous, only essential additions should be made. Furthermore, the review process should be streamlined and made more efficient (see below). Examples where review processes need strengthening include:

- No review process exists for multi-family and commercial projects. Reviews are needed to insure sites are designed to minimize impacts from entering and exiting traffic; that parking areas are well located; and that runoff is adequately controlled.
- For OSRD projects, special permits are required, but the review criteria should be strengthened to include the provision that the dedication of open space be in the interest of the town and consistent with town open space policies. In addition, OSRD developments in well recharge areas should be reviewed for runoff control.
- No town review process exists for industrial projects. Since the majority of industrial projects will be in Independence Park, an environmentally critical well recharge area, reviews of wastewater treatment, surface water runoff, and hazardous materials storage and disposal should be in place for individual projects.

TYPE OF REVIEW: SITE PLAN REVIEW AND SPECIAL PERMITS

Two common types of special review exist: site plan review and special permits. The distinction, in theory, is that special permits (traditionally, but not necessarily issued by boards of appeals), deal with the permitting of particular uses on particular sites, while site plan review deals with technical issues regarding the way a particular project is developed on a particular site, assuming that use has been authorized. Sometimes the distinction is more in theory than fact, however. A project that cannot meet site plan review standards for traffic flow, for example, is effectively a prohibited use. A special permit review can include the types of site design considerations found in site plan reviews.

Of the recommendations above for additional reviews, several are site use issues for which a site plan review process is recommended (multi-family, commercial projects, and industrial projects). For OSRD and new neighborhoods, the town can build on the existing system

Lozano, White and Associates

by making new neighborhoods subject to special permits and adding criteria to the special permit review process.

THE REVIEW AGENCY

The final issue regards the appropriate board for the site plan and special permit functions described above. There are several choices: the Board of Appeals, or the Planning Board, acting as special permit granting authority, could issue special permits. Either board could handle site plan reviews, although the Planning Board would be most likely. The town should make the determination, considering:

- administrative feasibility: maintaining the existing system where the Board of Appeals handles all types of special permits may be easier than dividing responsibility.
- expertise: the planning board may be better equipped to deal with the technical issues involved in site plan review, through its experience with subdivision review.
- tradition: in some communities, the Board of Appeals traditionally handles all discretionary reviews. The town may wish to continue this tradition.
- accountability: the Planning Board, an elected body, is directly accountable to the public, while the Board of Appeals is appointed. If the town wishes to distinguish the functions of the two boards based upon accountability, the Planning Board would deal with all permits affecting the direction of growth and development of the town; the Board of Appeals would deal with quasi-judiciary matters affecting individual sites and abutters. In this case, the Planning Board would issue special permits for uses, such as OSRD and new neighborhoods, while the Board of Appeals would deal with variances, changes of nonconforming uses, etc.

EASING REGULATORY BURDENS

With or without these additional regulations, the town can streamline its regulatory procedures to the benefit of both developers and town departments. Measures such as issuing a developers' guide and flow chart outlining reviews and timetables, early scoping of major projects with all affected boards to establish timetables and, where possible, joint reviews, and a central system for logging in project applications and notifying affected boards would help develop a predictable, efficient permit process. More regulations will mean increased work loads for town boards; maximum efficiency will be essential.

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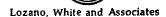


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EMPLOYMENT DISTRIBUTION IN SELECTED SECTORS TOWN OF BARNSTABLE AND MASSACHUSETTS, 1980

Sector	<u>३ of Total I</u>	<pre>% of Total Employment</pre>		
TOW	n of Barnstable	<u>Massachusetts</u>		
Manufacturing	7.7%	26.0%		
Wholesale and Retail Trade	34.8%	22.2%		
Services	28.9%	23.0%		

Source: Massachusetts Division of Employment Security

TABLE 2

RETAIL SALES PER CAPITA: BARNSTABLE COUNTY AND MASSACHUSETTS

	Per Capi	ta Sales
Sales by Store Group	Barnstable County	Massachusetts
Total	\$6425	\$4387
Food	1559	1010
Eating and drinking places	928	431
General merchandise	620	570
Furniture and appliances	221	183
Automotive	512	527
Drug	173	148
Source: Sales and Ma of Buying Po	rketing Management, <u>wer</u> , 1980	Annual Survey



TABLE 3

SELECTED INDICATORS FOR RETAIL/SERVICE ECONOMY IN BARNSTABLE COUNTY

1.	Effective Buying Income	1976	\$17,623
	(in 1980 dollars)	1980	14,560
		ቄ change	-17.4%
		2000	
2.	Retail Sales	1976 \$	948,735,000
		1980	977,901,000
		% change	3%

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Sales and Marketing Management, <u>Annual Survey of Buying Power</u>, adjusted for inflation.

3. Tourist S	pending				
Meals Sal	es	1975	\$ 125,2	292,000	
(in 1979	dollars)	1979	117,8	348,000	
·		% chang	ge	-5,9%	
Room Sale	s	1975	50,3	770,000	
(in 1979	dollars)	1979	40,4	119,000	
		% chan	ge ·	-20.4%	
Source:	Massachusetts	Department of 1	Revenue,	cited :	in C

ource: Massachusetts Department of Revenue, cited in CCPEDC, The Economy of Cape Cod, adjusted for inflation.



FISCAL CONSIDERATIONS

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The way in which Barnstable grows--that is, the type, location, quality and rate of growth--will affect the town's fiscal position. Certain types of growth typically produce more revenues than others (for example, industrial versus residential), and have greater costs (single-family versus apartments). Some growth locations can be serviced more efficiently than others (centralized rather than scattered, to a point). The higher the quality of growth, the higher the revenues. The higher the rate of growth, the greater the need for expenditures for capital facilities.

Thus, the impacts of the development and conservation policies presented in this document on the town's financial ability to provide services and the amount and timing of capital expenditures are important considerations. Further, implementation of some of the policies would have direct impacts on the town budget--for example, the costs of staff to provide the recommended special permit reviews.

These considerations are particularly important given the current fiscal position of the town. While relatively wealthy--Barnstable has one of the highest assessed valuations in the Commonwealth, and relatively low demands for service because of the large number of retirees and second home owners--problems exist. The finance committee reports that although there is currently a free cash surplus of \$6 million, projections show that this surplus will disappear by 1987-88, because expenditures are increasing faster than revenues. The town has time to avoid such a deficit by planning ways to increase revenues and/or slow the rate of increase in expenditures. Given these financial conditions, the impacts of development and conservation policies are of particular importance.

Following are some general observations on the effects of the policies in this document.

• Residential development: the proposed policies in this plan call for alternatives to single family homes in limited amounts to both meet market demands for smaller units and to conserve open space. Smaller units usually require lower municipal expenditures than single-family, because of fewer school age children. However, overall trends toward smaller households and fewer children mean these differences will be less.



The overall policy for residential development is to promote less dispersed development than currently encouraged. This type of growth will require lower expenditures for roads and other utilities than would more scattered growth.

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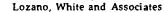
• Open Space: the policies herein recommend open space conservation targeted to areas of maximum benefit. More open space will be conserved by implementing these policies than continuing with the current system. From the standpoint of municipal expenditures, costs may be incurred for purchase of land or rights-of-way. However, use of alternative techniques such as OSRD, scenic easements, etc., will reduce the need for town purchase.

There are other ways to defray or reduce these costs. The town can use the open space system as a guide in acquiring property through tax title takings and in disposing of town-owned property, and thus reduce or defray the costs of carrying out its open space plan. Tax takings can focus on properties that would contribute most of the town's open space system, or which could be taken and then sold to generate revenues for other purchases. Similarly, property now owned by the town, but found to have little value, could be sold. (The taking of tax delinquent property has another important fiscal advantage: since the amount by which assessed valuation can be increased is limited by Prop. 2 1/2, eliminating delinquent properties from the tax rolls and replacing them with new valuations will increase the revenue the town can collect.)

Another potential cost of open space will be maintenance costs. Some of these costs could be extensive; for example, if large parcels or open space conserved under OSRD or new neighborhods were dedicated to the town rather than maintained by private association, or if a series of landscaped boulevards were developed.

On the revenue side, permanent preservation of open space will help maintain and increase property values, and, hence, the town's tax base.

• Economic development: the policies herein call for strengthening the commercial and tourist sectors and developing additional sources of economic activity. A healthy economy is essential to the fiscal stability of the town as a direct and indirect source of property tax revenues.



In order to promote a stronger commercial and tourist sector, the town should refrain from assessing commercial property at higher rates than residential property.

To improve the commercial and tourist sector, and hence maintain this source of tax base, some municipal expenditures will be needed, particularly for circulation, parking, and urban design improvements in Hyannis. In the long run, those expenditures will be well justified.

• Municipal staffing: the policies herein call for additional reviews of some types of projects, and an increased level of coordinated planning activity throughout the town. This will involve more staff time. Some of the increased costs can be defrayed by making permit handling more efficient.

