

Hampton Beach Area

Master Plan

Prepared for:

**The Town of Hampton, New Hampshire
NH Department of Resources and Economic Development –
Division of Parks and Recreation**

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I. PLAN SUMMARY

A. A Plan for the Future of Hampton Beach

The Town of Hampton and the State of New Hampshire have joined efforts to create a comprehensive Master Plan to resolve longstanding problems and create a positive new vision for the future of Hampton Beach. The purpose of this Master Plan is to coordinate public and private sector initiatives that will enhance the environmental, recreational and economic value of this area, and support extended seasonal activity and year-round residents.

The Purpose of the Plan

Hampton Beach is a unique coastal community and tourism destination that can benefit from a planned approach to its future. This Plan is a joint project of the Town of Hampton and the State of New Hampshire to create a common vision for the area, and translate that vision into a working program of specific actions that will incrementally improve the Beach and its environment.

The Plan has been designed to enhance the substantial assets of this area and reverse negative trends that are largely the result of the unusual history of the community. It includes a program focused on the next few years, but it also contains a vision for the long-term.

Through an open public planning process, the sponsors of this effort have sought a new consensus on action. The preparation of this Master Plan has been guided by the participation of a broadly representative Hampton Beach Master Plan Advisory Committee (HBMPAC), and local and state agencies. The Hampton Planning Board



View of Hampton Beach looking north

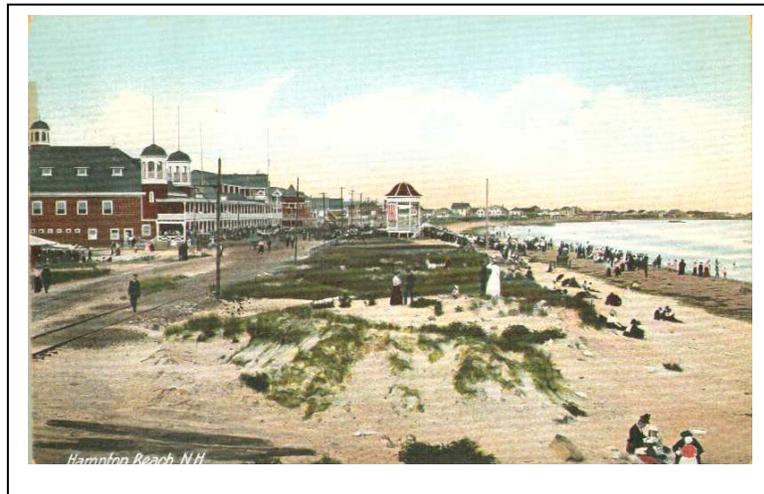
formally adopted this Plan on November 7, 2001. The New Hampshire Department of Resources and Economic Development also approved the Plan on this day.

This Master Plan establishes a comprehensive program of improvements for the private and public sectors that will steadily transform key aspects of Hampton Beach. The Master Plan creates a new framework for development and promotes a program of amenities and visual improvement. It considers land use and includes recommendations for providing a more coherent pattern that will reinforce the value of the land. The Master Plan seeks to further protect the special environment of Hampton Beach through actions and regulation. The Plan targets infrastructure improvements that support the Beach, involving transportation, circulation, storm water, water supply and sewer service. It also contains an economic strategy that will link investments to important benefits for the Town and the State.

The recommendations herein lay out a step-by-step process and actions for implementing proposed actions over a 50-year period. Some changes can be implemented immediately; other recommendations require a longer planning period. The initial phase describes detailed steps with responsible parties, funding sources, and appropriate costs, while the later phase identifies only the long-term steps. These strategies have been refined and advanced with illustrations to help explain and relate some of the physical changes with the proposed activities and uses.

B. The Planning Context

Hampton Beach is a spectacular barrier spit with broad beaches backed by coastal marshes. Beginning over a century ago, the beach and its surroundings were developed to support a seasonal public demand to enjoy and be near the water. The evolution of most of the Beach was long governed by a development company, the Hampton Beach Improvement Company (HBIC), which controlled the location and character of development through a 99-year land lease that began in 1897. Initially, this control created an attractive balance of beachfront homes, hotels, and entertainment facilities that served the summertime vacations of the urban families of New England.



However, many practical concessions were made during the first half of the 1900's to enhance short-term, economic opportunities and solve immediate issues. Development

began to fill every available spot of land, with few controls on the quality or mix of improvements or uses. The automobile overwhelmed the area during peak times, with increasing congestion and unsolved parking needs. Available revenue sources could not keep pace with the need to support the infrastructure and public facilities that were required.

The State of New Hampshire stepped in during the Great Depression to take over fiscal control of the beach and make it a state park facility. The introduction of the state jurisdiction included Ocean Boulevard, and the parking areas that have lined the beach since the early part of the century. Many improvements were made over time to enhance the recreational opportunities, such as the boardwalk, and provide for maintenance and safety.



The tourism market shifted, and the population using the Beach began to change. Once a choice for prolonged vacations, it increasingly became the destination for short stays and day trips. When some significant reinvestment began to occur, newcomers settled in as year-round residents, valuing the waterfront location. At the same time, significant disinvestments occurred in commercial properties, and the image of the Beach started to decline as the market for leisure activities became more competitive.

With the expiration of the original lease in 1997, the Town and related authorities are now the stewards of the developed areas of the Beach through its land use and environmental regulations, and local infrastructure. Much of the infrastructure is outdated or in poor condition, and the regulatory framework has not been consistently effective in meeting public or private sector purposes.

Within this context, there is a critical need for a coordinated vision that will link future State and Town policies and actions, and provide for both public and private sector improvements to create a more positive future.

Planning Area

The planning area for this study is comprised of all the land, activities, and waterfront uses in and around Hampton Beach, including both the Town and State Park areas. This area encompasses approximately 1,500 acres of land. In addition, the study has taken into account, conditions and trends in the surrounding region that have a direct impact on the uses at Hampton Beach.



C. Overall Vision

A new vision has been established for Hampton Beach during the year-long planning process. Establishing this vision was an initial step to improve the quality of life for those who live, visit, and work around Hampton Beach. This vision statement was developed with input from the public, Hampton Beach Master Plan Advisory Committee, interviews with interested citizens, and from the research of the existing conditions, issues, and needs. It represents the quality and image of this area that residents, property owners, the State, and the Town envision over the next 10 to 50 years. It leads to the strategies and methods designed to meet the purposes of the Master Plan.

Hampton Beach should be experienced as a coastal community that provides a consistently attractive and enjoyable setting for visitors and residents. It should appeal to everyone as a clean and comfortable place that offers a high quality environment for a variety of activities and uses. It should be environmentally healthy, because of the value of its natural resources. It should be economically successful, becoming a place for high value investments.

The developed land within Hampton Beach should be composed of a series of distinct sub areas, each with its own identity and mix of uses. This composition should reflect distinct park improvements and provide varied park visitor opportunities for separate segments of the beach. Building heights and densities should remain moderate and consistent with the image of a clustered coastal village. Buildings should be attractive, well maintained, with a unique character linked to the historic traditions and special beach conditions found here. Landscaping should become a feature of the Beach, through a wide variety of street trees, seasonal plantings and small green spaces within the built-up areas.

Traffic and parking should no longer dominate the streetscape; rather, a pleasant pedestrian realm with bicycle connections should be created to recast the image of the central portions of Hampton Beach. Travel to and from the Beach should be convenient, and circulation should be largely free from traffic congestion.

Through positive actions and coordinated management, Hampton Beach in the future should include:

- *improved beach and recreational areas, with activities and attractions that take advantage of its waterfront assets and are compatible with surrounding uses;*
- *a pedestrian-oriented central Beach district with a pleasant and inviting character and compatible developments that provide a high quality setting for a mixture of hospitality, entertainment, commercial and housing uses;*
- *an attractive harbor and waterfront that increase public access and promote opportunities for those who seek work and recreation on the area waters;*
- *improved residential districts within the Beach that are pleasant and supportive of year-round residents as well as seasonal homes;*
- *a protected environment and enhanced open spaces that can be enjoyed for both their resource and scenic values;*
- *improved infrastructure that allows all users to travel and park without delays, and provides adequate public services that meet the needs of all users.*

D. Key Recommendations and Improvements

Many of the recommendations and strategies within this Plan will lead to positive changes and improvements. Some of them will have direct impacts and immediate results, such as added benches on the boardwalk, and some will have long-term impacts and may be part of a larger strategy, such as zoning changes that impact development patterns. The follow list is a summary of key recommendations and improvements that are detailed in this Plan:

Land Use improvements that are envisioned in the Master Plan include the following:

- New zoning, site plan and design guidelines that will reinforce the moderate scale and pleasant qualities of Hampton Beach
- The reinforcement of distinctive sub-areas or districts within the Beach, including a vital commercial and entertainment central area and other areas more geared to year round residents or seasonal hospitality
- Reorganization of traffic and parking to allocate more land near the Beach for pedestrians and the activities they generate, and to improve the image of the beach
- Reorganization of the State Park areas to promote separate destinations geared to different use groups, including an active central performance and entertainment complex, areas geared to families and small children, and areas devoted to more passive enjoyment of the beach and harbor.

Physical improvements that are envisioned in the Master Plan include the following:

- New large and small park amenities along the waterfront ranging from new beach pavilions to park benches
- Changes in circulation patterns, streets, and lanes to move traffic more efficiently and dramatically reduce the congestion on the Beach
- Institution of new options for access and circulation through an internal beach trolley system that links parking and beach destinations, and off-site parking with shuttle service during peak times
- A new emphasis on pedestrian and bicycle use through extensive sidewalk, streetscape, and bikeway improvements
- Reinvestment in the existing private property to upgrade the appearance and value of the Beach area, and new private development in key locations
- Improved informational and directive signage
- Reorganized and improved business signage to create a more attractive place
- Improved gateways that welcome visitors to Hampton Beach
- A higher Hampton River Bridge to improve vehicle and vessel traffic
- Utility improvements so that the land uses at Hampton Beach are fully supported by adequate and environmentally responsible services.

Regulatory actions will include the following:

- Establishment of zoning incentives to help upgrade site and building conditions
- Better enforcement of zoning and building codes
- The reduction in the granting of variances or special exceptions that weaken the land-use regulations
- Institution of improved parking standards
- Continued enforcement of environmental standards.

Economic improvements will include the following:

- Multiple programs and financial incentives to support reinvestment in commercial properties and diversify businesses
- Diversify and enhance the aesthetics of the Beach in order to stimulate increases in property values, tax revenues, and employment
- Expansion of higher value, year-round residences in appropriate locations
- Expansion of the tourism season through special events, promotions, and physical improvements
- Catering to a more economically diverse clientele, emphasizing longer stays during the core summer season and during the shoulder season months of April, May, June, September, and October.

Program and management improvements will include the following:

- A management entity to coordinate the actions of multiple agencies and implement the plan recommendations to help revitalize and maintain the area
- A coordinated parking and traffic management approach by both the Town and the NH Division of Parks and Recreation
- New recreational programs that focus on the area's natural resources
- Dune protection through a dune and sand management program
- A new harbor committee that coordinates activities in Hampton Harbor.

This Plan focuses on the core commercial area and central portions of Hampton Beach, which has experienced the most problems and the greatest apparent disinvestments (see Figure 1). It has the highest concentration of attractions, the most prevalent parking and pedestrian deficiencies, and is subject to the greatest amount of change due to the economic conditions found there. The central area also establishes the dominant image of the Beach; and as such, improvements here will indirectly shift perceptions and value of the Beach.

This Plan also includes North Beach. Although this area has fewer and less complex issues today, the quality and value of these places are integral to the Master Plan. They have received careful consideration in terms of their future use and character (see Figure 2).

Figure 1. Major Improvement Areas along Hampton Beach

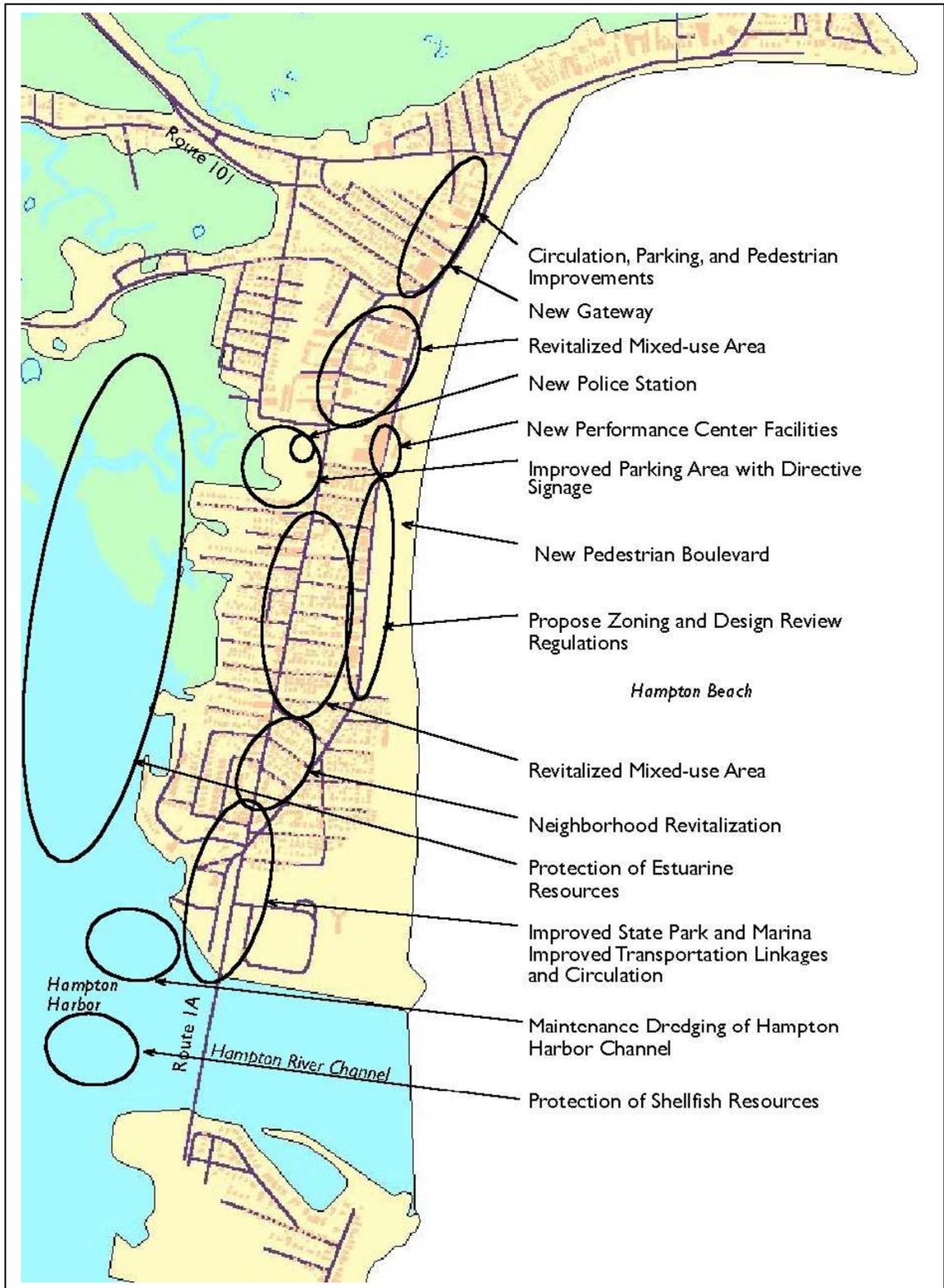
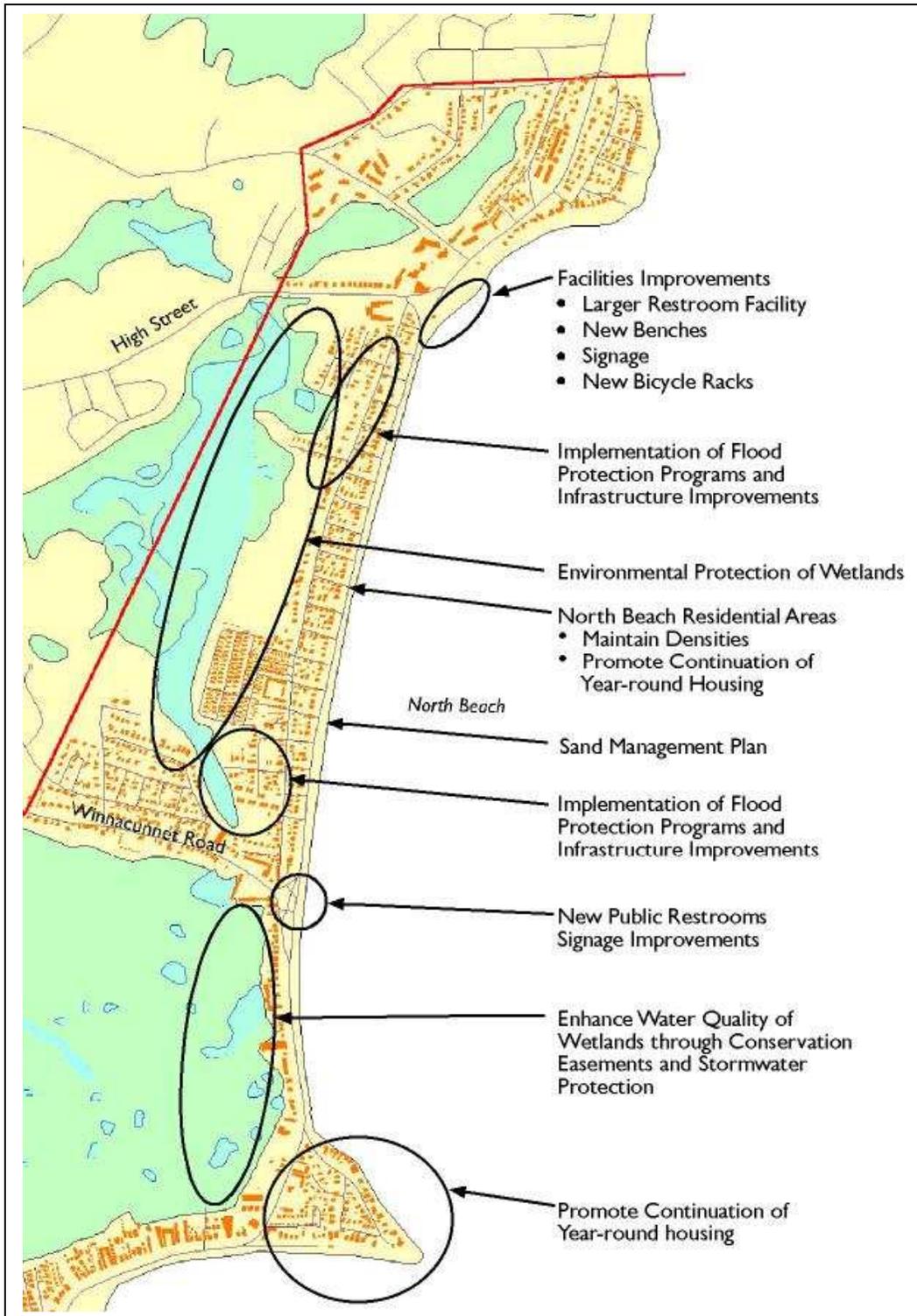


Figure 2. Major Improvement Areas along North Beach



E. Hampton Beach Over The Next 50 Years

The Master Plan includes the challenge to envision the future of Hampton Beach in fifty years. This challenge is linked to the perception that fundamental changes must occur and that patience may be required in order to realize the full implications of changes that will be made over the next few years.

Hampton Beach, as envisioned in this Master Plan, will become a mixed-use destination as well a high quality, year-round community oriented to its unique waterfront location. It will still be known for its lively seasonal beach life and the clustered attractions and entertainment, but it will be acknowledged as a place that people and families of widely different incomes and interests will all find a comfortable place to come, because the Beach will have highly compatible uses to offer everyone. But it will also be acknowledged as a great place to live year round, because of its overall vitality and the pleasant neighborhoods.

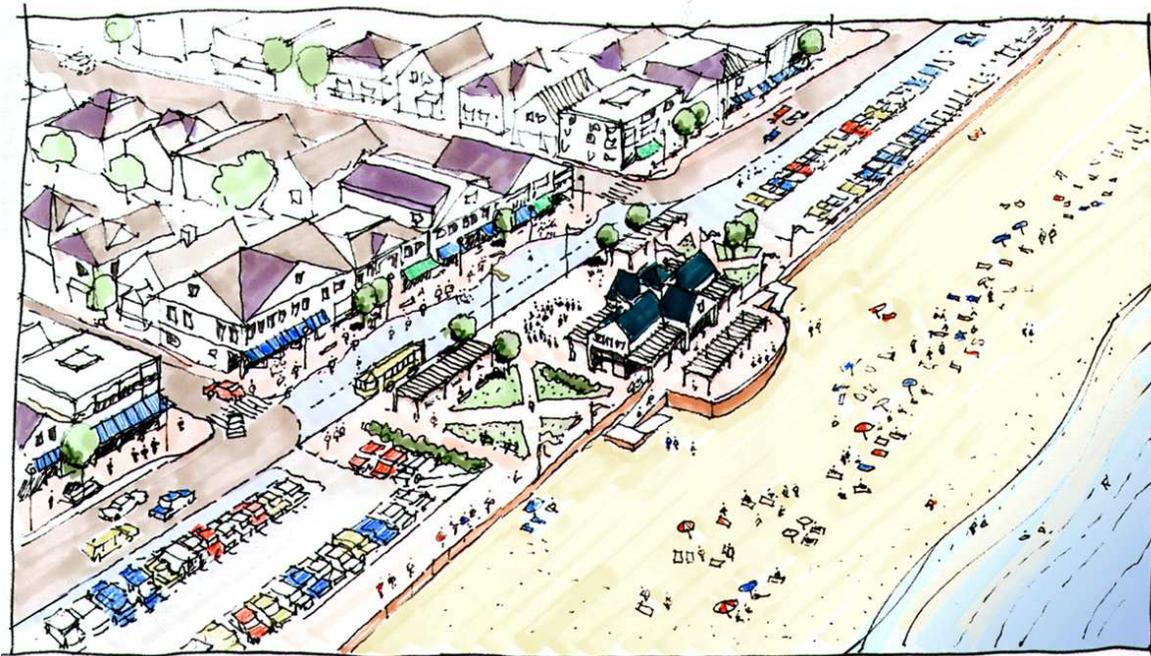


It will become a community with distinctive districts catering to different needs. The center of Hampton Beach will be a dense and pleasant ocean front village, which is the liveliest place along the beach. Wide, pleasant sidewalks will support large numbers of people strolling along Ocean Boulevard, enjoying a range of restaurant, shopping and entertainment choices. But this district will retain a life and vitality that stretches from spring to fall. Winter will remain the quiet season, but even then the core district will retain a population of residents in quality housing and visitors to a core of restaurants and hotels that find it increasingly profitable to remain open, and cater to a niche market for meetings and weekend trips.

Hampton Beach will be known for the range of festivals and special events that are hosted there, throughout the summer and in other parts of the year. These events will cater to different interests and populations, so that anyone could have a good reason to enjoy a visit at least once a year.

The State Park will be recognized as a diverse and pleasant destination offering different experiences for different visitors, catering equally to families, young people, adults and seniors. It will have a string of three pavilions along the main beach, surrounded by broad

public plazas that are crowded with people in the summer, enjoying the special events, using the restroom and changing facilities, participating in park-sponsored events, or simply enjoying the sport of watching each other. The southern end of the park will offer facilities for visitors who will enjoy a quieter visit to Hampton Beach, with facilities to make their visit more pleasant and interesting. While the State Park will retain its recreation and beach orientation, it will also attract those interested in the wildlife and ecology of the area and include new ways for the visitors to interpret and enjoy these assets.



The Beach will have a series of distinctive districts that provide varying mixes of year-round residential and hospitality uses, with sidewalk and bikeway connections within and among them. These districts will be characterized by buildings that reflect the New England beach character, and by landscaping that provides an important visual relief to the relatively high densities of the cluster, village-scale of the neighborhoods.

In fifty years, the automobile will remain a significant way to reach Hampton Beach, but excellent options will exist to dramatically reduce the impacts of parking and congestion. Parking along the beach will be limited to the minimum necessary to practically support businesses and access; many people will park in strategically located parking areas and low parking structures that do not directly consume value beachfront land, and use convenient shuttle buses to move along the beach. Others will choose to never bring their car at all, leaving



them in remote lots or using bus and shuttle connections to the regional train systems. Bicycles will be everywhere, supported by convenient storage areas, racks, and dedicated bikeways where they can be practically provided.

Economically, the value of the Beach to the economy of the Town and the State will be widely understood. There will be a regular program of capital improvements and maintenance projects to support local property values and business activity, to the long-term benefit of lower tax rates for everyone. The State will participate in this constant maintenance and redevelopment effort in order to sustain high quality programs and facilities because of the wider contribution that this investment will make to the seacoast region and the State.

F. Planning Issues and Process

Hampton Beach Issues

Most of the planning issues are due to the existing conditions of the infrastructure, regulations, and programs that evolved over the past hundred years. The core of Hampton Beach is as dense as many larger cities, and is on top of and next to a very fragile and dynamic coastal beach and wetland system. Furthermore, additional influences outside of state and town control, such as the conversion of seasonal homes to year round residences, have placed additional burdens on the infrastructure. Although the State and Town have periodically invested in various infrastructure improvements, these public investments have not attracted private investment that helps to support the local economy or improves the quality of the area's built environment.

Planning Process

The planning process was designed as a participatory project involving key stakeholders and jurisdictions. This process has been a useful tool in building an understanding of facts, trends, options and solutions for the needs of Hampton Beach. The project has been jointly sponsored by the Town of Hampton, the State of New Hampshire through its Department of Resources and Economic Development, Division of Parks and Recreation, and the New Hampshire Coastal Program. The process has been guided through the input of the Hampton Beach Master Plan Advisory Committee (HBMPAC) that was specifically established for this purpose.

A consultant team led by The Cecil Group, Inc. was selected to provide planning and technical assistance for the Master Planning process. This planning and design firm was supported by a team of specialists, including Rizzo Associates (transportation and utilities), Appledore Engineering (environmental and coastal planning), Economic Research Associates (economics) and Dr. Laurence Goss, a specialist in regional tourism economics.

As part of this process, there were public meetings and workshops, interviews with key local and state officials, working meetings with participating public agencies, and monthly meetings with the Advisory Committee. Furthermore, a series of reports and documents were generated to communicate the existing conditions, needs assessment, and strategies for revitalization.

Completion of this Master Plan signifies the first important step in implementation of a revitalization process for Hampton Beach. A large number of residents, businesses, public agencies and elected leaders have participated in the development of this Plan. Through this process, an opportunity has been created for a shared understanding of the conditions, issues, and needs for the future. The same participants and any other interested individuals will be involved in the next steps in implementation, shaping the specific initiatives to achieve the plan recommendations through an open, public process.

G. Requirements for Achieving the Vision

The vision of Hampton Beach cannot be realized unless certain conditions are met. The following lists several fundamental requirements that are needed to achieve a broad-based success that simultaneously improves the image and character of the area, unlocks reinvestment in the recreation, residential, and commercial areas, and creates a functional transportation system.

Requirement: Improving the Image of Hampton Beach

The residential and business communities as well as the local and state governments must support widespread efforts to improve the image of Hampton Beach.

The image of a community affects the decisions of potential visitors, residents, and businesses as they decide to visit, shop, recreate, invest, or live in a beach community. Hampton Beach has retained an image that does not contribute favorably to its quality of life either as a destination or as a place to live or work. Its positive attributes as a tourist destination include its natural features including the beach, water, and river, and their associated activities including swimming and boating. It has the Casino as an entertainment venue, and a network of hotels, lodges and cabins that provide a pleasant getaway. Many of the area's summer homes and cabins have been converted into year-round residences, and parts of Hampton Beach are exhibiting the characteristics of a well-tended residential area.

However, the overall quality of the visitor and resident experience is diminished by the lack of diverse amenities, poor quality infrastructure, congestion, and poorly maintained buildings that permeate areas of the Beach. Use patterns such as "cruising", while clearly attracting some populations, are distracting and undesirable for others. The poor image creates a cumulative loss of value that is translated directly into relatively low property values and tax revenues. Without reinvestment, the area cannot achieve its full potential.

Hampton Beach's cultural and geographic resources provide a strong foundation for positive change. Its image can be successfully revitalized through a consistent and coordinated program that supports its assets and promotes its strengths and opportunities.

Requirement: Building on Regional Advantages

The future activity envisioned in this Plan must build upon the distinct attractions and advantages that Hampton Beach possesses relative to other communities and markets in the region, including Boston, Lowell, Manchester, and Portsmouth. Furthermore, Hampton Beach has the potential to capture tourists who travel along the I-95 from regional communities to areas with similar amenities to Hampton Beach such as York and Ogunquit in Maine, Portsmouth and Rye in New Hampshire, and other coastal resorts. Hampton Beach was once a far greater attraction to Canadians. It is possible to recapture some of this market, as well as appealing to a greater European market than it serves today.

The Hampton Beach waterfront is an attractive, interesting destination and has numerous activities, events, and other recreational amenities that cater to a wide range of audiences. The Seashell Stage, Casino, Beach, State Park, and State Marina are all attractions with features that could be enhanced with new programs and facilities. Hampton Beach can build upon these regional strengths and advantages to make it a more pleasant, varied and extended seasonal destination.

Requirement: Reorganizing Circulation, Access, and Parking

The Hampton Beach area has an outstanding direct transportation connection to and from the region. However, during the summer season, access at the Beach entrances and along all the roads become congested, especially on hot summer days when people arrive in the mornings and when they leave in the late afternoons, and during special events. Hampton Beach needs to improve traffic flow in and out of the beach area. Clear, direct routes to parking facilities, changes in the roadway directions, and adequate public transportation are just a few of the potential opportunities for improving traffic. The overall plan for vehicles would reduce the number of cars that seek areas to park and circulate around the Ashworth Avenue /Ocean Boulevard loop.

Requirement: an Improved Quality of Life

Today, the Hampton Beach area provides a high "quality of life" for some of its residents and visitors. However, changing the image will result in substantial gains in quality that will in turn shift the perceptions of the citizenry and the markets. Improved infrastructure, amenities, public attractions, access to and from the Beach, parking, and buildings, and increasing the diversity of businesses and residential areas and other positive changes will attract higher quality businesses and visitors.

Additional Requirements for Achieving the Vision

This vision cannot be accomplished without a range of other actions and programs to support its completion, including the following:

- development of a management structure that can initiate and accomplish the complex tasks of revitalization over an extended period of time
- a significant financial commitment from local, state, and federal sources
- the provision of adequate infrastructure such as dredging and sewer systems to support existing and potential uses
- a coordinated program of new events and attractions to extend the season and attract new visitors.

While these elements are necessary for the Plan to come to fruition, achieving the full vision will require the continuing commitment of the Town's residents and businesses.

A Step-by-Step Approach to Redevelopment

The revitalization plan for the Hampton Beach area represents more than a checklist of desirable actions and recommendations. It is intended to be a comprehensive and coordinated program that will improve the image and the quality of life for people who live, work, and visit the area.

Revitalization of Hampton Beach will occur through a series of steps set out in a logical progression of project planning, implementation, and program development. The following key components outline this step-by-step strategy.

Setting the Stage for Growth: Public Sector Improvements

Public sector improvements are needed at the start of the revitalization process to help change the image and make the area more accessible. They could range from signage and access improvements to new gateways. Signage and infrastructure improvements that correct basic circulation problems are necessary to make Hampton Beach function more efficiently, especially at peak-use times. These steps are critical to setting the stage for revitalization in the private sector. Furthermore, the planning, permitting, and coordination of Phase II actions that support the long-term vision must be initiated.

A Phased Approach to Achieving the Vision

The recommendations lay out a step-by-step process for implementing the Plan. The Plan describes the actions needed over a 50-year period. Some specific changes can be implemented immediately; other recommendations require a longer planning period. The initial phase describes detailed steps with responsible parties, funding sources, and appropriate costs, while the later phase identifies only the long-term steps.

This Plan envisions three specific stages of growth over the next 50 years:

- Phase 1: Present to 2 Years
- Phase 2: 3 to 9 Years
- Phase 3: 10 to 50 Years

Each of the stages provides a series of steps to be implemented during that period. The following paragraphs provide a conceptual portrait and overview of the different phases. Table 25. Summary of Recommendations in Section V: Implementation lists the key actions, responsible parties, phasing of the actions, and potential funding resources.

Starting with Visible Changes

Making visible changes to the area to improve its image is a fundamental requirement that would help set the stage for growth. The Plan advocates short-term actions to enhance the appearance of the Beach through changes in directive and informational signage, and improving the gateways near the Hampton River Bridge and Route 101 exits and entrances. Landscape improvements and associated amenities are also recommended to make the place more attractive to all users. Finally, a more concerted effort must be made to keep some neglected private and public areas clean.

Phase 1: Present to 2 Years

During the first two years, most investments and actions will be channeled to create visible changes and set the stage for programs and long-term improvements. Initially, there will be a relatively modest level of public expenditure relative to later phases, as the early projects will be simple to implement and fairly small in scale. Beyond “bricks and mortar” improvements, there will be substantial permitting and technical studies that will provide the basis for project development, and neighborhood, business area, and recreational improvements in the later phases. Multiple programs can be created with the initial seed money. It is expected that these programs will be managed and coordinated through the first ten years of the plan and possibly beyond that time depending of the levels of investments. A specific level of investment must be secured for these initial stages of implementation to set the framework for later stages.

Phase 2: 3 to 9 Years

The focus during this stage would be for the management entity to implement the improvement programs, and incrementally improve the State Park, mixed-use, and neighborhood areas. In addition, this phase would involve site permitting and negotiations associated with larger projects, such as development of new performance areas and the construction of a new bridge. Investment levels in both the public and private sector would increase during this phase. However, replacement of the Hampton River Bridge may require a substantial investment of public funds.

Phase 3: 10 to 50 Years

This later phase of implementation will focus on completing the stage for later private sector investment by finalizing and implementing major public investment projects. The principal construction projects may include a new parking structure and removal of parking spaces from prime beachfront property. It would also involve coordination with any changes in future infrastructure including core area improvements such as a conference center/hotel.

An important component of this Plan would be the continued expansion of amenities and attractions to further improve the quality of life. Investment levels would increase substantially for the private sector, and public sector investment levels would decrease.

H. Plan Organization

The Master Plan is organized to facilitate review of the planning elements, and is divided into five sections. The Plan begins by setting the context for planning and ends by showing how the recommendations can be implemented.

- I. Plan Summary - Provides key conclusions and recommendations
- II. Introduction – Overview of Plan
- III. Existing Conditions – A detailed account of existing conditions
- IV. Recommendations – Methods to help bring the Vision of Hampton Beach to reality.
- V. Implementation – A process that supports development of recommendations and strategies.
- VI. Planning Participation – Provides a summary of the planning process and participation.

II. INTRODUCTION

A. Overview

The Town of Hampton and the NH Department of Resources and Economic Development have prepared this Master Plan to establish a comprehensive vision to address many land use, transportation, public access, recreation, open space, and other quality of life issues that currently reduce the success and enjoyment of Hampton Beach. The Hampton Beach Master Plan Advisory Committee has guided the planning process, representing diverse interests and jurisdictions within the area. The Cecil Group, Inc., has provided professional assistance in creating a detailed plan to address these issues and make recommendations to help fulfill a vision of a substantially improved beach area. The recommendations include actions that should be undertaken in phases, and continuing towards fulfillment of the overall vision over the next fifty years.

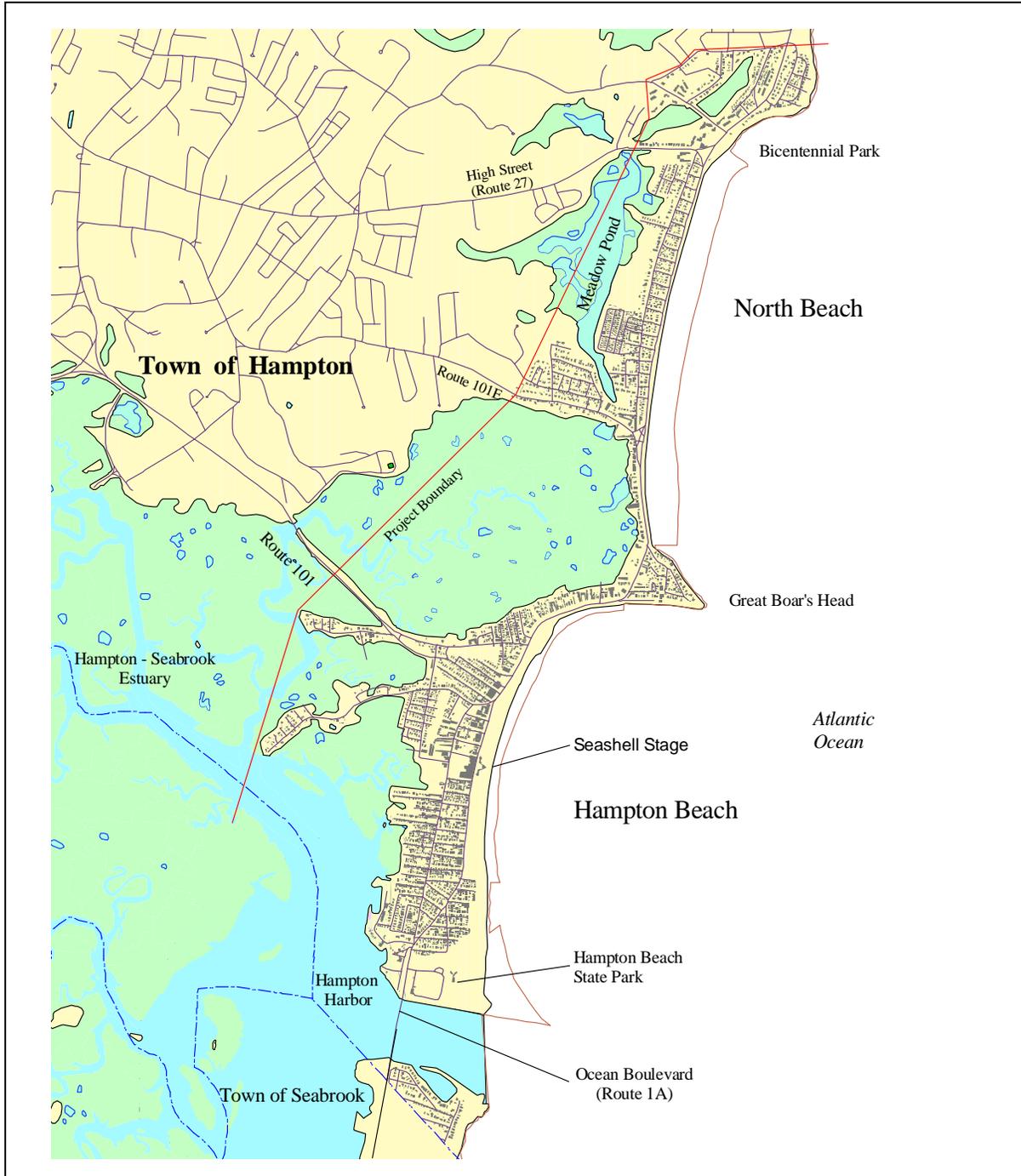
Substantial public and private investments will be needed to achieve the level of revitalization and the quality of life that the community and state have sought for this area. Over the long run, much of this reinvestment will occur within the private sector, responding to new opportunities to achieve higher value at Hampton Beach. The central area of the Beach requires significant improvements to ensure a vital and successful future as a mixed-use hospitality, entertainment and residential district. Neighborhoods, homes, and the services needed by the residents should be upgraded. A complete reorganization of traffic and parking will need to occur, to reduce congestion and create a more pleasant and valuable environment. Infrastructure improvements such as water and sewer lines will be required. Public and private investments are required to expand the diversity of and enhance the quality of recreational opportunities at Hampton Beach, so that a more diverse population is attracted. Investments in the marina and the adjacent lands are needed to make the area more enjoyable and aesthetically pleasing.

This Plan reviews key conditions and trends that will influence the future. It provides an assessment of the needs for Hampton Beach in the future. It then lists recommendations for land use, infrastructure, transportation, economics, tourism and the environment that are linked to achieving the vision for the future. It also provides implementation strategies that will allow for the phased accomplishment of these recommendations.

B. Project Study Area

The planning area for this study incorporates all the land, activities, and waterfront uses in and around Hampton Beach. This area encompasses approximately 550 acres of built land, 77 acres of beach, 700 acres of wetlands, and 115 acres of land adjacent to the harbor (see Figure 3). There are approximately 1.2 and 1.4 miles of beachfront along Hampton and

Figure 3. Project Area for the Hampton Beach Area Master Plan



North Beaches, respectively. In addition to the areas that are the focus of these planning efforts, the studies have taken into account conditions and trends in the surrounding region that have a direct impact on the uses at Hampton Beach. They include the adjacent tidal wetlands, Hampton River, and the road system leading to North Beach and Hampton Beach.

C. Planning Process

The planning process is designed to better understand the desires and needs of the community and users of the area. The aim of the process is to fully understand the issues, interpret the information, illustrate the conditions and potential options for revitalization, and ultimately provide strategies for improving the overall quality of life in and around Hampton Beach.

The process for creating the Master Plan required several other key steps to develop a full program of actions. It included five phases:

1. **Existing Conditions** – Existing resources, uses, and activities that have shaped the area were documented. Information from the Town, State, public agencies, the public, and key stakeholders was assessed.
2. **Needs Assessment** – The consultant conducted a needs analysis of current conditions and trends, and provided recommendations needed for improvement. The assessment includes both an analysis of data from the town and state agencies, and interpretation of existing land use and transportation information.
3. **Plan Development** - Initial strategies were presented to provide some direction and options for revitalization of and improvements to Hampton Beach.
4. **Draft Master Plan** – The strategies and recommendations from the previous phases were detailed and refined after discussion and review with the public. The results of this Report were derived in part from several sources:
 - Meetings with the public
 - Meetings with the Hampton Beach Master Plan Advisory Committee (HBMPAC)
 - Interviews with key stakeholders in Hampton Beach
 - Interviews with town, state, and federal officials
 - Previous reports, studies, and legal documents
 - GRANIT, Rockingham Planning Commission, and Hampton GIS data bases
 - The Cecil Group consultant team

5. **Final Master Plan** – The Plan was refined based on comments from a public hearing, and state and local agencies. These comments were discussed and incorporated into the Plan.

Participants

The planning effort was overseen by the Hampton Beach Master Plan Advisory Committee, which consisted of 19 representatives from various state and town committees, boards, and agencies, and several residents (see Table 1).

Table 1. Members of the Hampton Beach Master Plan Advisory Committee

Name	Association
Mr. Warren Bambury	Rockingham Planning Commissioner
Mr. James Barrington	Hampton Town Manager, Ex-officio
Mr. Rusty Bridle	NH State Representative
Ms. Diane Flint Hardy	Park Planner, NH DRED, Div. Parks & Recreation
Mrs. Sheila Francoeur	NH State Representative
Mr. Tom Gillick	Planning Board Chairman, Ex-officio
Mr. Brian Goetz	Hampton Water Works
Mr. John Grandmaison	The Ashworth By The Sea, business owner
Mr. David Hartman	NH Coastal Program, Ex-officio
Mrs. Beverly Hollingworth	NH State Senator
Ms. Jennifer Kimball	Hampton Town Planner
Ms. Diane LaMontagne	Citizen-At-Large Representative
Mrs. Vivianne Marcotte	Conservation Commission, Town of Hampton
Mr. Tom Mattson	NH DRED, Div. Parks & Rec., Seacoast Regional Office
Ms. Allison McLean	NH DRED, Div. Parks & Recreation, Co-chairperson
Mr. David Murphy	NH Coastal Program
Mr. Bruce Nickerson	Zoning Board Representative
Mr. “Doc” Noel	President, Hampton Beach Area Chamber of Commerce
Mr. Peter Olney	Planning Board Representative
Mr. Robert Preston, Jr.	Preston Real Estate
Mr. Richard Roy	Citizen-At-Large Representative
Mr. Peter Tilton	Commercial Fisheries Industry Representative
Mr. Robert W. Varney	State of New Hampshire, Ex-officio, Dept. of Environmental Services
Ms. Dori Wiggin	NH Dept. of Environmental Services, Wetlands Bureau
Mr. Skip Windemiller	Hampton Beach Precinct Commissioner
Mr. James Workman	Selectmen Representative, Co-chairperson

This Committee guided and reviewed the planning efforts throughout the year-long process. The Committee met once a month to provide direction to the Master Plan, insights about the area, feedback on issues, and input from the various members who were also involved with other town committees. Minutes were recorded at each monthly meeting and mailed to the members before the following meeting. Members of the Committee also participated visibly in all the other meetings with public and town officials. A summary of planning participation is presented in Section VI.

The NH Division of Parks and Recreation with the Department of Resources and Economic Development (DRED) has several members on the Committee and has partially funded the project. DRED also manages the Hampton Beach State Park, Hampton Harbor State Marina, North Beach, and associated areas and facilities. The Project was professionally staffed by the consultant team, The Cecil Group, Inc., which includes members from Rizzo Associates, Appledore Engineering, Economic Research Associates, and Dr. Laurence Goss.

Goals and Objectives

A list of goals and objectives was assembled from initial comments and documents associated with the Hampton Beach Area Master Plan. The purpose of these goals and objectives is to identify key purposes behind the planning process, provide a basis for direction during the planning process, and served as a reference throughout the preparation of the Plan. This list was revised based on the comments and direction of the Committee.

Community Character

- Hampton Beach should be restored as a family-oriented, high quality resort community for visitors.
- Hampton Beach should be improved and be considered an integral part of the entire Hampton community.
- Hampton Beach should be a pleasant year-round neighborhood for its permanent residents.
- The historic character of Hampton Beach should be enhanced where appropriate.
- The visual quality of Hampton Beach's townscape and architectural character should be improved.

Land Use

- The natural setting of Hampton Beach is its greatest asset; the surrounding beach, marshes, inlets, and waterways should be protected and enhanced.
- Land use should be organized to create appropriate relationships in terms of the scale, intensity, and types of uses.
- The State Park and its facilities are a fundamental asset and attraction; they should be enhanced to serve as high quality amenities and resources for the public to appreciate and use.
- Zoning regulations should both promote the best long-term organization of uses within Hampton Beach and establish site planning standards that create better relationships between buildings, parking, and open space.

Economics

- The investment climate at Hampton Beach should be improved to encourage appropriate redevelopment and property improvements.
- Hampton Beach should better serve as a tourist destination by consistently improving amenities and services that promote increased expenditures and an expanded season.
- As a major source of tax revenues, the Town should support public and private reinvestment that improves Hampton Beach as both a seasonal and year-round business location.

Traffic and Transportation

- Traffic congestion in Hampton Beach should be reduced.
- The supply and location of parking should be improved to better serve all users.
- Hampton Beach should be enhanced as a pedestrian environment.
- Hampton Beach should be an excellent and safe community for bicycling.
- Public transit should be enhanced to reduce vehicle trips and parking problems.

Environment

- The quality of the environment is fundamentally linked to the character and quality of Hampton Beach as a place to live and visit. The quality of the natural areas should be extensively protected and enhanced.
- Within developed areas, environmental impacts should be controlled to improve water quality, minimize flooding, reduce runoff, and protect other natural resources.

Facilities and Infrastructure

- The street and sidewalk infrastructure of Hampton Beach should be thoroughly upgraded to fully meet the needs of vehicles and pedestrians.
- The utility infrastructure in Hampton Beach should be upgraded to meet appropriate contemporary standards.

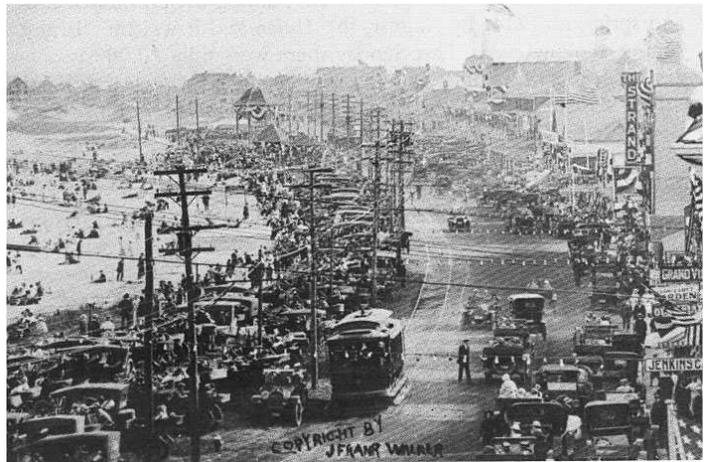
III. EXISTING CONDITIONS

This section includes a discussion of the history, land use, economy, transportation, environment, and infrastructure and public utilities of Hampton Beach. It reflects an assessment of past events and existing conditions at Hampton Beach that was made during the Fall of 2000 and the spring of 2001. It is expected that the existing conditions within this Plan will be periodically updated to reflect new trends and issues.

A. History of Hampton Beach

For its first three centuries, Hampton Beach largely supported a population of coopers, millers, fishermen, joiners, and carpenters. The Beach provided these early settlers with an abundance of natural resources.

The land offered rich soil for farming, and the marsh excellent pasture for cattle grazing and hay for fertilizer. Hampton River, North Beach, Hampton Beach, and the Atlantic Ocean provided seafood, a location to keep vessels, and enough products to sustain families and establish small businesses.



The first settlements occurred near Great Boars Head at the end of Winnacunnet Road, one of the main access points to the beach. Other initial developments included areas of fish shacks along North Beach and homes along Winnacunnet Road. Although most of the fish shacks are gone, many of the early homes can still be seen on this historic road.



Development at Hampton Beach between the late 1800s and the 1920s set the stage for the remaining years. During this period, businessmen set up infrastructure to transport and accommodate more visitors.

By 1930, most of Hampton Beach and North Beach was either developed or had streets and lots laid out for development. Post-1930 development

occurred on the marsh fringes except in a few areas that were filled such as in the southern portion of the Beach.

In general, it appears that the present use of the beach area as a destination and resort area will continue based on the national trends of increased leisure time and the development trends on the coast over the past 50 years.

The following is list of some key dates and activities that took place before and during the development of the Hampton Beach area.

Events Prior to the Development of Hampton Beach

- 1638 Hampton was settled by a group of settlers from and under authority of Massachusetts. At that time, Hampton included Hampton, Hampton Falls, Kensington, and part of Seabrook.
- 1640 The southern part of Hampton's border was re-drawn at Bound Rock, which was at the center of Hampton River.
- 1657 Bound Rock, which was originally in the middle of Hampton River, indicated the start of the boundary line surveyed and marked, "AD 1657-HB and SH," by Capt. Nicholas Shapley to determine the line between Hampton and Salisbury. HB denoted Hampton Bound, and SH Shapley's mark.
- 1794 A New Hampshire state law was enacted to prevent damage to the salt marsh that was caused by people carrying away "flat weed" to use as fertilizer.
- 1845-1875 Many miles of marshes were dug two to three feet deep to drain haying areas. Many of these ditches were re-dug in the 1930's.
- 1850s Many fish were caught in local fishing grounds, and were landed at Hampton Beach fish houses. From there, several species, including cod, hake, and pollack, were dried and shipped to Boston. During various times of the year, the Hampton River also provided an excellent source of seafood, including bluefish, herring, and eels, and clams.

Events That Led to the Existing Conditions in Hampton Beach

- 1897 Electric streetcar service initiated between Exeter and Hampton Beach.
- 1898 Hampton Beach Improvement Company began leasing lots between Ashworth Avenue and Ocean Boulevard.
- 1899 Expanded railroad service connected many parts of New England. It also connected to other area attractions including Canobie Lake Park, Salisbury Beach, and Plum Island. The Casino opened as well.
- 1902 Hampton was connected to Seabrook by a new, privately owned, "mile long" wooden bridge over the Hampton River.
- 1905 Sewer lines were constructed to eliminate direct disposal in the marshes and ocean.
- 1907 Hampton Beach Village District (Precinct) was formed in response to the Town's lack of municipal services to the beach area.
- 1915 A fire destroyed every house between B Street and Highland Avenue.

- 1921 A fire destroyed another large section of Hampton Beach between B Street and Nudd Avenue.
- 1926 The railroad discontinued trips from Hampton and Exeter due to the increased use of automobiles and the lack of demand for railroad services.
- 1933 The town transferred to the state all the land between the highway and the ocean from the Coast Guard Station to Haverhill Street, except Great Boar's Head and a small area north of the river.
- 1934 A new sewer treatment plant was constructed near Tide Mill Creek and connected to Hampton Beach establishments.
- 1934 Fifty new acres of land, now known as the Hampton Beach State Park, were created in the southern portion of Hampton Beach.
- 1944 –1945 Several major construction projects took place, including the Hampton Beach and North Beach seawall, harbor dredging, and a new 4-lane highway between Ashworth Avenue and the Coast Guard Station.
- 1949 A new steel and concrete bridge replaced the old “mile long” bridge over Hampton River.
- 1950 The State of New Hampshire completed construction of a portion of Interstate 95.
- 1956 The State began to use parking meters at the State Park.
- 1962 Route 101 was built to connect Hampton Beach to Interstate 95 and relieve traffic on more northerly routes.
- 1963 The State completed the replacement of the Hampton police station and bandstand with the new Sea Shell Stage complex (stage, restrooms, first aid and lifeguard office, and Chamber of Commerce office).
- 1988 A new bathhouse was built at the State Park.

Recent Planning of Hampton Beach

Many studies, feasibility assessments, preliminary designs, strategies, recommendations and other documents over the past 25 years focused on particular areas such as a new parking structure or beach pavilion. Several other plans, such as the drainage plan for the Town and the Route 1A Corridor Study, focused on larger areas that included Hampton Beach or parts of it. Although a few plans and recommendations were implemented, many of them were not due to inappropriate designs and concepts, and lack of funding, management, and most importantly, a vision.

The Hampton Beach Area Master Plan, however, represents a milestone for planning at Hampton Beach – it is the first time the State and the Town of Hampton joined to identify the needs and provide short and long-term solutions that will help revitalize this important community and state resource. This union serves as a foundation to coordinate actions and establish the means and support to carry this Plan forward.

B. Land Use Assessment

Overview

Land uses in the Hampton Beach project area range from concentrated and intense to sparse and moderate. The North Beach area and lands to the west of it are relatively calm throughout the year. Activities at Hampton Beach vary during two distinct seasons: summer and off-season. Intense uses occur during the summer when thousands of visitors travel daily to the beach, and hundreds of people fill the rental units and nightclubs. This combination of uses has made Hampton Beach very active during hot summer days and evenings. During the off-season, however, there is little activity and the Beach is very quiet.

An understanding of current land uses and activities that take place in the Hampton Beach area and in its surrounding area will help determine future uses. This section summarizes the uses within the project area and some of the adjacent properties.

Setting

The Town of Hampton is a coastal community located approximately ten miles south of Portsmouth, 45 miles southeast of the Concord, and 60 miles north of Boston. The land uses support primarily large seasonal populations and related retail, restaurant, and hospitality businesses. Development in the study area is primarily residential and recreational in character. The Town has a population of approximately 14,300 according to one of the Town's latest reports - the *Growth Management Annual Report 2000*.



The project area is located in the Town of Hampton along its eastern shore and the Atlantic Ocean. This area is comprised of Hampton Beach, North Beach, and the properties located along the backland areas (see Figure 3). The beaches, natural features, and the resulting layers of development that occurred over the past 100 years have led to most of the constraints and issues that now influence the area.

There are two main beach areas: Hampton Beach and North Beach. Hampton Beach is situated on a barrier beach in the southeastern part of the Town, north of the Hampton River, which is part of a large complex estuary. Hampton Beach, approximately 1.2 miles

long, has hundreds of small businesses including retail shops, restaurants, hotels, residences, parking lots, arcades, and high-density seasonal and rental houses. This area becomes very crowded during the summer season, especially on hot, sunny days, and during special events such as the Seafood Festival.

The North Beach area is mostly residential with a few small businesses in the northerly and southerly parts of the beach. There are several parking areas along the median of Ocean Boulevard, and one municipal parking lot at the intersection of High Street and Ocean Boulevard. Although North Beach is approximately 1.4 miles long, the southern portion of the beach is often covered with water since the high tide line is at the seawall.

Hampton Harbor, located on the south side of Hampton Beach, is connected to the Atlantic Ocean by the Hampton River, a wide, tidal river and channel. Recreational boaters and fishers heavily use the River.

The main transportation road (Route 1A), which runs along the coast through Hampton and North Beaches, connects to points south in Seabrook and points north in North Hampton. The main access road for most users in this area, Route 101, runs in an east/west direction through the town of Hampton to Hampton Beach. Interstate 95 is the main access highway to Route 101 for the southern region of the New Hampshire coast. The Land Use section provides a more detailed account of the uses and activities of all the project areas.

Population Assessment

A population assessment at the town, region, and state level provides an indication of change, level of development, and the associated impacts and uses in the project area. This assessment was based on several sources of information: the State of New Hampshire population projections, available through the NH Office of State Planning, Rockingham Planning Commission, and the 1990 US Census data. The economic section provides an assessment of population in relation to housing trends.

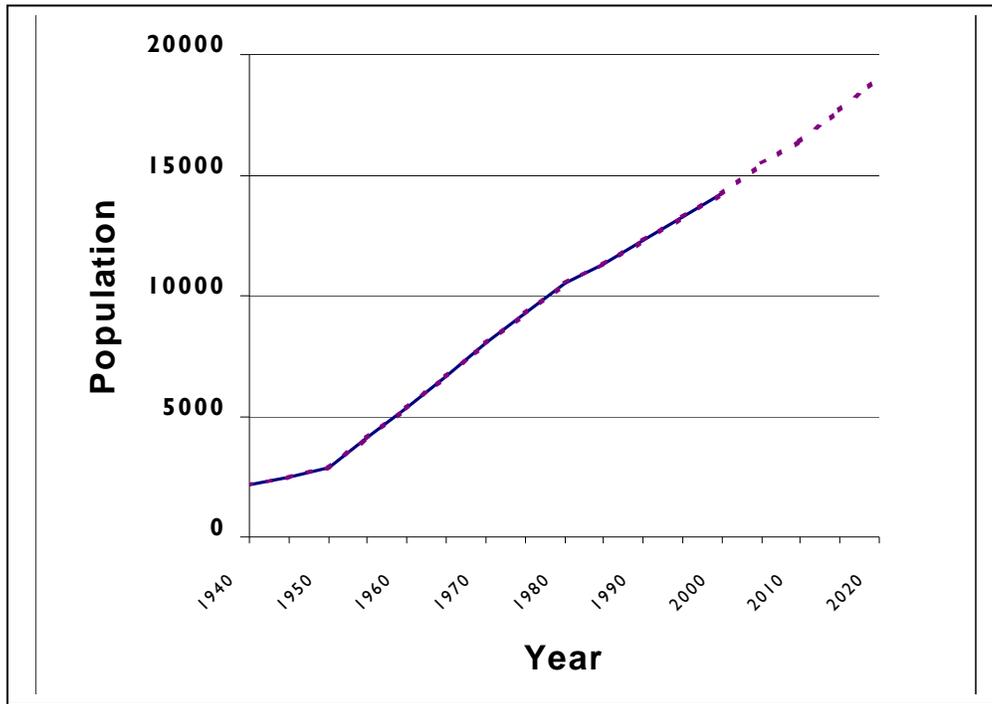
The Town of Hampton has a 1999 estimated population of 13,496. Over the past three decades it has experienced several demographic trends: steady growth, an increasing number of senior citizens, and sharp declines in household sizes. Population projections for Hampton include a 2.95 percent increase between 2000 and 2010, amounting to almost 2,200 new residents (see Figure 4). During the period between 2010 and 2020, an increase of 1.51 percent is projected.

Land Use Types in the Project Area

Land uses in the project area consist of mostly residential, mixed use, and open space. There are some other uses, similar to those found in a town center, including police and fire stations, churches, and a few parking lots. This section provides an assessment of the land uses in the project area. All the properties in the project area were categorized

according to their use. The following table identifies the amount of land, building area, and value of each of the land uses.

Figure 4. Population Trend for the Town of Hampton, 1940 – 2020



Source: Hampton Growth Management Oversight Board, Annual Report 2000.

Table 2. Land Uses in the Hampton Beach Project Area

Use	Land (Acres)	Land Use (%)	Building Area (sf)	Living Area (%)	Total Value ¹ (\$)
Residential	530.3	37.8%	3,574,394	76.4%	460,725,400
Commercial	39.1	2.8%	1,053,879	22.5%	69,941,400
Industrial	4.2	0.3%	12,865	0.3%	1,627,000
Government	3.7	0.3%	13,934	0.3%	1,565,500
Open Space	822.7	58.7%	0	0.0%	16,173,500
Other ²	1.5	0.1%	24,930	0.5%	1,011,000
Total	1,401.6	100%	4,680,002	100%	\$551,043,800

1. Total value includes land and building values.

2. Includes roads and sidewalks

Source: Town of Hampton, GIS Database, 2000.

Each of the land use categories represents a composite of uses. For example, some of the residential uses include condominiums, single-family residences, and mobile homes, and some of the commercial uses include hotels, supermarkets, and restaurants. The following paragraphs describe the various land uses in the project area.

Land-use Assessment

An important characteristic of land use in Hampton Beach is the high-density development patterns. Most street blocks, which include residential and mixed uses, have over 40 percent building coverage. This has important implications for fire control, lighting, view corridors, impervious surfaces, and other conditions that affect land use planning.

Another important feature is that the project area is built out. There are no more areas to develop – unless buildings are developed vertically on existing properties. Should there be some consolidation of uses, such as parking areas, more land may become available for development. The issue of changing the building height regulations will be addressed in the Needs Assessment phase of this planning project.

Residential

Residential uses occupy the largest percent of the built area. Total residential land value is over six times the value of commercial property. Residential uses are found throughout the built-up area, with beaches on the east side and wetlands on the west side of the project area. Residential uses include single family, condominiums, manufactured homes, camps, and apartment buildings.

Commercial

Commercial uses comprise about one-third of the total building floor space but only about seven percent of developed land area. These uses are generally found as mixed uses, mainly residential, in several locations in the project area. They include the middle of Hampton Beach between Ashworth Avenue and Ocean Boulevard, the southern portion of Hampton Beach, and two small areas in the northern and southern parts of North Beach.

Industrial

Several properties are categorized as industrial. However, these include more institutional type uses, specifically a water tank and electric substation on Church Street.

Government

Government properties include town police and fire stations on Ashworth Avenue, several small vacant town parcels, the state park, beaches, and related facilities, and the Hampton Harbor State Marina. The Division of Parks and Recreation of the NH Department of Economic Development (DRED) owns and maintains all of the beach areas, the Hampton Beach State Park, North Beach, and the Hampton Harbor State Marina. The NH

Department of Transportation (NHDOT) owns and maintains Route 1A (Ocean Boulevard).

Open Space

Open space c. Open space is a designated land use that comprises over 58 % of the total land. It includes all the beach and wetlands to the east of the main coastal road and to the west of the developed areas along North and Hampton Beaches. As a land use, open space is described in more detail in the following section. A detailed description of wetlands is in the Environment and Open Space section.

Parks and Open Spaces

Parks and open space in Hampton Beach are dominated by one primary area - the beaches, and to a lesser extent, the access points along Hampton Harbor to other waterside uses. Aside from these, there are several other designated open spaces in and near the project area, mainly the open tidal wetlands and the tot lot located next to the Seashell Stage.

Open space, according to the Hampton Master Plan, is defined as land that is worthy of protection from development. Under this definition in the context of uses in the project area, there is significant acreage that is protected by either conservation easements or existing state and town regulations (see Figure 5).

A list of designated conservation parcels that are owned by either town or state agencies, or private environmental groups is shown in Table 3. In addition to these areas, approximately 700 acres of tidal wetlands exists in the project area, and these cannot be developed according to state and local laws.

There are 317 acres of designated conservation parcels in the project area. Over 76 acres are protected salt marsh, and are owned by the Town and the Society for the Protection of New Hampshire Forests (SPNHF). There are also salt marsh areas owned by the Audubon Society (ASNH), but their exact locations are not known, and therefore not included in these totals.

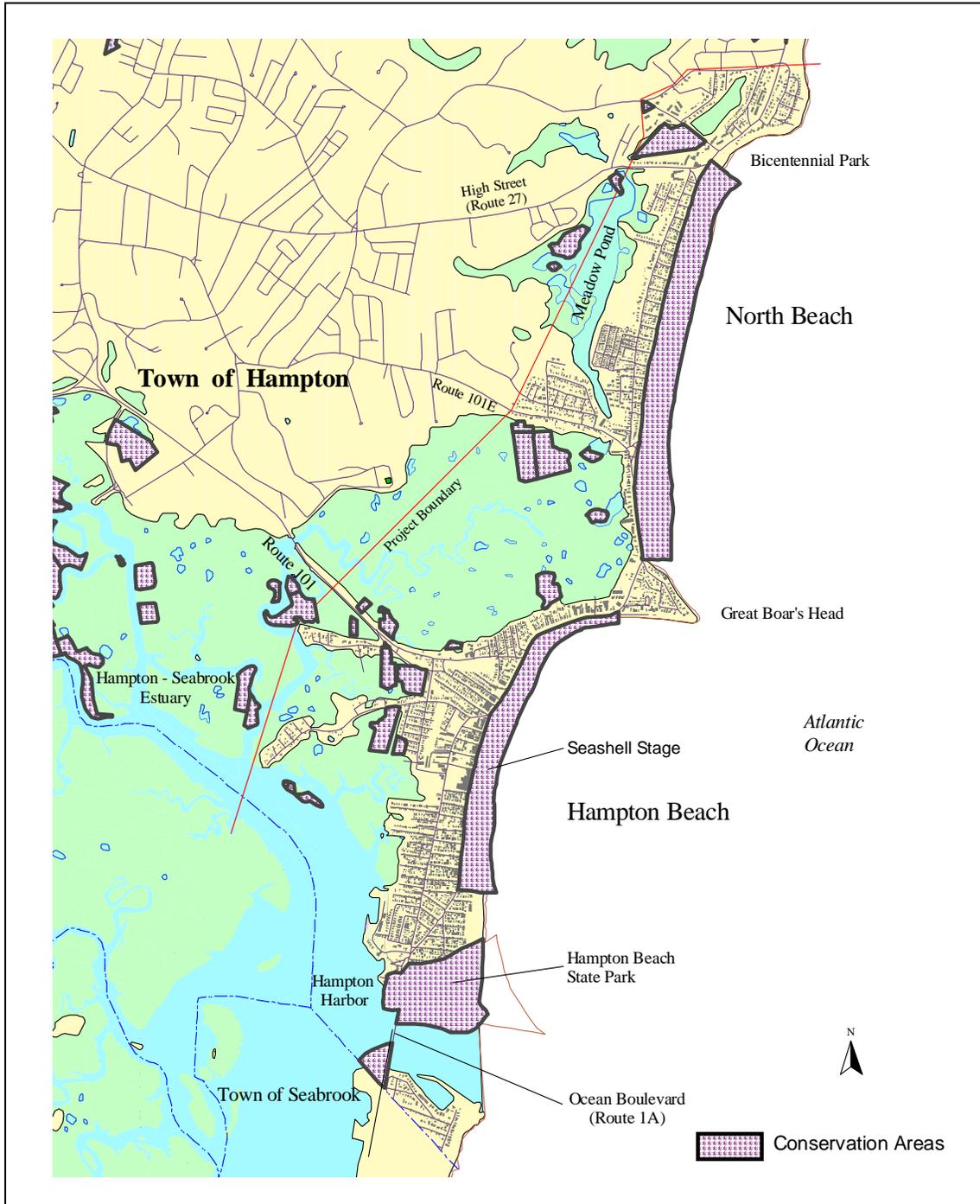
Table 3. Designated Conservation Parcels in the Hampton Beach Project Area

Name	Protection Agency	Acres
Salt marsh	ASNH Hampton Salt marsh - SPNHF	0.2
Salt marsh	Battcock	5.0
Salt marsh	Battcock	5.5
Salt marsh	Battcock	1.4
Salt marsh	F&G Hampton Salt marsh - Brown	4.8
Salt marsh	F&G Hampton Salt marsh - Brown	2.5
Salt marsh	F&G Hampton Salt marsh - Garland	0.5
Salt marsh	F&G Hampton Salt marsh - Land	0.2
Salt marsh	F&G Hampton Salt marsh - Palmer	1.3
Salt marsh	F&G Hampton Salt marsh - Perkins	1.4
North Beach	Hampton Beach State Park	103.4
Hampton Beach	Hampton Beach State Park	65.0
Hampton Beach State Park	Hampton Beach State Park	54.4
Upland	Marsh Island Corp.	0.6
Wetlands	Marsh Island Corp.	11.0
Salt marsh	SPNHF Salt marsh - Lamprey	7.9
Salt marsh	SPNHF Salt marsh - Langley + Pierson	2.2
Salt marsh	SPNHF Salt marsh - Langley + Pierson	0.1
Salt marsh	SPNHF Salt marsh - Langley + Pierson	4.2
Salt marsh	SPNHF Salt marsh - Leavitt	1.7
Salt marsh	SPNHF Salt marsh - Penniman	1.2
Salt marsh	SPNHF Salt marsh - Penniman	0.5
Salt marsh	SPNHF Salt marsh - Penniman	1.3
Salt marsh	SPNHF Salt marsh - Penniman	9.7
Salt marsh	SPNHF Salt marsh - Penniman	7.8
Salt marsh	SPNHF Salt marsh - Penniman	1.3
Salt marsh	SPNHF Salt marsh - Rawding	0.8
Salt marsh	SPNHF Salt marsh - Rawding	1.0
Salt marsh	Town of Hampton	5.4
Salt marsh	Town of Hampton Marsh	0.8
Salt marsh	Town of Hampton Marsh - Garland	1.4
Salt marsh	Town of Hampton Marsh - Hickman	6.4
Former Barge Facility Land	Unknown	6.5
Total		317.5

Source: Rockingham Planning Commission, Town of Hampton Master Plan, 1995.

ASNH- Audubon Society of New Hampshire, SPNHF – Society for the Preservation of New Hampshire Forests

Figure 5. Designated Conservation Areas in the Hampton Beach Project Area



Zoning and Building Codes

This section of the Plan provides an overview of the zoning and building codes as they relate to the project area. Recommendations for changes to the ordinances follow in Section IV.B **Land Use**.

What is Zoning?

Modern zoning districts began in the early 1900's in response to the location of potentially incompatible and noxious land uses next to commercial and residential areas. The zoning ordinance has evolved over the years as a means to limit certain types of land uses in a particular area of the municipality, resulting in a separation of uses.

Overlay zoning, another common planning term, has additional restrictions in a defined area that extend the underlying zoning requirements. It is generally used when there is special public interest that does not coincide with traditional zoning in a specific geographic area. For example, a watershed overlay district may require increased distances or setbacks from a pond if a new house is constructed in or near its buffer zone.

Ideally, the Master Plan sets the agenda for town actions, and the Zoning Ordinance is the regulation that implements the Plan. Typically, a zoning ordinance regulates land by the following measures:

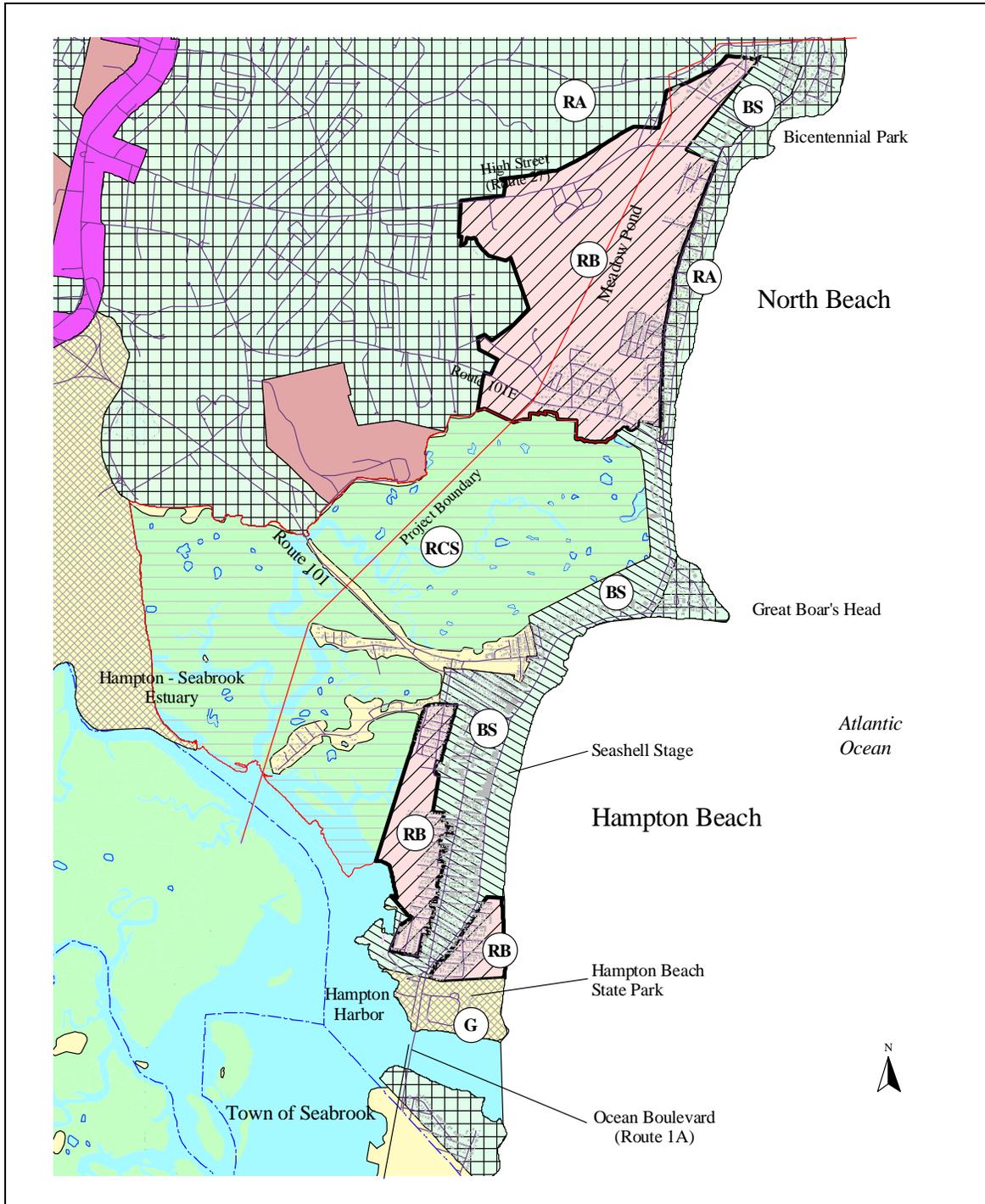
- Segregating land uses
- Creating development standards for the size and shape of lots and buildings
- Addressing lots, buildings, and uses that pre-dated the adoption of the zoning ordinance (non-conformities)
- Establishing criteria for the evaluation of permit applications for new buildings
- Establishing procedures for permitting uses not specifically allowed
- Defining terms that have specific meanings under the ordinance
- Creating a map that displays the location of each zoning district.

Overview of Zoning in Hampton Beach

The zoning ordinance establishes five zoning districts and two overlay districts in the Hampton Beach project area (see Figure 6). They are as follows:

- RA – Residence A: This is primarily a residential district that has a minimal lot area of 15,000 sf.
- RB – Residence B: This residential district has a minimum lot area of 10,000 sf.
- RCS – Residence C – Seasonal: The lot size for this residential district is 6,000 sf.
- BS – Business Seasonal
- G – General: This area applies only to the Hampton Beach State Park

Figure 6. Zoning in the Hampton Beach Area



- Wetlands Conservation District: This district is an overlay intended to protect, preserve, and prevent the unregulated filling and alteration of wetlands and their buffers.
- Aquifer Protection District: This district aims to protect, preserve, and maintain existing and potential groundwater supplies and related groundwater recharge areas of known aquifers.

The Hampton Zoning Ordinance was first adopted in 1949. Numerous sections have been added or revised on a section-by-section basis over the intervening years. Overall observations of the current ordinance are listed below.

Observations of the Zoning and Building Code Ordinance and History

- The ordinance provides clearly defined uses, districts, definitions, and a zoning map.
- An exceptionally high percentage of impervious surface area per lot is allowed for the RA and RB districts.
- Multi-family dwellings pre-dating the current ordinance are non-conforming uses, or “boxed out,” in the BS district.
- The Ordinance has been amended more than 45 times since it was adopted in 1949.
- The variance history shows a high number of variances granted in the Hampton Beach area (see the following section on Variance History).
- The ordinance lacks the graphics generally found in more modern documents to help support the intentions of the ordinance as well as provide a user-friendly document.

Observations in the Hampton Beach Area

- Year-round residential conversions have occurred in areas of homes that were originally designed for seasonal use. These conversions may increase water, sewer, and other public needs during the off-season months.
- There is a lack of exterior design control for off-season uses in the business districts.
- Many buildings appear to violate zoning regulations.

Additional specific observations are provided on the following Articles within the ordinance that are relevant to the project area.

Article V - Signs

The ordinance presents extremely detailed sign controls and regulations. It provides a definition for all types of signs, and establishes size and design restrictions, permitted uses, permits, fees, violations, and enforcement regulations. The ordinance does not, however,

define the minimum required amount of information for businesses to provide; it only specifies the maximum amount of information, such as directional information.

Deficiencies in the sign regulations are reflected in actual conditions with the built environment. Observations on existing signage in the project area, mainly along Ocean Boulevard and Ashworth Avenue, are as follows:

- There is a lack of signage that directs drivers and pedestrians to specific attractions or cultural areas, as well as interpretive signage about some of the area's environmental features.
- Signage dominates and obscures many views along the roads.
- Excessive commercial signage detracts from the area's visual attractiveness.
- There is an extensive amount of building signs that mask architectural features.

Article VI - Parking

The parking ordinance provides guidelines for various types of parking lots, requirements for use and design, and defines penalties for violations. Although these requirements are specific, they do not appear to be enforced. Specifically noted are the following observations:

- Some parking lots do not appear to have designated parking spaces for disabled patrons.
- The Town does not have records of all public and private parking lots, sizes, and locations.
- Although the State has a record of total parking spaces, there is no tabulation of spaces in individual lots and along sections of the street.
- Parking is not required in specific commercial areas that could have increased utilization by allowing shared parking.

It is critical to know the number and the use of parking spaces in the Hampton Beach area to establish the demand and need for parking and its management. This is especially important if the Town, and/or the State wish to establish a unified and coordinated parking plan for Hampton Beach. The consultant team has made record of these factors; they are described in the Transportation section.

Article VII - Exterior Design

This article identifies the need for exterior design control. However, these regulations are suited for residential subdivisions, and do not apply to an established, built out area such as Hampton Beach.

Article VIII – Multi-Family Dwellings

This article sets limits on setbacks, heights, and buffers for multifamily dwellings, which are defined as having three or more units. However, these dimensional standards “box out,” or limit new units, from being built in the Hampton Beach area for the following reasons:

- The average lot dimensions in the Hampton Beach area are 50 feet wide and 100 feet deep. However, the minimum frontage or width at the road under the regulations is 100 feet.
- No units are allowed within 40 feet of another lot line or building, which again conflicts with the existing lot dimensions.
- Driveways should be at least 25 feet from the front of any building.

Article IX - Manufactured Home Parks

This article establishes regulations for the site conditions and approval of a proposed manufactured home park. It defines lease arrangements, circulation, minimum number of homes, and open space buffer conditions.

Article X - Building Permits and Inspection

This article sets forth building permit requirements, and establishes limitations for the number of permits as part of the Growth Management Ordinance. Permit requirements include submittal of detailed and accurate floor and plot plans, and fees. It also sets forth inspection procedures and penalties for non-conformance with the requirements.

The intent of the Growth Management Ordinance is to guide and ensure the orderly development of land within the Town through compliance with the Master Plan, and with any revisions to the Subdivision Regulations, Site Plan Regulations, Zoning Ordinance, Capital Improvement Program, or the Master Plan. It also aims to encourage public debate and ensure adequate public services are available. Building permits are limited to 72 units in any 12-month period.

An important relevant requirement of this article states that a dwelling unit may be demolished or reconstructed if the use remains the same, and if the new construction conforms to the dimensional requirements of the Zoning Ordinance. This creates severe limitations on reconstruction of units in the high-density areas of Hampton Beach due to the common non-conformance with setback requirements that are seen in these areas. This requirement also acts as a disincentive to development.

Article XI - Construction Provisions

This article requires that any new or altered building conform to specific national codes, be connected to public sewers where available, and meet floodplain development regulations.

Floodplain regulations are particularly important to development in the Hampton Beach project area due to the significant number of valuable properties. Regulations require all necessary government permits, flood proofing and elevation information, flood carrying capacities in riverine areas, and minimized flood impacts to new sewer connections. Each of the specific flood zones has requirements that are more stringent than the building requirements outside the flood zones.

This ordinance, however, does not refer to the AE and the AE500 zones that are now used by Federal Emergency Management Agency (FEMA). Regardless, conformance with flood zone regulations requires significant building costs and modifications to flood proof, and this has an impact on the ability to alter the existing building stock in the flood zone within the project area.

Article XII - Certificates of Occupancy

This article requires that all new residential and commercial units and all existing rental units will require a certificate of occupancy to be issued by the Building Department to the owner of record. All rental property will be designated as either "Year Round" or "Seasonal". Units designated seasonal can only be leased between May 15 and October 15, and are not subject to the New Hampshire Energy Code.

This article states that the certificate expires ten years from the date of issue. Information received during interviews for this study suggested that there have been recent conversions from seasonal to year-round uses at many of the beach houses. However, records of the property conversions are not readily available for several reasons:

- The Building Department is not informed of all the conversions
- The certificate goes to the owner and not the property, making it difficult to track the properties

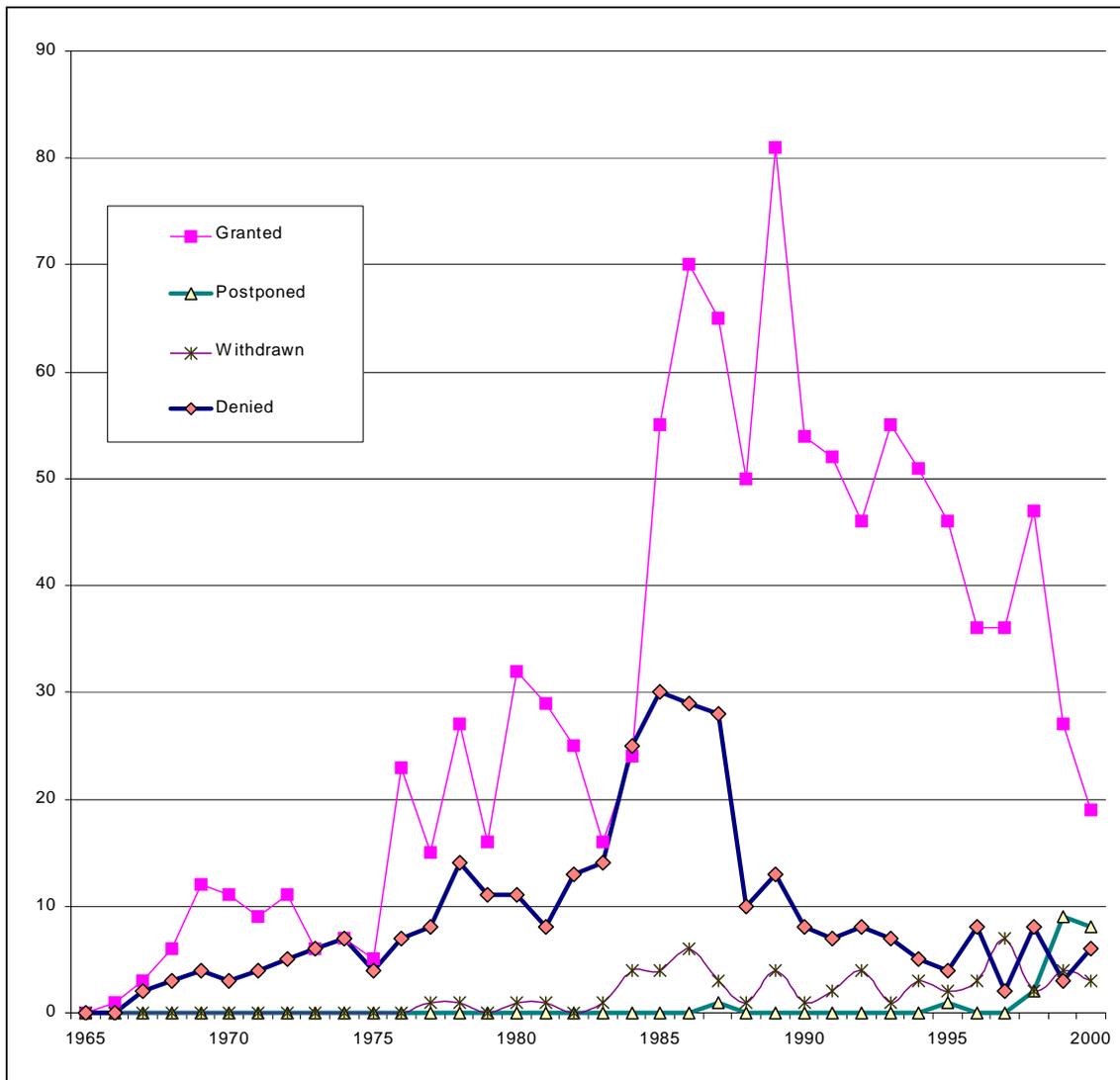
Variance History

The Town of Hampton Building Inspector's office has a detailed record of zoning variances that were denied, granted, postponed, or withdrawn since 1966. It includes variances for all properties along streets that are either in or pass through the project area. Almost 1,500 records were categorized by the type and year of the variance decision.

Overall, there appears to be a significant number of variances granted in the project area relative to the amount of denied variances (see Figure 7). More than 71 percent of the variances over the past 35 years were granted, and approximately 21 percent of the variances were denied. Most of the variance activity occurred between 1984 and 1998 with the highest number in 1986. In 1989, for example, 81 variances were granted and 11 were denied. There were fewer than 10 postponed or withdrawn variances in any single year over the past 35 years.

A significant amount of variances were granted in the Hampton Beach area during the past 30 years. The Zoning Ordinance, which provides the basis for approval and denial of a variance, has similarly been changed many times. This indicates that there has been a mismatch between the properties and uses at the Beach and the regulations that control them. It appears that the ordinance does not adequately serve property owners in the Hampton Beach area, and consequently it may need to be substantially revised.

Figure 7. Variance History for the Hampton Beach Area by Variance Decision, 1966 -2000



Source: Town of Hampton, Variance Records. May 16, 2000.

C. Historic and Cultural Assets

The Hampton Beach area has substantial historic and cultural assets. Since there is little, if any, documentation available that specifically reveals these assets, this assessment was based on personal communication with several local people and several source documents.

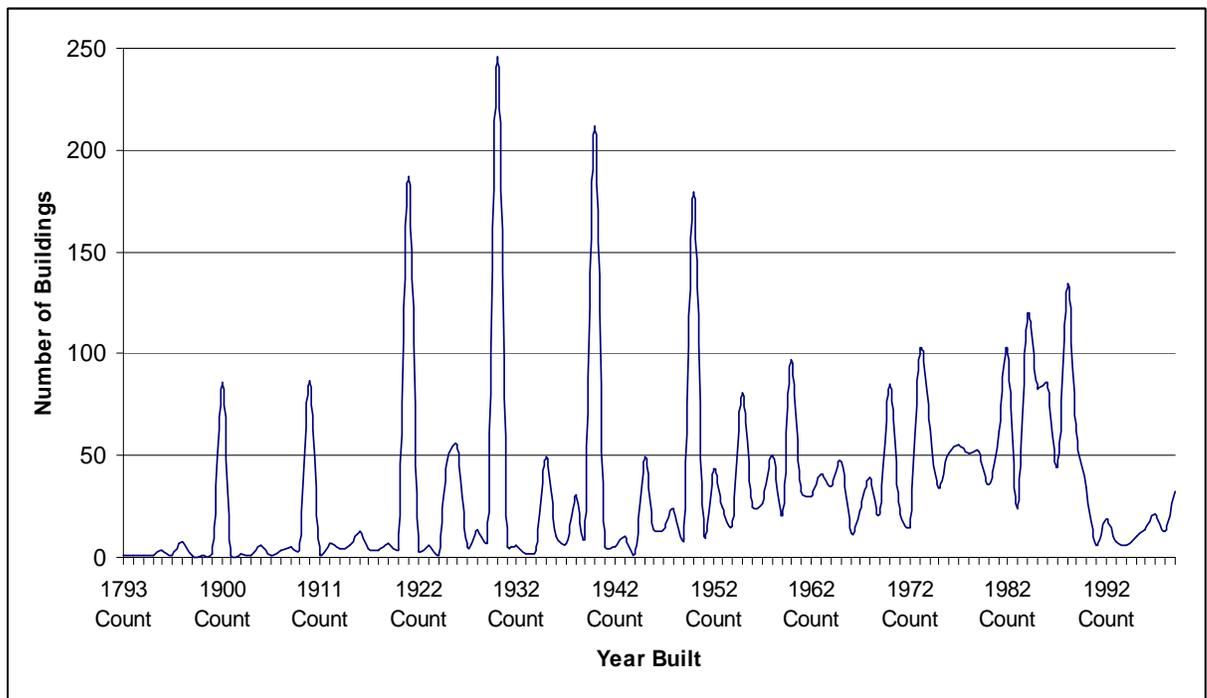
Most of the buildings in the project area were built between 1920 and 1960 (see Figure 8). There were periods and years (1920, 1930, 1940, 1950, 1973, 1982, 1984, and 1988) when a significant number of buildings were built. The average age of all the buildings is about 44 years. About 20 buildings were built before 1900, and some of these are identified in the following cultural and historic assets table.

Table 4. Cultural and Historic Assets in the Hampton Beach Area

Hampton Beach - Turn of the Century Architecture	
Location	Comments
The Casino	Built 1899
Ashworth Hotel	Largest hotel on the Hampton Beach waterfront
The Seashell Stage	Main boulevard and beach entertainment area
Sailors' Marine Memorial	Memorial dedicated to all the men lost at sea during the wars
Catholic Church	Located on Church Street
Community Church	Located next to water slide, on the other side of Ashworth Avenue from the Hampton Beach Fire Station
Hampton Beach State Park	Important state beach recreational area
Beach Fire Station	Located on Ashworth Avenue, built 1923
Sergeant's Island	Located in the marsh north of Hampton Harbor
Island Path/Glade Path	Location of old, early period beach houses
Bound Rock	Historic marker of Hampton town line
Bound House	Former house associated with Bound Rock
Reuben Lamprey Homestead	Built in 1760; located at 416 Winnacunnet Road; listed on National Register
Hampton Beach Dunes	Substantial heights of changing dune system
Boar's Head – Turn of the Century Architecture	
Greenman Estate	Located on the tip of Great Boar's Head, and recognized as one of the nicest 19 th Century homes in the Hampton area
North Beach - Turn of the Century Architecture	
Stone Cottage	Beautiful beach, stone cottage located on the south side of North Beach
Bicentennial Park	Location of Fish House, north side of North Beach, was the site of the Coast Guard Station which no longer exists

Agricultural Sites	
Hampton State Fish Pier	Important recreational boating ramp and parking area
Soft shell clam flats	Historically commercially-used clam flats, now recreational
Hampton River estuary and wetlands	Formerly used for grazing and collection of marsh hay, now considered ecologically important to improve the wetland ecology and water quality
Meadow Pond Farm	One of the few remaining farm areas along the NH seacoast

Figure 8. Number of Structures Built in the Hampton Beach Project Area by Year



Source: Town of Hampton Assessor's Records, 1999

Many historic structures no longer exist. The fires of 1915 and 1921 burned many of the original buildings. The original “mile long” wooden bridge was replaced by the current steel and concrete bridge in 1949. Nor do the trolley tracks remain. Although these structures no longer exist, they remain a part of the history that led to the area’s current conditions and development pattern. Recognition and preservation of the cultural past can shape how the community views its future.

Scenic Areas

The area around Hampton and North Beaches offer many viewing locations and vantage points. The State has designated an 18.5 mile Coastal Byway, which runs along the coast of Hampton from Portsmouth to Seabrook.

Aside from the designated viewing areas such as at the Seashell Stage and the Marine Memorial, many other locations provide not only panoramic views, but also “snapshot” views such as one looking east through the path of the State Park dunes, or through the narrow corridor of Tuttle Avenue to the marsh.

One of the most spectacular views in Hampton Beach is not from the Boulevard, but from the top of the waterslide next to the Community Church on E Street. This vantage point provides a 360° view of Hampton Beach and the tidelands behind it.

The following is a list of viewing and scenic areas:

Designated Viewing and Scenic Areas	Non-Designated Public and Private Viewing Locations
<ul style="list-style-type: none">• Seashell Stage area• Marine Memorial• Coastal Byway• Independence Byway	<ul style="list-style-type: none">• Great Boar’s Head• Top of the water slide on E Street• State marina• Boardwalk• Tower at Seashell Stage• Bicentennial Park

Another scenic area is along Winnacunnet Road, which is designated as a Scenic Byway. There are many historic homes along this road, which leads into the southern portion of North Beach.

There are some streets, however, that have restrictive or unsightly views due to the development or particular use of the property. For example, Duston Avenue is blocked by a high wooden fence, and Ashworth Avenue has several, large parking lots. To improve the views, these and other areas should be landscaped or have the barriers removed.

In essence, one can enjoy the views from many locations around the Hampton Beach area. The character of the street patterns, the land use, and the open areas make that possible.

D. Environment and Open Space

The section identifies the environmental conditions of the Hampton Beach and adjacent lands. It is based on information generated from assessor's records, GIS data, previous plans, state records, and individuals who have specific knowledge of the area. The project area includes a large portion of the estuarine system, which is impacted by the adjacent uplands. Much of the developed portions of the project area directly border this system, and the complex interactions and impacts of land uses and activities and the dynamic wetland ecosystems are discussed later in this section.

The Hampton Seabrook Marsh and Estuary

Introduction

The Hampton-Seabrook Marsh and Estuary lies within the Taylor River/ Hampton River sub-watershed of the Coastal Watershed. At 5,000 acres, it is the largest tidal marsh in New Hampshire. In Hampton, there are 1,554 acres of tidal marsh or coastal marsh along the Hampton and Taylor Rivers. This resource represents almost 20 percent of the Hampton's land area, and almost 40 percent of the project area. Within the marsh estuarine system, there are a number of watercourses and bodies including Hampton River, Tide Mill Creek, Nudds Canal, Blind Creek, Nilus Brook, Eel Ditch, Meadow Pond, and Old Mill Pond (fresh water).

The Hampton-Seabrook Marsh and Estuary provides habitat for several rare and endangered plants and animal, migratory birds and other wildlife. It is important in the production of fish and shellfish. It offers flood protection for adjacent uplands and acts as a water quality filter by trapping silt and organic matter. These wetland resources are also highly valued for open space, recreation, and education.

Physical Description

Like all tidal marshes of the northeast, the Hampton marsh appears almost flat and contains intricate drainage channels and creeks lined by small cliffs, or ridges, dotted with pools and salt pannes. It also contains many man-made ditches. This estuarine system is inundated by daily high tides and includes the following features:

- High marsh (featuring a complex plant community)
- Salt meadow which is flooded during bi-monthly lunar tides
- Low marsh (found on the fringes along tidal creeks or estuaries)

A border zone, also known as the ecotone, is formed where the high marsh and the upland, or a freshwater wetland, merge. This transition zone between two ecological communities usually contains a high diversity of species (vegetation and animal), and serves as a buffer zone for the marsh.

The soils of these wetlands are organic peat deposits composed of plant remains in various stages of decomposition, and sand, silt and clay mineral particles.

Functions

The Hampton tidal marsh is an important resource that provides critical ecological and social functions including habitat for plants and wildlife, hydrology for water flow, quality open space, and education.

Habitat

These resources provide habitat and reproduction areas for birds, wildlife, plants, and fish. They also provide valuable sources of food for waterfowl, fish, shellfish, and wildlife.

Flora

Tidal wetland vegetation is distributed according to tidal range, elevation, and soil salinity and type. As typical with most tidal marshes in this geographic area the two most common plant species are *Spartina alterniflora* found in the intertidal zone and *Spartina patens* found in the high marsh. Other species are listed below:

- Spike-grass, salt marsh gerardia, silver weed and sea milwort in the high marsh
- Tall reed, salt spray rose, seaside goldenrod and Virginia rose in the border zone
- Bayonet grass and glasswort in pannes

Fauna

The primary wildlife groups include waterfowl, raptorial birds, shorebirds, wading birds, gulls and terns, song birds, terrestrial mammals, marine invertebrates, reptiles and amphibians. Among the waterfowl are black ducks, mallards, American goldeneyes, mergansers, buffle-head, blue-winged teal, and Canada geese. Raptorial species include marsh hawks and harriers. Shorebirds include the semi-palmated plover, killdeer, black-bellied plover, golden plover, lesser and greater yellowlegs, and a variety of sandpipers. Songbirds include the red-winged blackbird. Mammals that inhabit the marsh or nearby border zones include cottontail rabbits, muskrats, raccoons, foxes, and white-tailed deer.

In the larger creeks and rivers, a variety of finfish including flounder and striped bass can be found. Small fish such as Tomcod and killifish inhabit small creeks and ditches. Crabs and eels and soft-shelled clams can be found on the tidal flats. There are also scattered pockets of blue mussels and American oysters.

New Hampshire Natural Heritage Inventory

According to the New Hampshire Natural Heritage Inventory (December 2000), there are 26 known occurrences of rare species and exemplary natural communities within the project area. These findings were recently issued in a Natural Heritage Publication—

Ecological Assessment of Selected Towns in New Hampshire's Coastal Zone, (Nichols 2000). Appendix I identifies 12 plant species, ten natural communities, and four vertebrate species.

Several endangered bird species inhabit the marsh or nearby Hampton Beach environs. In 1997, the piping plover, listed as a federal and state endangered species, returned to nest in New Hampshire. Usually one or two nests are spotted at the Hampton Beach State Park, which has a protected nesting area; one nest was spotted during the 2000 season. A state endangered species, the common tern, now has approximately 40 to 50 nesting pairs in the Hampton salt marsh. A pair of Arctic terns has also located to this area. Several salt marsh species of conservation concern also can be found including the willet, salt marsh sharp-tailed sparrow, and seaside sparrow.

Hydrology

Hampton's tidal wetlands act as natural buffers and flood water storage areas by protecting uplands and storing excessive runoff from storms, then slowly releasing the excess water. These resources also maintain water flow. During times of low flows for rivers and streams, wetlands augment stream flow by discharging excess water. Finally, these resources provide water quality purification by trapping silt and organic matter.

Open Space and Education

These tidal wetlands provide open space and recreation opportunities for residents and visitors as well as scenic/aesthetic enjoyment. They also have historical and archeological value as an integral part the region's settlement history, and have significance scientific value that can serve as a living learning environment.

Regulation of Tidal Marsh Activity

While tidal wetlands provide high value for habitat and open space, they pose many development limitations for building roads and other structures. In New Hampshire, tidal wetlands are primarily regulated by the State through the DES Wetlands Bureau. The Hampton Conservation Commission, however, also plays a very active role in tidal marsh protection and enhancement. In some instances, the federal government may play a role especially for large projects such as dredging, or bank stabilization.

Local

The Town mapped 26 tidal wetlands that were identified as "Prime" in the Hampton Beach project area. These wetlands are documented in a report to the Town — *Identification, Documentation, and Mapping of Prime Tidal Wetlands in the Town of Hampton, NH* (Richardson 1982). These wetlands are classified as "prime" due to their size, unspoiled character, fragile condition, and the ecological and social benefits. The prime status specifically prohibits filling or other alteration for development or other activities that would cause degradation of the present condition of the land without a duly noticed local

public hearing. To date, the Town has not legally adopted these prime wetlands, and therefore, the Town has no legal authority to report these areas to the State as designated prime wetlands qualifying for additional protection under RSA 482-A.

The Town of Hampton has a local Wetland Conservation District that distinguishes between inland and tidal wetlands. Essentially all of the wetlands in the study area are tidal. The tidal definition uses the Prime Tidal Wetland definition derived from the 1982 Richardson study. Permitted uses include forestry, agriculture, wildlife and conservation areas, education, and recreation. Under specific circumstances, structures such as wharves and footbridges may be permitted by Special Permit. The regulation also specifies a 50-foot setback from all fresh and saltwater wetlands. The Conservation Commission reviews all wetland permit applications. It forwards them to the Planning Board and the state Wetland Bureau, which ultimately issues the permit. The Town also has a series of aerial photo-based coastal wetland maps prepared in 1986 to assist with identification and management of these resources.

State

The State of New Hampshire regulates activities in tidal marsh areas through the Wetlands Bureau of the NH DES under RSA 482-A, which requires a permit for any filling, dredging, or structure construction in wetlands. Tidal wetlands jurisdiction extends up to the highest observable high tide and includes a tidal buffer zone of 100 feet. Any activity within this zone is regulated based on the impact of the proposed activity and its distance from the marsh.

The Wetlands Bureau also regulates activity in sand dunes under the same act, which would affect areas in the eastern side the study area associated with the beach and dune system. The DES has prepared draft-revised rules for tidal wetlands and sands dunes in The Code of Administrative Rules that implement this act. These rules are scheduled to be implemented by late spring 2001.

The State also regulates activities in shoreland areas under the Shoreland Protection Act. Under this act, the State has jurisdiction within 250 feet of the high tide line of any tidal marsh. The State has established standards for uses, woodland buffer cutting, septic system setbacks and building setbacks.

The New Hampshire Coastal Program (NHCP), under the Office of State Planning, funds a Federal consistency officer solely for work in the tidal areas of the Seacoast, including Hampton. This work is as part of NHCP's Federal Coastal Consistency Review Process, which involves state review of federal action and/or permit applications pursuant to federal laws and regulations to ensure that such activities are consistent with the state's federally-approved coastal zone management plan and program.

Federal

Depending on the size and nature of an activity, the Army Corps of Engineers (ACOE) may have jurisdiction through Section 404 of the Clean Water Act. The ACOE may coordinate review with the EPA, NMFS, and the US Fish & Wildlife Service. Most state wetland permits fall into the category of programmatic general permit. That gives the ACOE the option to intervene after a 20-day review period, but in most instances it does not. The ACOE will take jurisdiction over projects of significant size, such as those greater than three acres, or involving development of a new marina.

Current Situation and Issues

Intertidal Flow

Salt marshes need the flooding and draining of saline waters to create the conditions essential to the characteristic high marsh flora and fauna. Restrictions in flow create conditions for the growth of invasive species such as purple loosestrife, phragmites, and blue-green algae. Phragmites and purple loosestrife are a problem in some locations in the Hampton salt marsh. In addition, impounded or trapped waters prevent draining and augment mosquito breeding and a loss of natural predators such as fish and birds.

In the past, much filling and manipulation of the marsh system often restricted the natural flow of water. Consequently, portions of the marsh have become degraded. At present, however, the overall tidal flow in the Hampton salt marsh is good, and consequently is a relatively healthy marsh. Hampton has done much to restore the quality of the marsh. For example, several major restoration projects have been recently completed. After the Town replaced the culvert under Winnacunnet Road near Meadow Pond, tidal flow improved, flooding was reduced, and the purple loosestrife infestation diminished significantly. However, since the culvert replacement, significant erosion problems have occurred.

Water Quality

The State of New Hampshire has developed surface water quality classifications for all water bodies in the state. For the most part, surface waters are classified as either Class A or Class B. Class A is the highest quality and is typically designated for municipal water supplies. The Hampton River estuary is designated as Class B, meaning it is acceptable for fishing, swimming, and other recreational purposes. The estuary typically meets this standard. However, there is a caveat for tidal waters that are used for the growing and harvesting of shellfish for human consumption. In this instance, the standards must meet the criteria of the National Shellfish Program Manual of Operation that is under the jurisdiction of the US Food & Drug Administration (FDA). The key water quality parameter for allowing the harvesting of shellfish is the presence of fecal coliform. Wherever this standard is exceeded, shellfishing is prohibited.

In the 1980's, the entire harbor was classified as "Restricted" because bacterial counts were higher than the FDA standards. This determination was based on limited sampling.

Fecal coliform is typically related to human or animal waste. At present, the NH DES does not have a permanent baseline water quality monitoring station in the tidal portion of the Hampton River. However, for the past several years, NH DES and the Department of Health have established an aggressive water quality monitoring program that samples water quality on a much more frequent basis than in the past. The results of this monitoring indicate that after a significant rainfall, fecal coliform counts also rise significantly. However, approximately three days after rain events, fecal coliform counts typically drop to acceptable enough levels to allow shellfishing.

Consequently, some clam flats (i.e., Common Island Flat and Hampton/Browns Flat) in the harbor have been “Conditionally” opened on a limited basis— Fridays and Saturdays from November to May. These flats can be opened if the coliform counts in a given time period are below the standard for closure. Other areas of the harbor near Tide Mill Creek are closed since the Hampton waste treatment plant discharges into the creek.

The overall water quality of the estuary has improved in recent years as both Hampton and Seabrook have taken actions to reduce contaminant discharge. At present, almost all of Seabrook is on a public sewer. Hampton has also made significant progress in expanding sewer coverage. Several residences in Hampton Harbor, however, are not connected to the sewer system. The Town also installed a new dechlorination facility at the wastewater treatment plant. Remaining sources of estuarine pollution still include the Hampton Waste Water Treatment Facility and non-point source pollution from the impervious developed areas of Hampton Beach.

Sand Dune Degradation

Although there are limited sand dune resources in the study area, these areas should be protected and managed as they represent valuable habitats and act as natural storm barriers. Much of the original dune line has been destroyed, although there are remnants at Hampton Beach State Park and the area just north of the park. The beach area north of the Hampton Beach State Park north to the beginning of the seawall/street side parking area is bordered by residences and dead end streets, and has had significant dune degradation

During the past year, the NH DES has worked with students from Winnacunnet High School to install fencing in the state park dunes to control foot traffic and establish walkways to protect the dunes. Under this program, areas of the dunes were also re-vegetated. Although this fence provides many long-term habitat and flood-protection benefits, it was taken down during the summer of 2001.

Point Source Pollution

Waste Water Treatment Facility

A majority, but not all, residential and commercial users in the project area are on the Municipal Wastewater Treatment Plant. This is a secondary treatment facility employing an activated sludge process. It has a design capacity of 4.7 million gallons per day. The

plant discharges into a tributary of Tide Mill Creek. At present, there is a moratorium on additional hook-ups to new developments.

This facility represents a threat to the marsh and estuary especially during periods of high stormwater runoff when the plant has difficulty treating additional loads. The stormwater discharged to the tidal wetlands is a source of high fecal coliform counts to the estuary, which contributes to the closure of shellfish beds for recreational harvesting.

Industry

There are three point industrial sources of pollution within the Hampton River Watershed each with an NPDES permit.

Non Point Source Pollution

Untreated stormwater runoff from the Hampton Beach area flows into creeks, rivers, and drainage ditches. Stormwater drains enter the marsh and harbor as non-point discharge. There are approximately 200 untreated stormwater or other discharge pipes that enter directly into the Hampton-Seabrook Marsh and Estuary. In the Hampton Beach Study area, there are 16 direct discharge points between Fellows Avenue and the intersection of Brown Avenue and the Route 101 (see Figure 9).

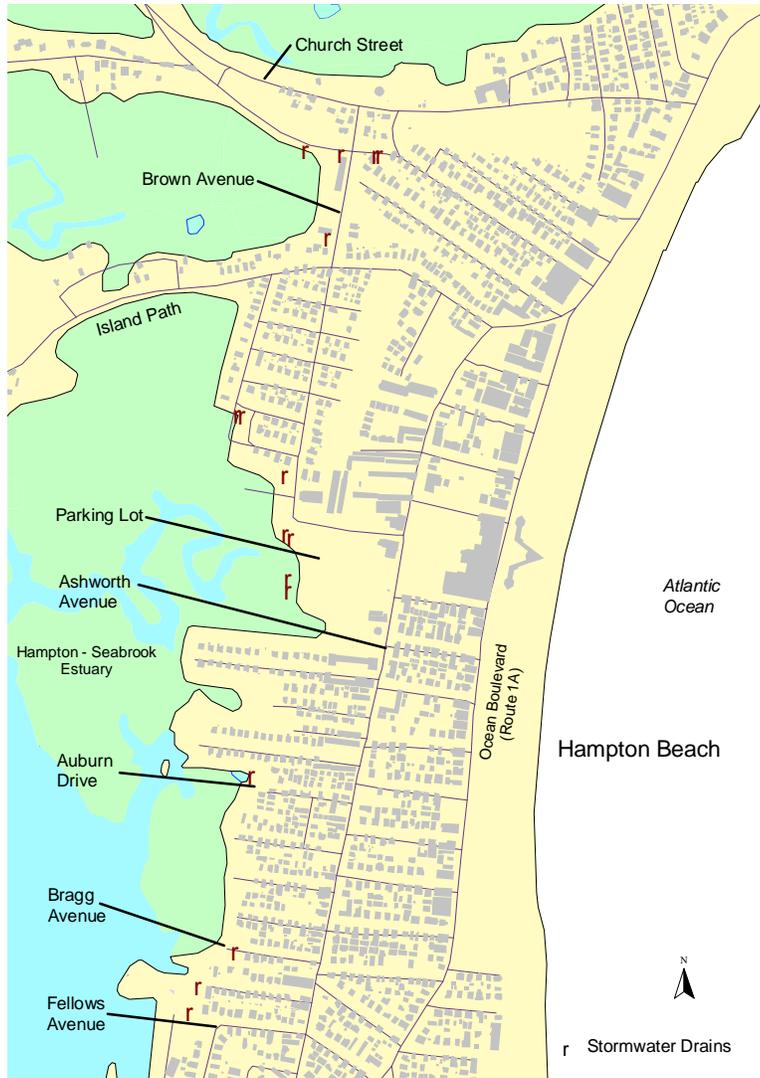
The cumulative impact from development may also compromise water quality and the integrity of the salt marsh. Increased run-off from impervious surfaces, wastewater treatment plant overloading and malfunctions, faulty individual septic systems, and inadequate storm water drainage all contribute to the degradation of water quality.

Another source of nonpoint pollution is from marine engines, mainly 2-cycle outboards that discharge unburnt fuel directly into the water. Newly designed 4-cycle engines emit significantly less pollutants into the water. EPA mandated that by 2006, dealers could sell only these new low-pollution engines. The NH Department of Environmental Services and the NH Marine Trades Association have teamed up to encourage consumers to purchase and use cleaner-burning engines. These two groups entered into a voluntary agreement to accelerate the phase-in of the new low-pollution marine engines in New Hampshire before the EPA 2006 mandate.

Marinas

Although there are only two marinas in the harbor—one state and one private—there is potential for contamination of the estuary from day-to-day operations and maintenance procedures. These uses also pose a potential threat of spills and/or dumped sewage from boats that could compromise water quality. A 1994 Sanitary Survey Report indicated that the Hampton River Marina and the presence of boats moored nearby had a negative impact on the shellfish flats.

Figure 9. Map of Stormwater Discharge Points



Source: Shellfish Restoration Program, NH Department of Environmental Services.

Private Property Activity

In a number of areas along the fringe of the marsh, there are periodic encroachments by private owners. In particular, the areas of Island and Glade Paths include a number of cottages and homes that are essentially constructed in or very close to the marsh. While such structures might not be legal if they were to be built today, at present they represent a significant encroachment into the marsh environment. Any expansion or substantial reconstruction of these homes needs to be strictly regulated to ensure the public benefits associated with a healthy marsh system.

Analysis and Issues

Overall Health of the Marsh and Estuary

The overall health of the marsh is good in terms of limited restrictions to tidal flow or areas of water retention on the high marsh surface. Several projects are underway sponsored by the Town and the Natural Resource Conservation Service (NRCS) to deal with moderate flow issues in the marsh. However to ensure the continued health of the marsh, invasive species, such as phragmites, need to be monitored and controlled through restoration projects.

Development Encroachment

Development in the watershed and areas immediately adjacent to the marsh impact the overall health of the marsh. These impacts contribute to the degradation of water quality and other important wetland functions. They also tend to fragment the significant habitat that the marsh provides for many waterfowl and wildlife species and fish.

Nonpoint Pollution Abatement

In the Hampton Harbor area, ambient water quality during dry weather periods has improved, but water quality monitoring indicates a decline in quality after storm events. The water quality of the marsh is compromised by nonpoint pollution sources. Nonpoint sources impacting the marsh include stormwater, failed septic systems, development activity (residential and commercial), runoff from impervious surfaces, and other direct and indirect sources and activities.

Recreational Activities

Motorized recreational activities in the estuary and marsh, such as jet skis, are disruptive to the marsh. Impacts of motorized recreational uses include bank erosion, disruption of bird nesting, and nonpoint pollution (oil/ fuel spills).

Habitat Protection and Salt Marsh Ecosystem Integrity

The long-term preservation of the Hampton-Seabrook salt marsh and estuary is important to maintaining a healthy and diverse habitat for the numerous plant, bird, wildlife and fish species supported by the marsh. Fragmentation of the habitat by development encroachment and individual ownership uses is apparent and risks habitat loss and endangering species.

Abuse of Tidal Wetlands

Tidal wetlands are severely impacted by residents and visitors that dispose yard waste such as lawn clippings and hazardous household waste such as used motor oil directly into the marsh and into areas that runoff into the marsh such as storm drains and parking lots.

Aside from formal education of the public, signs and brochures should be strategically placed to inform these people about the negative impacts to the environment and about alternatives to dumping wastes in and near environmentally sensitive areas.

Education and Outreach

The Seacoast region of New Hampshire has several environmental facilities that specialize in different marine fields. The following is a list of these programs.

Name	Location	Specialization
Agricultural Education and Research Center	Hampton, Route 1	Aquaculture
PSNH Science and Nature Center	Seabrook Station	Wetland ecology
Sandy Discovery Center	Great Bay Estuary, Stratham	Research, education and resource protection of Great Bay Estuary
Seacoast Science Center	Odiorne Point State Park, Rye	Rocky and tidal shores

Residents, public officials, and the tourist population could all benefit from educational efforts highlighting the functions of wetlands, especially in Hampton – Seabrook Marsh and Estuary. These would include the following:

- Providing habitat and reproduction areas for rare/endangered plants and animals, migratory birds and other wildlife, and fish and shellfish
- Identifying their hydrologic importance in tidal flow and flood control
- Promoting their aesthetic, historical and scientific importance

Lack of understanding of this complex system may contribute to potential future misuse and abuse.

Air Quality

The quality of air has important implications for people who live and visit an area, especially in an intensely developed and actively used recreation area. Hampton Beach must deal with air quality issues from two sources:

1. It is in a non-attainment area for ozone as identified by the US EPA
2. Emissions from idling cars produce air pollutants and offensive fumes that concentrate along some of the main roads

These two issues are explained in more detail in this section.

Background

The Clean Air Act requires the US EPA to set National Ambient Air Quality Standards (NAAQS) which protect the public health and “[allow for] an adequate margin of safety.” New Hampshire’s ambient air quality standards are identical to the NAAQS. As of mid-1997, NAAQS existed for the following six pollutants:

1. Nitrogen dioxide (NO₂)
2. Carbon monoxide (CO)
3. Particulate matter smaller than 10 microns (PM₁₀)
4. Ozone (O₃)
5. Sulfur dioxide (SO₂)
6. Lead (Pb)

For each of the NAAQS pollutants, different regions of the U.S. are classified as either “attainment” or “non-attainment.” The State of New Hampshire operates a network of air quality monitors located in each of ten state counties. These monitors measure a variety of air pollutants and are operated on a continuous basis.

Formation and Sources of Ozone

Cars, buses, and trucks are defined as mobile sources of air pollution because they generate three major pollutants: hydrocarbons and volatile organic compounds (VOCs), nitrogen oxides (NO_x), and carbon monoxide (CO). VOCs react with NO_x in the presence of sunlight and elevated temperatures to form ground-level ozone, a major component of smog. Ground-level ozone is the most serious air pollution problem in the northeast and Mid-Atlantic States.

Air Quality Programs

Ozone is the only pollutant that classifies Rockingham County as a “non-attainment” area. Therefore, this area is required to develop air quality plans and take particular steps on a specific timetable to demonstrate reductions in the pollutants that contribute to ground-level ozone.

There are no programs specific to the Hampton Beach area that addresses air quality. Rockingham County, however, has a motor vehicle emissions testing program, new motor vehicle standards, a gasoline vapor recovery program, and a federal reformulated gasoline program that are being used to restore air quality for ozone. The failure of a non-attainment area to achieve air quality standards on schedule can result in the following:

- Withholding of federal transportation funds
- An increased need to reduce emissions from industrial and business sources at a rate that could negatively affect their ability to expand or add new facilities

Local Vehicle Emissions

The Hampton Beach area has an acute problem with emissions (fumes emitted) from idling vehicles. Anecdotal information gained from interviews with people who work, visit, and live in the area revealed the degree of the problem. The common complaint is that many vehicles trying to travel along Ocean Boulevard, Ashworth Avenue, and some of the connecting roads, idle for many minutes. This situation is particularly acute during morning and afternoons, and during special events. The combination of a large volume of cars and long idle times results in poor air quality and fumes that create an offensive and undesirable environment.

E. Hampton Harbor and the Waterfront

Hampton Harbor and the adjacent waterfront are located at the southern end of Hampton Beach along the Hampton River. Hampton Harbor is an inlet from the Atlantic Ocean that is formed by the confluence of the Hampton and Blackwater Rivers. The Blackwater River represents the southern portion of the harbor and is principally within the town of Seabrook. The northern portion of the harbor, associated with the Hampton River, is the focus of this section of the Master Plan.

The Harbor provides a variety of marine-related activities with recreational boating and commercial fishing the most common. One of the Harbor's best assets, aside from its relatively deep water and protection from severe storms and waves, is its location on the New Hampshire seacoast. Vessels have direct access to the Atlantic Ocean with only several hundred yards of channel length. This section of the report describes the physical elements and current land and water uses and activities of this area.

Physical Conditions

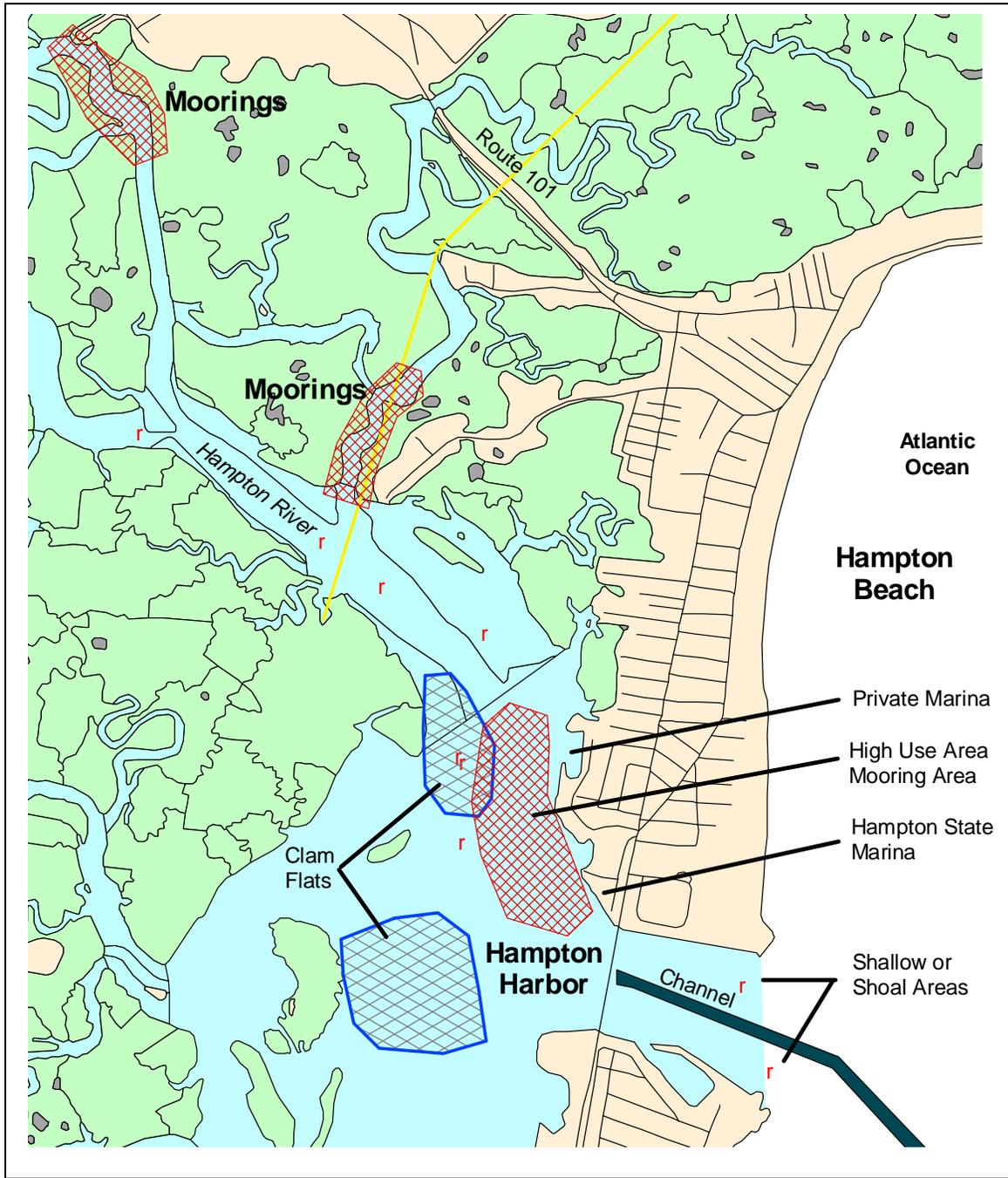
Harbor Channel

The entrance to Hampton Harbor is through a federal channel that is maintained by the US Army Corps of Engineers (ACOE) and is bordered by two stone jetties on either side of the inlet (see Figure 10). These jetties were installed in the early 1930's to stabilize the inlet. This inlet, first dredged in 1965, allows navigation from the outer ocean through a relatively narrow channel that separates Hampton Beach State Park to the north and the Sun Valley section of Hampton to the south. Prior to the channelization by the ACOE, the inlet was actually south of the Sun Valley area.

Historical records indicate that the barrier beach system has shifted significantly over the past 150 years. Even today, this system is dynamic with sand transport moving predominantly from north to south along Hampton Beach. This sand is deposited in and around the existing channel. At present, there is shoaling on the north side of the inlet and a sand spit off the south side. Periodic maintenance dredging of this inlet is necessary to ensure that it remains at project depth.

A 40-foot wide bascule bridge stretches over the Hampton River. This bridge is operated and maintained by the NH Department of Transportation (NHDOT). During most of the year, the bridge is opened on demand from vessels that need to enter or exit the inner harbor. Under the bridge, there is a 17-foot clearance for vessels at high tide.

Figure 10. Hampton Harbor Area Conditions



Travel within the federal channel and under the bridge can be hazardous. Flood velocity is 1.5 to 2.2 knots and the ebb velocity is 2 to 3.2 knots. In addition to the potentially fast current, there is continual shoaling and periodic strong winds. The US Coast Guard maintains five markers in the channel to guide vessels into and out of the harbor.



Aerial View of Hampton River Channel and Hampton Harbor Looking West

Wind and Tide Characteristics

Wind velocity, direction, duration, and fetch (distance the wind travels across the water) combine to create wave action within harbors that determine the quality of the area for anchorage. In Hampton Harbor, the fetch is generally limited since the harbor is semi-enclosed and protected from the east by the barrier beach.

Based on wind data from the Isles of Shoals Station from 1984 to 1993, the mean monthly wind speed ranged from a low in July of 10.7 knots to a high in December of 16.3 knots. Based on the same data, wind direction occurred most frequently from the west—20.11% of the time compared to the east, which was only 5.34% of the time. Other quadrants with relatively high wind occurrence included the northwest with 14.29%, the south west with 15.25%, and the south with 16.50%. As with much of this geographic region, the prevailing winds come from the west—typically from the southwest in the summer and the northwest in the winter. Since the harbor is generally exposed to the west over the low-lying marsh, high winds from a westerly direction can be a problem. Storms such as Hurricane Bob in 1991, which had a strong southwesterly wind component, caused significant damage to property in the harbor.

Tidal records are kept for Portsmouth Harbor and are adjusted for Hampton Harbor. The harbor has mean range of 8.30 feet—with mean high water at 8.63 feet and mean low water at 0.33 feet. The mean tide level above mean low water is 4.5 feet.

Harbor Uses and Activities

Hampton Harbor is principally an anchorage for numerous pleasure craft, as well as commercial fishing vessels, and charter boats for deep-sea fishing and whale watching. The harbor's configuration and depth allow many vessels to use its waters. Several shallow areas in the harbor, such as near The Willows, restrict vessel navigation, which is fast becoming a major problem for boaters.

Controlling depth for navigation in the harbor is approximately 5-6 feet, although dredging is required at least every 5 years to maintain this depth. The last dredging was in 1998.

Continual sedimentation and shoaling creates a problem not only in the channel but also outside the channel. In an effort to guide vessels in the harbor, the state maintains three channel markers. With continual shoaling in various parts of the harbor, depths of 2-3 feet or less are common. These areas can change incrementally from year to year. Consequently, local knowledge is required for safe passage of vessels.

In an effort to better understand the dynamics of harbor circulation and sedimentation, the State has retained marine engineers from UNH to conduct a hydrodynamic study of the harbor to provide guidance for future dredging and harbor maintenance activities. No further dredging will take place in either Hampton or Seabrook Harbors until this study is completed in 2001. In addition, a Dredge Management Task Force, made up of representatives from relevant state and federal agencies and coordinated by the Office of State Planning, meets periodically to discuss and coordinate dredging policy and activity in the Seacoast, including Hampton and Seabrook Harbors.

Large Vessels and Moorings

The Pease Development Authority, Division of Ports and Harbors (PDA-PH) is responsible for permitting moorings within the harbor. There are now 183 permitted moorings in the harbor. Of these, 52 are classified as commercial, meaning that the mooring is used for business purposes. For example, Smith & Gilmore Fish Pier has three moorings and Gauron Fisheries has five. The mooring permits have an annual fee of \$4 per linear foot of vessel. If a private entity, such as a marina, leases a mooring, the rate is \$5 per foot. There are no leased moorings in Hampton Harbor. At present, the harbor is at capacity and the only new mooring permits that are issued come off a waiting list of 70 individuals. There is very little turnover of mooring permits, no more than one or two per year.

Most of the vessels are moored in the main harbor area, although there are some in Tide Mill Creek and Nudds Canal associated with Hampton River Boat Club or private land owners. The Harbor can accommodate relatively large vessels since the harbor is dredged approximately every five years to a controlling depth of approximately six feet. Vessel lengths vary from approximately 15 feet to 45 feet with drafts that range from one to six feet. The PDA-PH has a part-time harbor master for Hampton-Seabrook Harbor, who is responsible for setting moorings and maintaining proper navigation including the setting of the channel markers.

Small Vessel Activity

Over the past several years, there has been an increase in small vessel activity, especially with personal water crafts (PWC) and sea kayaks. These craft are either brought in on trailers and launched at the state marina or rented from one of the shoreside concessions. PWCs that are rented from Smith & Gilmore are taken out of the harbor and allowed to function in the near shore waters off Hampton Beach State Park. Individual owners of PWCs that launch from the state ramp have been observed to cause problems within the harbor due to speeding and reckless operation.

These vessels have adversely impacted the estuaries. Their wakes and the vessels themselves erode the marsh edges and destroy critical estuarine habitat. It is difficult to enforce vessel speeding laws and environmental regulations that help protect the estuaries on account of the following challenges:

- Large size of the wetlands and extent of waterways
- Relatively few number of enforcement agents
- Vessel owners that are uneducated about the need to protect critical wetland habitat

Commercial Fishing

There are approximately 20 full-time commercial fishermen in Hampton Harbor. Most of these are members of the Yankee Fisherman's Cooperative (Co-op) that is located in Seabrook Harbor. The Co-op provides a number of services for its members including bait, ice, cold storage and discounted goods from the Co-op store. There are also a number of part-time fishermen that use the harbor. Depending on the season, a given fisherman might fish for a variety of species—ground fish in the spring, shrimp in the winter, and finfish in the summer or fall. Lobsters can be taken year round, though stocks are more abundant in the late spring, summer and fall. Because of the federal limits on the number of catch for ground fish, many of the fishermen have moved solely to lobstering. The value of this fishery is indicated by the gross revenues of \$3 to \$5 million annually from the reported catch at the Co-op.

Shellfishing

Recreational shellfishing is allowed in the harbor area under limited conditions on weekends from November to May. Most of the shellfish activity occurs on the

Hampton/Browns Confluence Flat, Common Island Flat, and Middle Ground Flat. The latter two are in Seabrook Harbor. There is no commercial shellfishing permitted in New Hampshire.

Harbor Management

The harbor areas of New Hampshire, including Hampton Harbor, are under the jurisdiction of several state agencies including the PDA-PH, Department of Safety Marine Patrol, Fish & Game, NH Division of Parks and Recreation, and the Department of Environmental Services (DES). In addition, several federal agencies have legal jurisdiction for specific activities that directly or indirectly affect harbor activities.

State

Pease Development Authority, Division of Ports and Harbors (PDA-PH)

This agency is responsible for permitting, locating and managing moorings in the coastal waters of the state. In addition, the PDA-PH is responsible for ensuring safe navigation of vessels through the location of navigational aids in state waters and the maintenance of channels for safe vessel travel. In Hampton and Seabrook Harbor, a part-time harbor master is responsible for these activities. The Authority also works with the Dredge Management Task Force to coordinate dredge activities in these harbors.

NH Department of Safety/Marine Patrol

In New Hampshire, personal watercraft (PWC) or *Jet Skis* are registered through the Department of Safety. The Marine Patrol, a Division of this Department, is responsible for ensuring safe operation of vessels in the coastal waters of the state. The Marine Patrol has three vessels that operate in the Seacoast that are docked at the Coast Guard Station in New Castle. The patrol also has an 18-foot skiff that is stored in Hampton. This vessel was recently added in response to the need to control vessels specifically in Hampton Harbor, especially PWCs. The Patrol operates from approximately late April to the end of October with three full-time patrols on the weekends during the season, including one patrol just for the Hampton skiff.

Since anecdotal information is inconsistent with the number of reportable vessel incidents or violations, especially for PWCs, and marine patrols are not on duty on a regular basis due to weather conditions and other factors, valid trends are difficult to assess. However, there appears to be general agreement that PWCs have become a nuisance in the harbor. By law, all vessels have to maintain headway speed (no wake or no greater than 6 mph) within 150 feet of another vessel, mooring field, swimmer, raft, dock or the shore.

NH Fish & Game

The New Hampshire Fish & Game Department is responsible for the management of living marine resources in the state and the Seacoast. In addition to its legal responsibility to protect and manage these resources, Fish & Game also issues licenses for recreational and

commercial fishing and recreational shellfishing. There is a specific license for lobster and crab. The department has a ten-quart limit on soft shell clams.

NH Division of Parks and Recreation

The Division of Parks and Recreation of NH DRED manages the state marina, charges fees for parking and launching vessels into the harbor from the state ramp, and charges commercial fishermen for use of the commercial pier. DRED, however, does not have direct jurisdiction of water activities in the harbor. Management of the marina is discussed more fully below.

NH Department of Environmental Services

NH Department of Environmental Services (DES) is charged with maintaining and enhancing water quality in the Hampton-Seabrook Estuary including the harbor to provide greater opportunity for recreational fishing and shellfishing. DES also regulates harbor dredging and dock construction under RSA 482-A through its wetland permitting process. DES and Fish & Game determine when shellfish beds can be open during the season. At present, three shellfish areas are “conditionally open” and can be harvested on Fridays and Saturdays from November to May as long as there has been no rainfall event prior to a weekend opening and/or fecal coliform counts are below the threshold determined to be safe for shellfishing.

NH Office of State Planning

The New Hampshire Office of State Planning (NH OSP) is responsible for administering the state’s coastal program. This agency acts in a coordinating role to encourage Seacoast communities to adopt polices and regulations consistent with the state’s coastal zone management plan and program. It works with state and federal agencies to ensure that any actions by these agencies in New Hampshire coastal zone are consistent with the state’s coastal zone management plan and program. NH OSP coordinates the state’s Dredge Management Advisory Committee and manages the Federal Consistency program, and provides grants to local Seacoast communities and groups for projects that work toward achieving the goals of the state’s coastal program.

Federal

US Army Corps of Engineers

The Corps regulates work in, or affecting, navigable waters under Section 10 of the Rivers and Harbors Act of 1899. It also regulates activities in wetlands and shorelands. The Corps is responsible for maintaining the federal channel and issuing permits for state dredging projects in the harbor.

US Coast Guard

The Coast Guard is responsible for navigational safety in the federal channel through the placement and maintenance of Aids to Navigation buoys and markers.

National Marine Fisheries Service (NMFS)

NMFS is responsible for management of marine mammals and fisheries and endangered species. This agency establishes legal limits for harvesting various species of marine life.

Landside Uses and Activities of Waterfront Area

The landside area of the harbor area includes all the properties south and west of Ocean Boulevard and Duston Avenue (see Figure 11). The area is comprised of residences, marinas, and some retail shops (see Table 5). Over 14 percent of the area (1.2 acres) is vacant property.

Table 5. Land Uses and Values Along the Hampton Harbor Waterfront

Use	Lots	Units	Size (acres)	Acres (%)	Values
Residential	11	25	2.0	24	\$2,817,500
Residential/Commercial	3	3	1.9	23	\$791,700
Commercial	3	NA	3.3	39	\$1,687,000
Vacant	3	NA	1.2	14	\$76,100
Total	20	28	8.4	100%	\$5,372,300

Source: Town of Hampton Assessor Records, 1999.

Property Values

Waterfront areas typically have large ranges in property values due to the existing and allowable uses. Most of the properties in this area have direct water access. Residential lots also have higher property values than commercial lots based on lot size. This area includes two buildings that have a total of 12 condominium units. The value of these units may explain why the residential values are high.

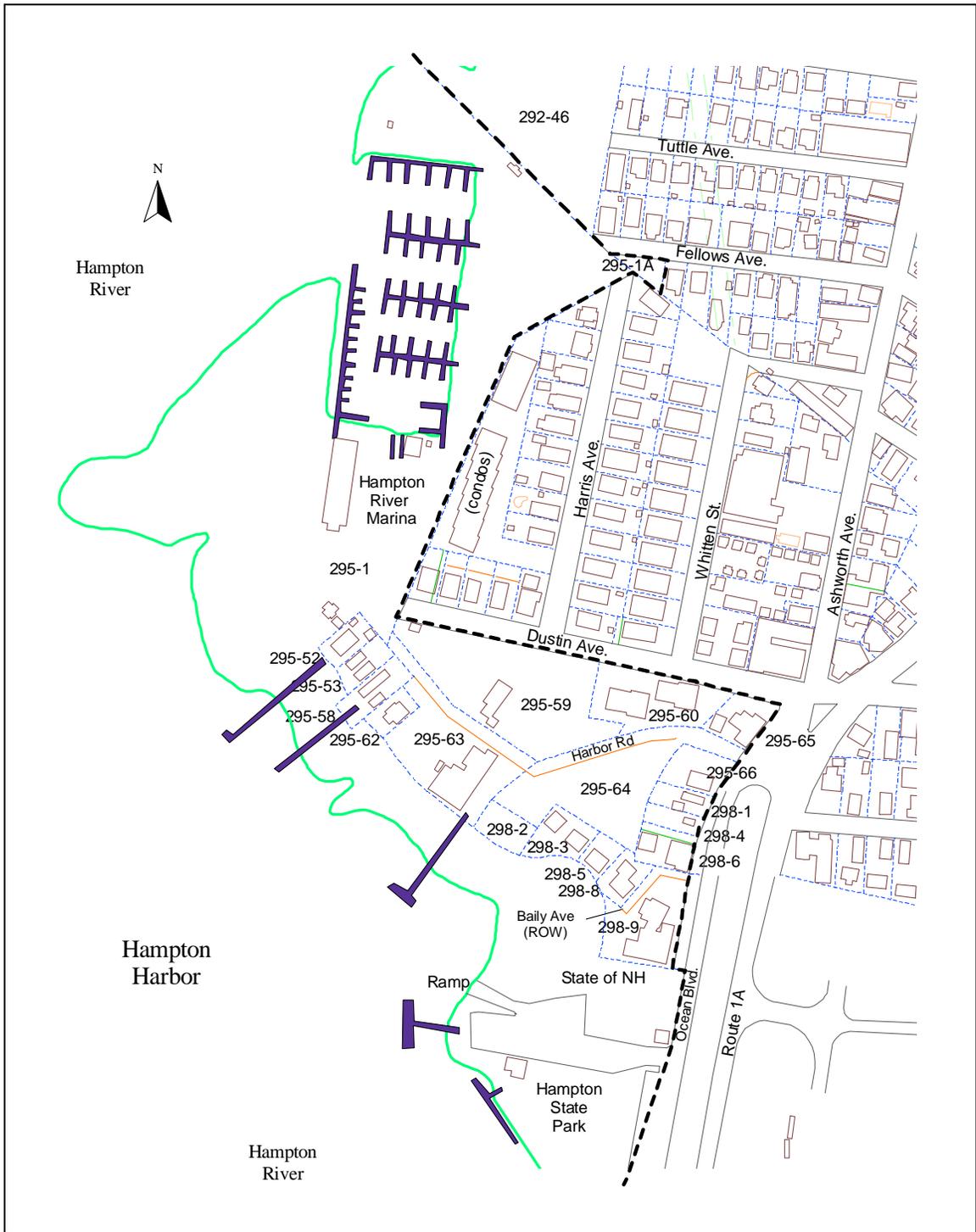
Marinas

Hampton River Marina

The Hampton River Marina located on the northwest portion of the Harbor is the only privately operated, full-service marina in the Harbor area. The marina, a large facility, built on filled and dredged wetlands provides 142 slips that average 30.5 feet in length as well as approximately 65 spaces in a 3-level dry stack storage facility. Almost all of the vessels are powerboats; only four are sailboats. Most of these are between 25 and 35 feet (97) while another 30 are greater than 35 feet in length.

This marina provides a variety of services including: a boat lift, a boat ramp, a seasonal restaurant, the only pumpout in the harbor, showers, a laundry, recreation room and repair services. It also provides fuel, electricity, ice, and services for transient boaters.

Figure 11. Properties in the Hampton Harbor Area



It is open in the off-season on a limited basis. A number of commercial fisherman dock their vessels at the marina during the winter to protect their vessels with the wind/wave screen that shelters one area of the marina. Basic marina services are available during the off-season.

Hampton Harbor State Marina

Hampton Harbor State Marina, a state-operated marina located on the southeastern portion of the Harbor, is currently managed by NH Division of Parks & Recreation (NH DPR), a division of DRED. It provides multiple uses including a recreational boat launching area, parking, a pier for commercial fishermen, a bait and tackle shop, and duck boat tour, parasail, and Jet Ski rental businesses.

The commercial fishing facility includes a parking area that is adjacent to a timber-pier with approximately ten floats, parallel to the pier, and two hoists for commercial fishing activities. For the most part, fishermen use this facility to take on or off-load equipment such as lobster pots. The only service the state provides is a waste oil disposal facility. The fishermen use the Yankee Co-op in Seabrook for such services as ice, bait, and fuel and to off-load fish.



View of the Hampton Harbor and Bridge Looking South

For recreational boaters, the marina provides a parking area for vehicles and a 25-foot concrete boat launch as well as a dock and float system for temporary tie-up. There are also bathroom facilities and a bait and tackle shop on premises. The shop leases space from DRED. A duck boat business also leases space from DRED.

The facility is open year round, but services are very limited in the off-season. NH DPR provides a manager only during the boating season from approximately May through October. This individual is available only on weekends in May, then full-time from June to Labor Day, and then weekends until closing, usually in October. The recreational floats are removed in October and re-installed in April. Fishermen continue to use the facility in the off-season, but there is little in the way of recreational boating activity. The seasonal manager is responsible for collecting parking fees, managing vehicle parking, and ensuring that the bathrooms and other facilities are cleaned. He also monitors the waste oil

collection, a service that is provided by NH DPR for fishermen. Waste oil is disposed of in a collection bin and then hauled away by a DRED contracted hauler.

NH DPR charges for parking and use of the commercial pier. Fishermen pay an annual fee based on a \$6.00/foot of vessel standard with a minimum of \$150.00 per year. It also charges a parking fee to recreational boaters - \$8.00 to park and launch a vessel or just \$4.00 a day to park. Gauron Charters has an agreement with DRED that allows charter users to be charged only \$3.00 per day. All money goes to the NH DPR as part of the self-funding policy of the state.

Recently enacted state legislation grants the PDA-PH with the responsibility of operating and maintaining the commercial fishing pier and facility. NH DPR will continue to manage the parking, boat launching, and the recreational piers and floats.

Gauron Charter Service

This facility operates three party boats for deep-sea fishing and whale watching, and is located at the state marina. It also has an agreement to allow tie-up at the state pier for 30 minutes at a time to load and un-load passengers.

Smith & Gilmore

This facility provides services for many types of water-based recreation activities including deep sea and coastal fishing, personal watercraft, parasailing, and whale watch and fireworks cruises. It has a bait and tackle shop and a parking area. The business also owns a marine railway.

Public Access

Other than at the State Marina, there is no other public access in the harbor area. Additional access points could be made at the town-owned property or possibly at the marsh located north of and adjacent to the Hampton River Marina. This marsh is known locally as the *Willows*.

Conclusions

Hampton Harbor has the capacity to support a variety of activities and uses. The area supports a substantial number of businesses (restaurants, charter vessels, jet-ski rental, fishing, tackle), and helps maintain the diversity of uses in the area. However, to better manage the harbor area to ensure a long term, sustained use of this commercial, recreational, and economic asset, constraints and issues must be addressed through a coordinated effort.

- Predominant long shore drift from north to south along Hampton Beach creates continual shoaling in the harbor inlet.

- Currents and tidal velocity in the federal channel and under the bridge can cause hazardous boating conditions.
- Continual shoaling and sedimentation in the harbor requires frequent maintenance dredging.
- The compact harbor area leads to conflict between harbor users; e.g., jet skiers in the harbor traveling above headway speed can create a hazard and in some cases erode tidal marsh.
- Elevated levels of fecal coliform occur after significant rainfall events from direct discharge of stormwater pipes and other non-point sources into the harbor and adjacent tidal marsh.
- Multiple agencies with responsibility and jurisdiction in the harbor area require continual coordination for overlapping responsibilities.
 - ◆ Local—Planning Board, Conservation Commission, Code Enforcement
 - ◆ State— PDA-PH, DRED, DES, Fish & Game, Marine Patrol
 - ◆ Federal—ACOE, National Marine Fisheries, EPA, EDA
- There has been a continual record of storm and flood damage to marine waterfront users.

F. State Park System

The New Hampshire Department of Resources and Economic Development (DRED) maintains the beaches, all the property on and to the east of Ocean Boulevard (Route 1A), and the Hampton Harbor State Marina. The following sections provide an overview of the existing conditions of the state park facilities in the study area.

State Facilities and Services

The state facilities in the Hampton Beach area include four distinct areas and destinations: Hampton Beach, North Beach, Hampton Beach State Park, and Hampton Harbor State Marina (see Table 6). All of them are managed by DRED. The state facilities listed below are described by their location from north to south along the waterfront (see Figure 12).

- North Beach
- Seashell Stage area and Hampton Beach
- Hampton Beach State Park
- Hampton Harbor State Marina

Most of the people that work at the Hampton Beach state facilities are employed during the high season, between June and September. There are four year-round and approximately 55 part-time employees. The largest percent of them are lifeguards.

North Beach

North Beach, located north of Great Boar's Head, is a very popular beach, but not typically as crowded as Hampton Beach. Metered parking is available along the entire length of the Beach. One bathhouse, maintained by DRED, is located on the north side of North Beach. Although the beach is over 1.4 miles long, it has few dry sand areas at high tide. There are relatively few commercial businesses in the area, and fewer rental units than at Hampton Beach. Surfing is one of the more common activities at this beach.

Seashell Stage Area and Hampton Beach

Hampton Beach is extremely active and more popular than North Beach for several reasons. Hampton Beach is located across from many businesses such as restaurants, arcades, and hotels, motels, and rental properties. This beach is large, over 1.1 miles long, and has a significant amount of dry sand and capacity for thousands of beachgoers.

Figure 12. State and Town Facilities in the Hampton Beach Area



Table 6. Summary of State Facilities and Uses

Area/Facility	Use / Comments
Hampton Beach State Park (RV)	
Administration and concession buildings	Gift and concession stores for the beach users Administration offices for the Hampton Beach area
Maintenance sheds	Large and small shed for all the Hampton Beach state parks
Bathhouse	Bathhouse and restrooms for uses of the Beach
Pavilion	Shelter with picnic tables
RV sites, parking	Area on south side of park for RV campers
Hampton State Marina	
Pier and docks	Docks provides short term docking Pier allows access to charter vessels
Boat ramp (not in Report)	Wide boat ramp for single use
Office / toilet building	Office for fee collector and public toilets
Pump house	Pump house for fueling station
Fuel station	Provides fuel for boaters at the pier
Seashell Stage area/Hampton Beach	
State park office	Office area for state park staff
Lifeguard tower	Main building that houses lifeguards and equipment
Chamber of Commerce building	Leased area by the Hampton Chamber of Commerce Used to provide information and sell lottery tickets
Seashell Stage	Main entertainment area for Hampton Beach
Restrooms, men's and women's	One of two public bathroom facilities along Hampton Beach
Light / flag tower	Tall tower that provides lights for the Seashell Stage
Restrooms, Ross Avenue	One of two bathrooms facilities along Hampton Beach Current plans to upgrade
North Beach	
Bathhouse	Bathhouse and restrooms for North Beach

Source: *Building Inventory Report*, NH DRED, June 26, 2000.

Hampton Beach is one of the region's most popular beaches. It attracts visitors from New Hampshire and Massachusetts, as well as other states. This beach and the adjacent boulevard are very crowded and busy during hot summer months and special events such as the Seafood Festival. Surfing, a very popular sport along the New Hampshire coast, is not allowed at Hampton Beach, but is allowed along sections of North Beach. During the off-season, significantly fewer people use the beaches and boulevards.

On a typical hot summer day, many families enjoy activities on the beach such as sun-bathing, surfing, volleyball, walking, and picnicking. The boulevard that runs the entire length of Hampton Beach is used by thousands of people to watch and come to be watched, as well as to walk, skateboard, roller blade, and ride bicycles. The Seashell Stage area, located at the center of Hampton Beach, is the most popular destination for beachgoers as this facility includes a performance stage, park office, and public bathrooms.

View of the Seashell Stage (right) and the State Park Office (left) along Ocean Boulevard



Seashell Stage Area

The Seashell Stage area, located midway along Hampton Beach across from the Casino building, is comprised of a small complex of cinderblock buildings including the State Park offices, Hampton Beach Chamber of Commerce, restrooms, play area, a small flag/light tower, a lifeguard tower, and the Seashell Stage area with seating for about 700 people. The state provides access for disabled persons with parking spaces at various locations, ramps, special beach wheelchairs, and a beach ramp that extends to the high tide line.

There are regularly scheduled events on and near the Seashell Stage throughout the summer season including daily and weekly activities for children and families, nightly concerts, karaoke, talent shows, and fireworks. Annual events, such as the Children's Festival, Seniors Weekend, and the Miss Hampton Beach Contest generally attract very large crowds, and extend into the shoulder season. The annual Seafood Festival and Sidewalk Sales event, usually held for three days the weekend after Labor Day, has attracted over 200,000 people in the past. For the past two years, the New Hampshire Special Olympics has held a "Penguin Plunge" during a winter day. Its attendance is dependent on the weather and has ranged from 500 to 2,000 people.

Hampton Beach State Park

Hampton Beach State Park, located on the southeastern part of Hampton Beach, has a parking lot that can accommodate 400 to 700 cars, parking and hookups for 35 recreational vehicle campers, and a building complex that consists of a pavilion, bathhouse, several

maintenance buildings, an administrative building, and a concession (see Figure 12). It costs \$8/day to park for the beach on weekends, \$5/day on weekdays, \$5 to \$11/day for RVs, and \$35/day for campers that use designated spaces with sewer hookups.

View of RV Campers along the Hampton River at the Hampton Beach State Park



This part of Hampton Beach is quieter and has a more natural setting than the main section of the Beach. Aside from the beach and rocks on the ocean side, many people use the breakwater for fishing and walking. Although several commercial businesses are located on the other side of Route 1A near the Hampton State Marina, they do not seem to influence uses at this beach area.

Hampton Harbor State Marina

The State Marina provides excellent access to Hampton River and surrounding water bodies including the Seabrook River and the Atlantic Ocean. It has a parking area for vehicles and trailers, a boat ramp, and several docks and piers. Several businesses, including whale and fishing charters, and a bait and tackle shop, lease space at this location. Parking fees for all users range from \$4 to \$8/day.

Three buildings are located at the State Marina:

1. Tackle shop – leased as a fishing tackle business
2. Entrance booth – used to collect parking fees
3. Ticket booth – leased by Platypus duck boats business

A detailed description of this area begins on page 48 in the chapter titled Hampton Harbor and the Waterfront.

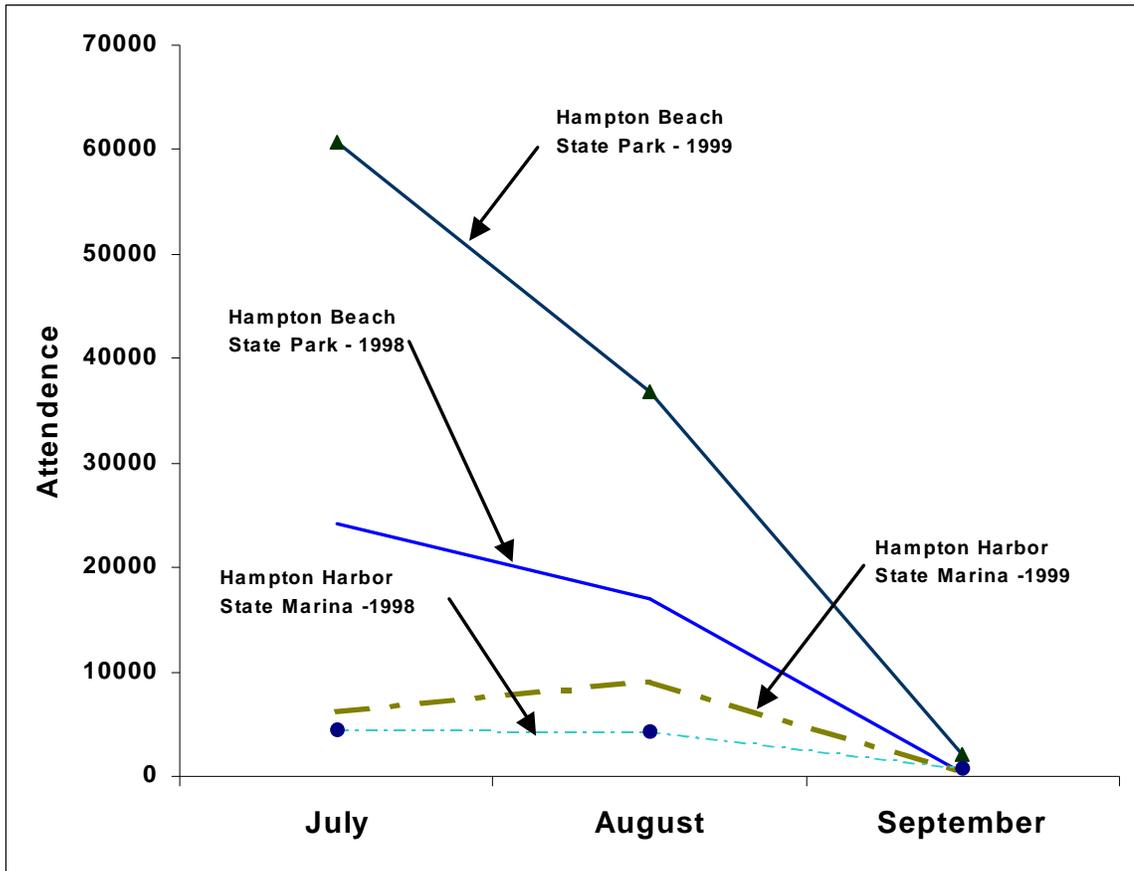
Management and Operations

The Division of Parks and Recreation of the NH Department of Resources and Economic Development is responsible for managing and operating Hampton Beach, North Beach, and Hampton Beach State Park and the Hampton Harbor State Marina. The New Hampshire State Park system, which consists of 74,741 acres, 45 state Parks, 14 natural areas/wayside areas, and 10 historic sites statewide is very unique in that it does not receive appropriations of general funds from the Legislature, unlike other state agencies in New Hampshire and other state park agencies across the country. Faced with a growing budget crisis in 1991, the Legislature passed Chapter 40:2, Laws of 1991 establishing a State Park Fund to provide an adequate level of service and maintenance in the State Park system. This Fund is capitalized by the revenues that the state park system generates. These revenues include park entrance fees, season passes, retail store sales, group reservations, shelter rental, parking meter revenue, parking fines, leases, and special use permits.

Through this legislation a non-lapsing State Park Fund was created into which all park revenue is deposited. Any surplus income in excess of budgeted expenses may be spent on any park project or program, including for operations, maintenance, and capital expenditures, with the approval of the legislative Fiscal Committee and the Governor and Executive Council. Since its inception, the State Park Fund has had positive net operating income for six out of ten years, which has permitted the completion of numerous projects including land acquisitions, major campground improvements and development, an expanded marketing program, new parking meters, equipment purchases, replacement vehicles, and the Ameri-corps Program.

The budget for the state parks has varied over the past few years. It essentially breaks even. Salaries make up approximately half of the expenses, while other expenses are for the operation of the various state areas including the Seashell Stage and the state marina. Most of the income is derived from parking meters, and other income sources include leased parking spaces and fines. A detailed budget is in Appendix II.

Figure 13. Summer Day Use Attendance at Hampton Beach State Park and Hampton Harbor State Marina, 1998 and 1999



G. Transportation

Introduction

The Transportation section of the Hampton Beach Master Plan project provides a solid understanding of the existing transportation infrastructure present on the corridor, including traffic volumes, truck percentages, and travel speeds. Parking, transit and pedestrian information was also collected and analyzed. Finally, travel safety issues were identified.

Study Area

Based on conversations with the Hampton Beach Master Plan Advisory Committee and analysis of the original study area, a more extensive study area was selected for this project. The study area extends from the Hampton/Seabrook town line near the Hampton River Bridge to the south up to and including the intersection of Route 1A and High Street to the north along Route 1A (see Figure 14). For a portion of the study area, Route 1A splits onto two roadways, forming a one-way couplet. Both Ocean Boulevard (northbound) and Ashworth Avenue (southbound) are included in the study area.

State Park Drive, Church Street, Route 101E (Winnacunnet Road), and Route 27 (High Street) intersect Route 1A (Ocean Boulevard), an urban arterial, to form the study area intersections.

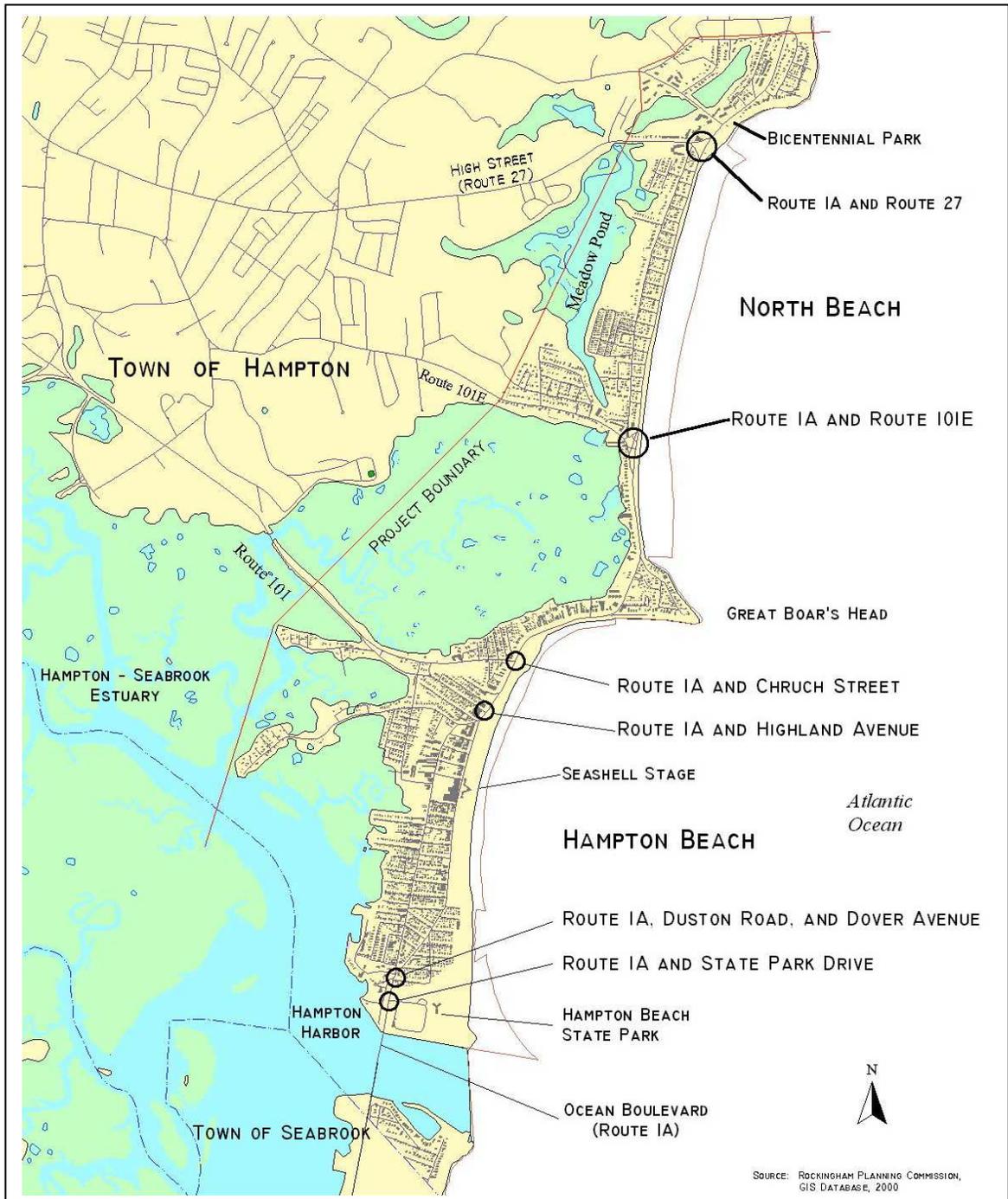
Route 1A (Ocean Boulevard) and State Park Drive

The intersection of Ocean Boulevard and State Park Drive is a typical “T” type, unsignalized intersection located in the southern end of the study area. State Park Drive, the stop-controlled approach, intersects Ocean Boulevard from the East and has designated left and right turn lanes. At this point, Ocean Boulevard is used as one wide travel lane in each direction.

Route 1A (Ocean Boulevard), Duston Avenue, and Dover Avenue

The intersection of Route 1A, Duston Avenue, and Dover Avenue is a five-way, unsignalized intersection located 0.1 miles north of State Park Drive. Duston Avenue intersects Route 1A from the West and Dover Avenue intersects Route 1A from the East. Ashworth Avenue approaches the intersection from the north and Ocean Boulevard exits the intersection to the north. On the southern side of the intersection, Route 1A is a two-way roadway. There is a U-turn located in the center of the intersection where southbound traffic on Ashworth Avenue may reverse direction to head northbound onto Ocean Boulevard. Duston and Dover Avenues both consist of one travel lane in each direction.

Figure 14. Locations of Major Intersections Addressed in this Report



Route 1A (Ocean Boulevard) and Church Street

The intersection of Ocean Boulevard and Church Street is an unsignalized, “T” type intersection located 0.75 miles north of State Park Drive. In this area, Route 1A is a divided roadway with parking provided in the center. Church Street intersects Ocean Boulevard from the west and leads one-way traffic away from the intersection. Ocean Boulevard is separated by a median containing parking areas. There is a U-turn located within the intersection where northbound traffic on Ocean Boulevard may reverse direction to head southbound. Traffic making the U-turn may queue in the median, which is an extension of Church Street.

Route 1A (Ocean Boulevard) and Route 101E (Winnacunnet Road)

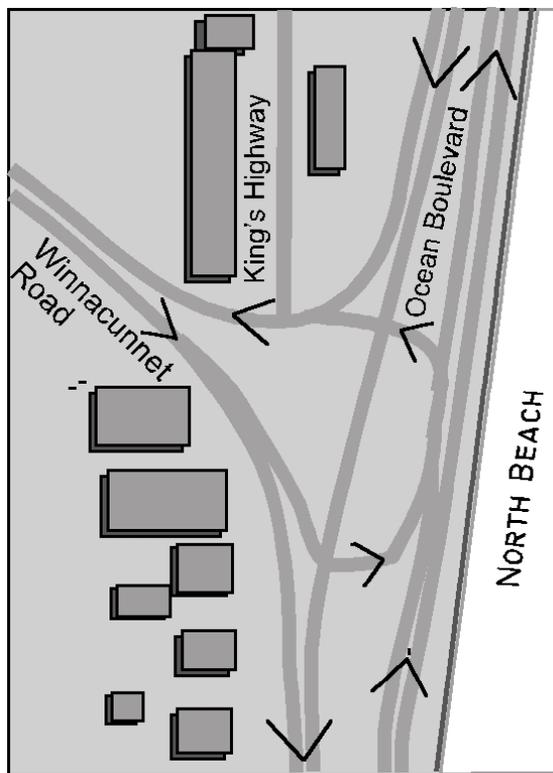
Ocean Boulevard and Winnacunnet Road meet at an unsignalized, T-type intersection (see Figure 15 for intersection layout). Winnacunnet Road intersects Ocean Boulevard from the west approximately 1.5 miles north of State Park Drive, and is under stop control. Ocean Boulevard southbound consists of one travel lane where traffic is not permitted to turn onto Winnacunnet Road, as traffic bound for Winnacunnet Road is separated out of the traffic stream prior to reaching the intersection. Winnacunnet Road eastbound is divided by an island before it meets with Ocean Boulevard where northbound traffic will cross Ocean Boulevard southbound before proceeding northbound, and where southbound traffic which merges right will merge onto Ocean Boulevard southbound.

Figure 15. Intersection at Ocean Boulevard and Winnacunnet Road

Ocean Boulevard northbound consists of a through lane and a left turn lane that leads to Winnacunnet Road westbound. Ocean Boulevard southbound consists of a through lane and a right turn lane that leads to Winnacunnet Road westbound. Throughout this intersection, directional traffic is separated by a median that also provides a place for left-turning traffic to queue.

Route 1A (Ocean Boulevard) and Route 27 (High Street)

The intersection of Route 1A and High Street is a four-way signalized intersection. Route 1A northbound has a designated left turn lane in addition to a through lane. Route 1A southbound has a right turn lane



to access High Street separated from through traffic by a raised island. High Street also has designated left turn lanes for both eastbound and westbound traffic. The eastern leg of the intersection, which consists of one lane in each direction, provides access to a parking area.

Traffic Volumes

To determine the base traffic conditions, traffic volume data was collected on all major roadways and at study area intersections. Automatic traffic recorders and turning movement counts were used to collect this information.

Daily Volumes

Automatic traffic recorder (ATR) counts were conducted in two independent studies along Route 1A. The first of these two studies was conducted with HI-STAR unit number 8343 in seven locations. Information was gathered at six of these locations: 566 High Street, 580 Winnacunnet Road, Ocean Boulevard at Hampton River Bridge, Route 101 at Glade Path, Main Beach Area, and North Beach. This study was conducted over an 84-hour period in 15-minute intervals in August 2000 to obtain average Thursday, Friday, Saturday, and Sunday traffic volumes. The seventh location data were collected on Ashworth Avenue and Ocean Boulevard at the Casino area over a 59-hour period in 15-minute intervals in August 2000 to obtain representative Monday, Tuesday, and Wednesday traffic volumes. The weather was clear and hot during all data collection.



Summer afternoon traffic on Ocean Boulevard

The second ATR study was conducted at four locations: Ocean Boulevard between G & H Streets, Ocean Boulevard south of Route 101E, Ashworth Avenue between G and H Streets, and Ocean Boulevard north of Route 27. This study was conducted for 72-hour periods in August 2000 to obtain Saturday, Sunday, and weekday volumes for summer condition. The daily volumes for the locations associated with the two studies are displayed in Table 7, and are represented in Figure 16.

Figure 16. Average Daily Traffic Volumes at Major Intersections Along Ocean Boulevard

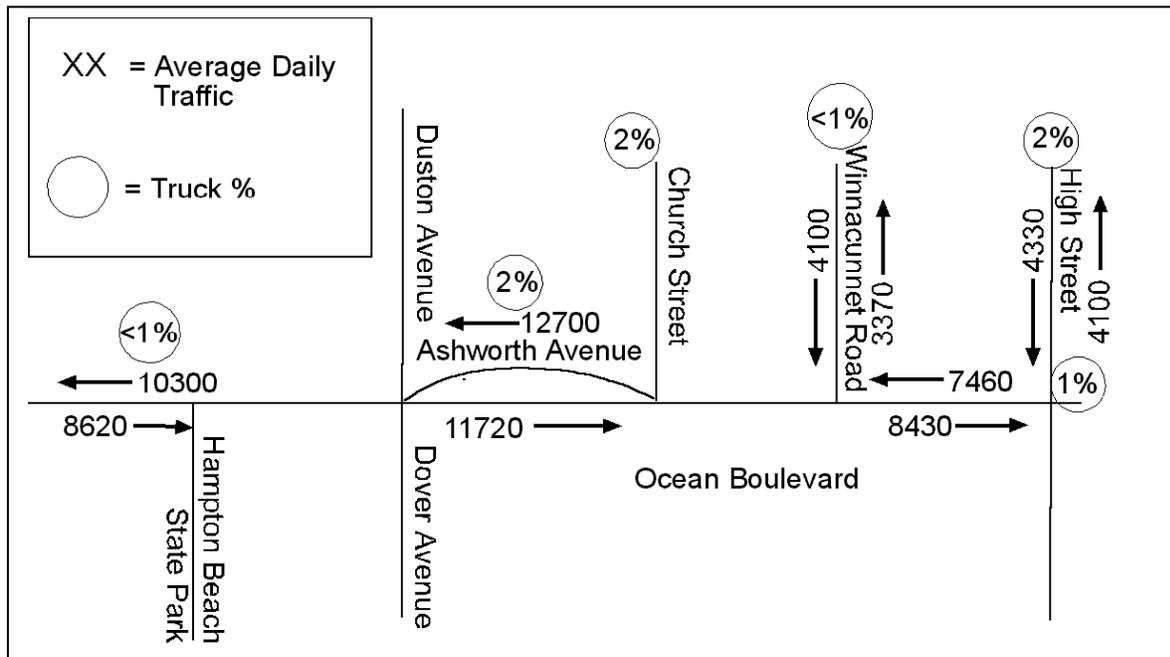


Table 7. ATR Counts

Location	Days Counted	ADT (vpd)
566 High Street	Thursday 8/24/00 – Sunday 8/27/00	8426
580 Winnacumnet Road	Thursday 8/24/00 – Sunday 8/27/00	7460
Ocean Boulevard at Hampton River Bridge	Thursday 8/17/00 – Sunday 8/20/00	18920
Route 101 at Glade Path	Thursday 8/17/00 – Sunday 8/20/00	17344
Main Beach	Thursday 8/17/00 – Sunday 8/20/00	36264
North Beach	Thursday 8/24/00 – Sunday 8/27/00	24409
Ashworth Ave./Ocean Blvd. at Casino Area	Monday 8/21/00 – Wednesday 8/23/00	15885
Ocean Boulevard between G and H Streets	Saturday 8/26/00 – Monday 8/28/00	10938
Ocean Boulevard south of Route 101E	Saturday 8/26/00 – Monday 8/28/00	13017
Ashworth Avenue between G and H Streets	Saturday 8/26/00 – Monday 8/28/00	15839
Ocean Boulevard north of Route 27	Saturday 8/26/00 – Monday 8/28/00	31809

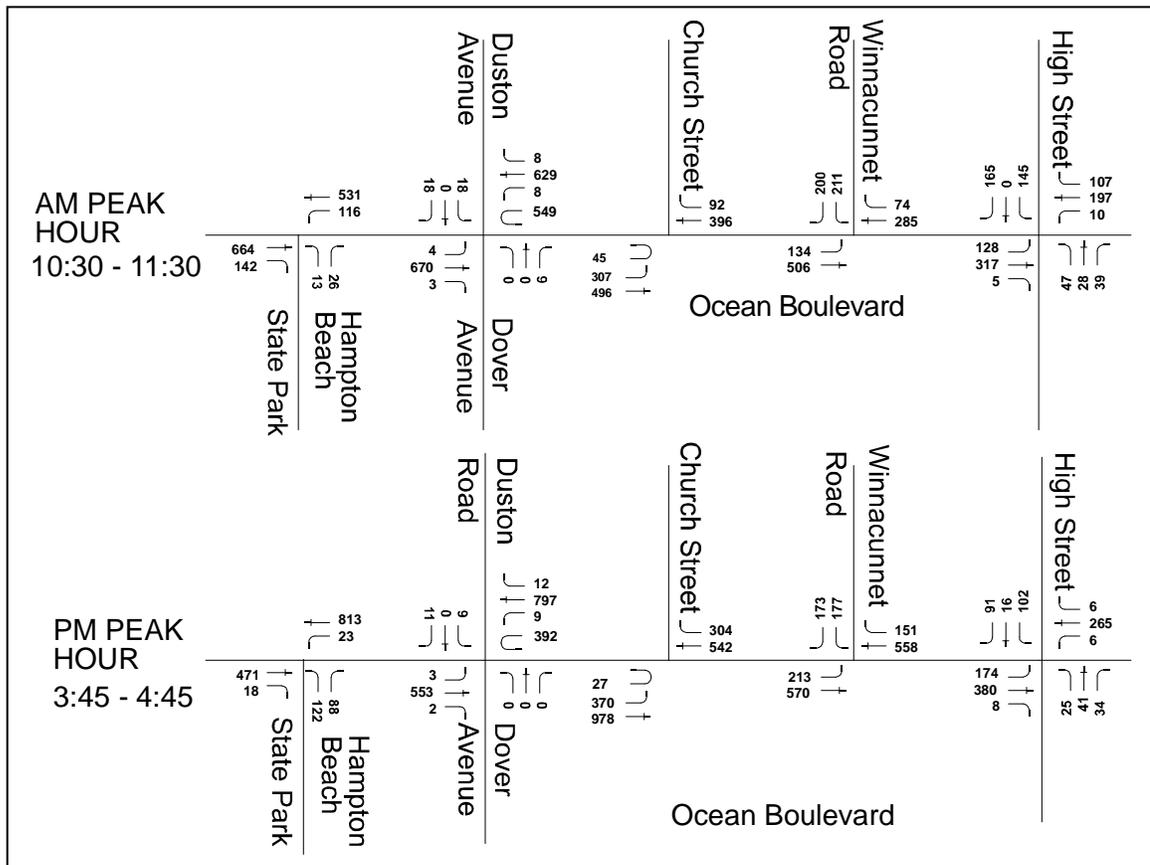
Truck Volumes

The existing percentages of trucks (greater than three axles) included in the daily traffic volumes were determined. In general, the study area traffic consists of two-percent trucks. One location, Ocean Boulevard at High Street, consists of only 1 percent trucks. Two locations, Ocean Boulevard at Hampton River Bridge and Winnacunnet Road, consisted of less than 1 percent trucks. Truck percentages are displayed in Figure 17.

Peak Hour Volumes

On August 26, 2000, manual turning movement and vehicle classification counts were collected at the seven study area intersections. Because traffic in the area is higher on Saturday than during the week, data were collected during the Saturday peak periods, from 9:00 to 12:00 noon and from 3:00 to 5:00 PM. These counts show that weekday traffic in the study area peaks between 10:30 and 11:30 AM and between 3:45 and 4:45 PM. Existing peak hour traffic volumes are illustrated in Figure 17.

Figure 17. Existing AM and PM Peak Hour Traffic Volumes



Travel Speeds

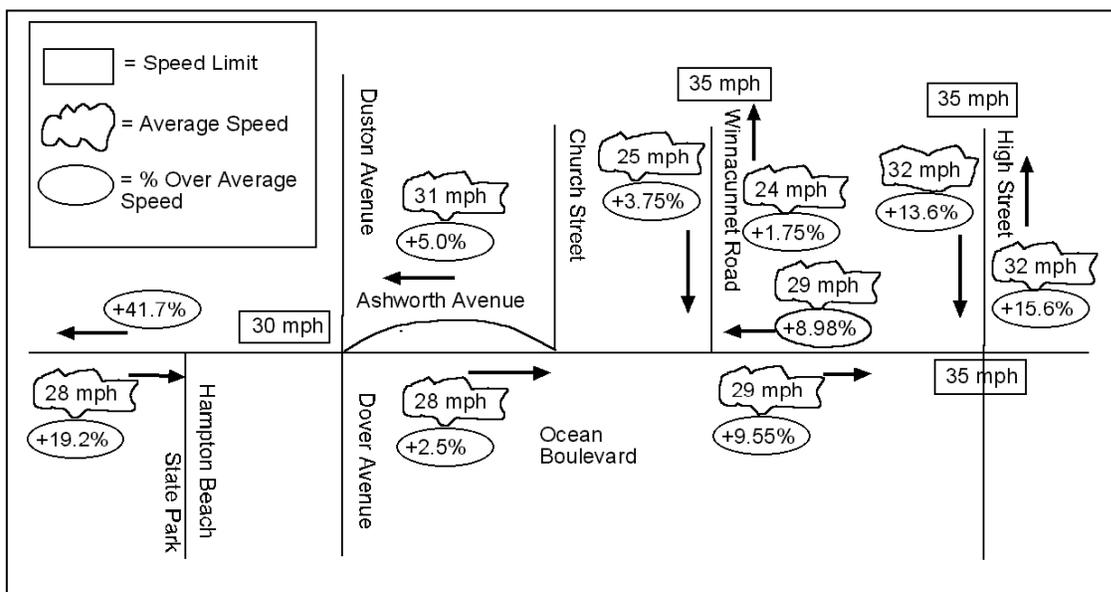
The vehicle speeds measured on major roadways in the study area are described below and are shown on Figure 18. The speed limits for each link are also illustrated on this figure and are described below.

Speed limits with the study area are generally observed on Ashworth Avenue, High Street, Winnacunnet Road, and most parts of Ocean Boulevard. Vehicles traveling south on Ocean Boulevard have a tendency to exceed the limit south of Dover Avenue. This area may need additional enforcement to maintain safe conditions for other pedestrians and vehicles.

There are two posted speed limits for traffic on Ocean Boulevard. On the northern end of the study area the speed limit for Ocean Boulevard is 35 miles per hour (mph). The average speed for vehicles traveling in this area is 29 mph with 9 percent of the vehicles traveling over the speed limit.

In the vicinity of the main beach area, the southbound vehicles on Ashworth Avenue have an average speed of 24 mph, measured over a 24-hour period with 5 percent of the vehicles traveling faster than the speed limit of 35 mph. The northbound vehicles traveling on Ocean Boulevard have an average speed of 28 mph measured over a 24-hour period with 3 percent of the vehicles traveling faster than the speed limit.

Figure 18. Speed Statistics Along Ocean Boulevard in Hampton



South of Dover Avenue on Ocean Boulevard, the speed limit is posted as 30 mph. The vehicles traveling on Ocean Boulevard in the southbound direction have an average speed of 31 mph and 42 percent of the vehicles travel faster than the speed limit. In the northbound direction, the vehicles traveling have an average speed of 28 mph and 19 percent of the vehicles are traveling above the speed limit.

The vehicle speeds on High Street were also collected. The posted speed limit for High Street is 35 mph. The average speed for both the east and westbound vehicles is 32 mph. While the percentage of eastbound vehicles traveling faster than the speed limit is 14 percent, the westbound vehicles traveling above the speed limit is 16 percent.

Winnacunnet Road has a posted speed limit of 35 mph. The average speed that was observed for the eastbound vehicles is 25 mph, with 4 percent of the vehicles traveling faster than the speed limit. The westbound vehicles travel at an average speed of 24 mph and have 2 percent of the vehicles traveling above the speed limit.

Parking

There are several forms of available parking within the study area. The types of parking include metered parking, center lot parking, public and private parking lots, leased parking areas, and other miscellaneous parking.

Parking Supply

The public parking supply at Hampton Beach includes on-street metered parking and off-street lot parking. Each type of parking was inventoried and the results are described below.

Parking Lots

There are 10 parking lots along the Hampton Beach corridor (see Table 8). Each lot has been designated a number and their locations may be observed in Figure 19. A brief description of their size and location follows by lot number.

On Street Parking

There is a large supply of metered, on-street parking located along Route 1A. There are some in parking areas in the median of the road and others along the curb of the roadway. South of A Street are 505 parking spaces on Route 1A, 424 on-street spaces between A Street and Boar's Head Terrace, and 630 on-street spaces north of Boar's Head Terrace. Over 150 of these spaces are leased on a yearly basis, and 18 of them meet American Disability Act (ADA) requirements for parking. There are also six bus spaces. All the metered parking spaces are owned and operated by the State.

Table 8. Parking Lots in the Hampton Beach Project Area

Lot #	Spaces	Location and Notes
1	110	West side of Ashworth Avenue between Hobson Street and Manchester Street, and is most southern lot on Hampton Beach corridor.
2	620	West side of Ashworth Avenue and north of Hobson Street, largest of the eight parking lots.
3	300	East side of Ashworth Avenue, between D Street and F Street second largest parking lot out of the eight
4	80	West Side of Ashworth Avenue, and between Brown Avenue and the Fire Department
5	100	East side of Ashworth Avenue, and between C Street and D Street
6	200	West side of Ashworth Avenue and south of Island path,
7	75	Surrounded by Ashworth Avenue, Ocean Boulevard, and A Street, smallest parking lot out of the eight lots
8	250	South of Church Street, north of Highland Avenue, and east of Brown Avenue
9	240	On Island Path between Jones Lane and Brown Avenue
10	45	East of Ashworth Avenue between B and C Streets (estimated # of spaces)
	1,735	Total Spaces



Metered Parking Spaces on Route 1A at North Beach

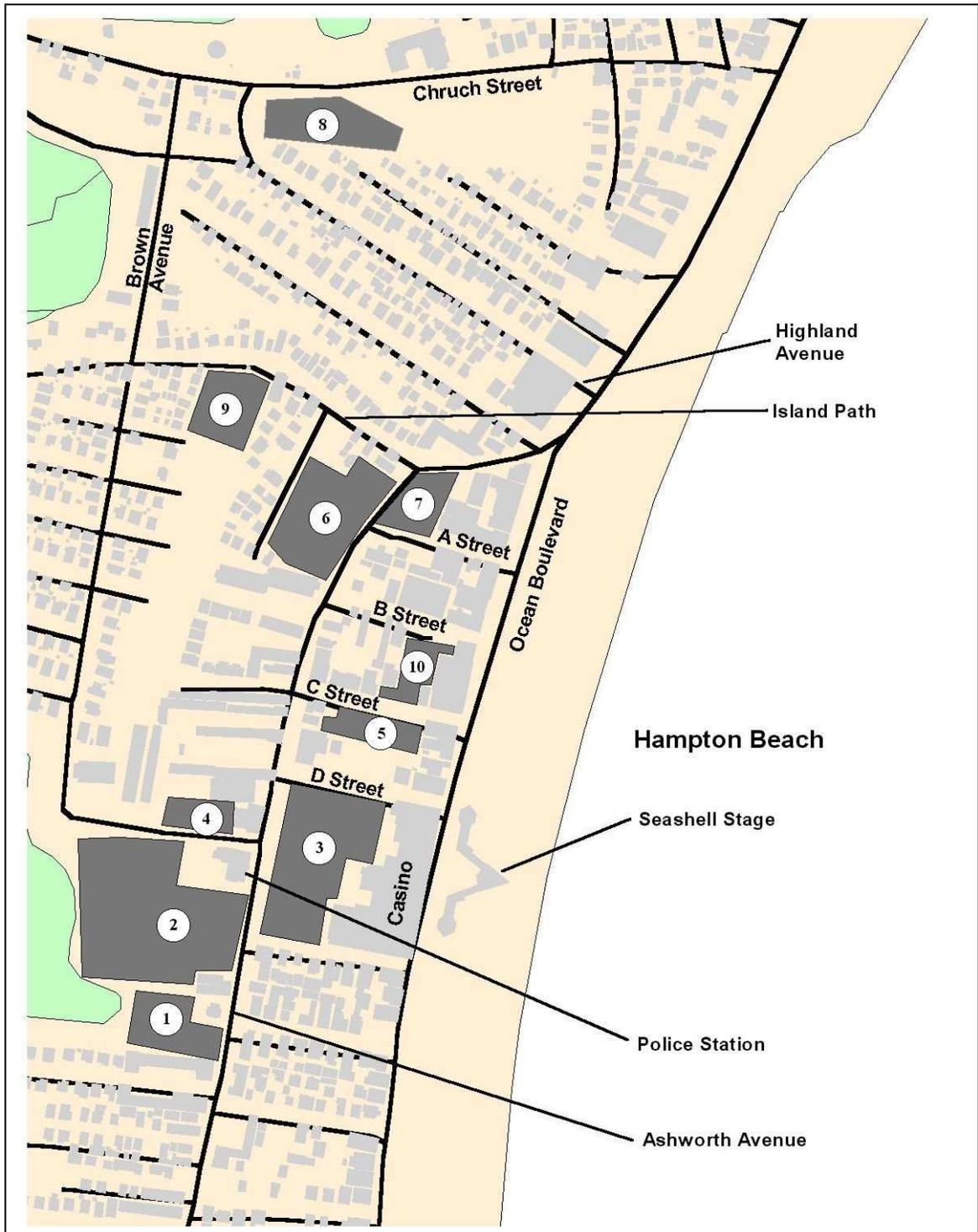
Parking Occupancy

The occupancy survey of both on and off-street parking spaces was conducted during a field visit on Saturday, August 26, 2000 from 9:00 AM to 12:00 noon and 3:00 to 5:00 PM. A similar survey, conducted by Arthur D. Little, Inc., reviewed daily parking lot occupancies in the study area during 1983. That study indicated that parking occupancy differs greatly between weekdays and weekends.

Parking Lots

The following figure and table displays parking lot locations and availability at Hampton Beach. Counts of available spaces were taken in each parking lot numbered 1 - 8 at various intervals throughout the day. The percentage of empty spaces in each lot have been calculated and given with their corresponding times of count.

Figure 19. Parking Lot Locations at the Main Hampton Beach Area



Note: Parking lot 6 was increased from 200 to 300 parking spaces after the parking study was completed in August 2000.

Table 9. Parking Lot Availability

Lot#	Total Spaces	Time of Day			
		9:00 – 11:00 AM	11:00AM - 12:00 PM	3:00 – 4:00 PM	4:00 - 5:00 PM
1	110	75%	57%	19%	29%
2	500	89%	19%	22%	36%
3	300	90%	24%	12%	25%
4	50	0%	0%	2%	6%
5	100	25%	N/A	3%	12%
6	200	59%	12%	8%	16%
7	75	39%	7%	32%	27%
8	250	78%	60%	7%	74%

As shown above, various sections of the study area are available for parking at different times. These results are described in detail below.

- 9:00-11:00 AM:** Lots #1, 2, 3, and 8 were nearly empty with 75-90% of spaces available. Lot #6 had approximately 60% of its spaces available. While lots #5 and #7 were mostly full with 25-40% of their spaces available, Lot #4 was completely full.
- 11:00 AM – 12:00 PM:** During this time, most of the parking lots began to fill up except for lots #1 and #8, which still had about 60% of their spaces available. Lots #2, 3, and 6 filled considerably in this time with only about 10-25% of their spaces available. Lot #7 had less than 10% of its remaining spaces available, while lot #4 remained completely full.
- 3:00-4:00 PM:** During this time, lots #1 and #8 filled considerably. These lots experienced a 40-50% increase in parking, leaving only 10-20% of remaining spaces available. Lots #3-6 remained mostly full with only 2-10% of their spaces still available. Cars began to disperse from lots #2 and #7, which had 20-30% availability at this time interval.
- 4:00-5:00 PM:** During this period, lot #8 which had experienced a dramatic decrease in parking availability in the previous time frame, cleared out considerably. The parking availability increased by nearly 70%, resulting in about 75% of the spaces available. Lots #1-7 did not experience any major fluctuation during this time. These lots had a parking availability between 5-35%.

Overall, Lots #1,2,3 and 6 follow a similar cycle throughout the day, as they all are 60-90% vacant in mid-morning and are frequently parked in throughout the remainder of the day. Lots #5 and #7 were 60-95% full throughout the entire day, while lot #4 was the most popular parking location and rarely had vacant spaces. Lot #8 was the least popular parking location and would remain mostly vacant throughout the day, except during the 3-

4:00 PM interval where it would be nearly completely full and then empty out again in a short period of time.

According to the parking feasibility study completed by Arthur D. Little, Inc., Lot #2 was the most heavily utilized municipal lot within the study area in 1985. In addition, the Little study showed that Lots #5 and #8 were most utilized on the weekends. Our study also indicated that lots #2 and #5 were heavily utilized, while lot #8 was found to be mostly vacant throughout the day, except for a short period in the afternoon where it experienced nearly full utilization.

On Street Parking

The occupancy at the metered on-street parking was noted during the field surveys on August 26, 2000 from 9:00 AM to 12:00 noon and from 3:00 to 5:00 P.M. The area from State Park Drive-up to A Street began filling up at 9:00 AM and reached capacity shortly thereafter. During the morning period, the majority of on-street parking spaces between A Street and Highland Street on Ocean Boulevard were rarely utilized except between J and M Streets, which was 60 percent utilized between 9:00 AM and 12:00 noon. Other spaces in this vicinity were found to be far less utilized. Metered street parking spaces north of Highland Street were recorded at 75 percent occupancy during the morning survey.

During the afternoon survey, the occupancy of all on-street parking areas was significantly less than noted during the AM survey. Overall, parking was noted at 15 to 50 percent occupied during the 3:00 to 5:00 PM period. An interesting pattern was noted during this period in the northern portion of the study area; some areas that were approximately 15 percent occupied at 3:00 PM proceeded to fill up to almost 50 percent occupied by the end of the survey period, a reversal of the expected trend.

Operating Conditions

Existing peak hour traffic operations in the project study area were determined. Specifically, intersection operating levels of service were calculated as described in greater detail below.

Level of Service Criteria

Level of service, a term used to describe the quality of the traffic flow on a roadway facility at a particular point in time, is an aggregate measure of travel delay, travel speed, congestion, driver discomfort, convenience, and safety based on a comparison of roadway system capacity to roadway system travel demand. Operating levels of service are reported on a scale of A to F, with A representing the best operating conditions and F representing the worst operating conditions. Depending upon the type of facility being analyzed, Level of Service A represents free-flow or uncongested conditions with little or no delay to motorists, while Level of Service F represents a forced-flow conditions with long delays and traffic demands exceeding roadway capacity.

Level of Service D is often cited as the design standard for suburban roadways. However, when trying to establish minimum “acceptable” level of service thresholds for existing roadways a number of factors must be considered. These include existing operating levels of service on other similar and nearby facilities; the duration of the peak traffic periods; the feasibility and cost of providing traffic mitigation; and state and local regulations.

Roadway operating levels of service are calculated following procedures defined in the *1997 Highway Capacity Manual*, published by the Transportation Research Board. For signalized and unsignalized intersections, the operating level of service is based on travel delays. Delays can be measured in the field but generally are calculated as a function of traffic volume; peaking characteristic of traffic flow; percentage of heavy vehicles in the traffic stream; type of traffic control; number of travel lanes and lane use; intersection approach grades; pedestrian activity; and signal timing, phasing, and progression where applicable. The specific criteria applied are summarized in Table 10. The calculated average delay per vehicle for signalized intersections applies to all vehicles entering the intersection and under control of the traffic signal. For unsignalized intersections, it is assumed that through movements on the main street have the right of way and are not delayed by side street traffic. Consequently, the total delay values in Table 11 for unsignalized intersections apply only to the minor street intersection approaches or to left turns from the major street into the minor street that must yield to oncoming traffic.

Table 10. Intersection Level of Service Criteria
Average Delay per Vehicle (Seconds)

Level of Service	Signalized Intersections	Unsignalized Intersections
A	≤ 5.0	≤ 5.0
B	5.1 to 15.0	5.1 to 10.0
C	15.1 to 25.0	10.1 to 20.0
D	25.1 to 40.0	20.1 to 30.0
E	40.1 to 60.0	30.1 to 45.0
F	>60.0	>45.0

Source: *Highway Capacity Manual, Special Report 209*, Third Edition, Transportation Research Board, National Research Council, Washington, DC, 1997.

Intersection Operating Conditions

The procedures described above were used to determine existing peak hour operating levels of service at the study area intersections (see Figure 14). Table 11 summarizes existing conditions levels of service (LOS) for the study area intersections. As can be seen in this table, two of the study area intersections (Route 1A (Ocean Blvd)/State Park Drive and Route 1A (Ocean Blvd)/Church St) fail during PM peak hours. The intersection of Route 1A (Ocean Blvd) and State Park Drive operate at LOS E during the AM peak hour. The remaining locations operate at level of service C or better during the two peak hours.

Table 11. Existing Conditions Intersection Analysis Results

	AM Peak		PM Peak	
	Delay ¹	LOS ²	Delay	LOS
Route 1A (Ocean Blvd)/State Park Drive	40.8	E	73.4	F
Route 1A (Ocean Blvd)/Duston Ave./Dover St.	>100	F	54.0	F
Route 1A (Ocean Blvd)/Church St	24.9	C	>100	F
Route 1A (Ocean Blvd) (SB)/ Route 101E (Winnacunnet Rd) (EB)	13.7	B	18.7	C
Route 1A (Ocean Blvd) (NB)/ Route 101E (Winnacunnet Rd) (EB)	20.5	C	24.1	C
Route 1A (Ocean Blvd)/ Route 101E (Winnacunnet Rd) (WB)	8.1	A	9.5	A
Route 1A (Ocean Blvd)/Route 27 (High St) ³	12.7	B	11.4	B

¹Delay in seconds per vehicle

²LOS = Level of Service

³Signalized Intersection

Version HSC-3

1. Delay in seconds per vehicle

2. LOS = Level of Service

3. Signalized intersection

Transit

The transit system in Hampton Beach is an entirely privately funded trolley system. Town officials and residents support increased transit service in the Town, however, there is no public funding currently available. Despite the lack of public funding, the trolley system works to serve a number of public groups including the recreation department's after school programs.

Regular Trolleys

During the summer, two trolleys operate along the corridor between the Hampton River Bridge and the North Beach turn-around from 12:00 noon until 10:00 PM. These trolleys, which stop at the municipal lots and trolley sponsors, such as hotels, along the route, are unable to run on a schedule due to the heavy congestion along the beach. In the morning, trolleys also run from the hotels on Route 1 to the beach, and return at 4:00 and 8:00 PM.

In addition to these routes, the trolley company provides four trolleys north and south between Hampton Beach and Kittery via High Street and Route 1. These trolleys stop at the outlets, Portsmouth, and at a number of sponsors along the route, and offer connections to the Portsmouth Trolleys, University of New Hampshire, and Kittery shuttles to the beach. The trolley company serving Hampton Beach also serves the Kittery market, but

those trolleys are publicly subsidized. Fares are \$2.00 per ride, excluding sponsors, who ride free.

Special Programs and Events

There is trolley service for special programs and events. For example, trolley service is provided to the recreation department to transport children to programs on Fridays.

For special events at the beach, such as the Seafood Festival and the Fourth of July, the trolley service runs constantly. Although the bus companies have a designated traffic lane at the beach, the trolley company does not receive any special treatment and must travel in the congestion that typically occurs during these events.

Scenic Byways

There are two state-designated scenic byways in the Hampton Beach area. A portion of the Independence Byway runs, in part, along Winnacunnet Road, and ends in the southern portion of North Beach. Part of the 18.5 mile Coastal Byway is along Route 1A in Hampton. It runs from Portsmouth to Seabrook, and offers excellent views of the Atlantic Ocean as well as many sandy beaches and historic properties. The byway is popular with motorists, bicyclists, and pedestrians.

Designation of roads as byways to the statewide network makes them eligible for federal transportation TE-21 funds. Funds allow upgrading of pedestrian facilities, protection of byway resources, and promotional material. NH DRED has a Memorandum of Agreement with the NH OSP to develop multi-modal visitor facilities along the Coastal Byway to enhance non-motorized use of the Byway. These facilities include bicycle racks, trolley stop facilities, and interpretive material. The trolley facilities include benches, shelters, pavement markers, and signage. Two trolley stops are planned for the Hampton Beach Seashell and Hampton Beach North.

Pedestrian Accommodations

Pedestrians are an important component of the Hampton Beach transportation network. This is illustrated in the large number of crosswalks extending from the beach to the commercial areas on the west side of Ocean Boulevard. These pedestrian crossings contribute significantly to the slow traffic conditions experienced by motorists along Ocean Boulevard. Although there are a number of pedestrian crossings located along the corridor, sidewalks are not provided at all points along the Beach. Nor are there any pedestrian crossing signals along the entire Ocean Boulevard corridor.

The best pedestrian accommodations can be found along Ocean Boulevard north of the intersection of Ashworth Avenue and Ocean Boulevard and south of 6th Street. A sidewalk is provided along the commercial and residential properties on the west side of the road in addition to some areas of wide sidewalks along the sea wall on the east side of the road. This stretch of road also has frequent sidewalks.

The area south of this intersection is lined with parking either in the center or on the east side of the roadway, and some areas lack pedestrian accommodations on the west side of the roadway. Despite the lack of amenities, the pedestrian volumes along this portion of the beach are very heavy, and as mentioned above, the pedestrians do seem to have the right of way in the roadway.

Ashworth Avenue lacks pedestrian accommodation as well. There is a narrow sidewalk provided on the north side of Church Street and a sidewalk on the south side of Winnacunnet Road. There are no pedestrian crossing signals on the entire Hampton Beach corridor, which is not typical for an area that has large volumes of pedestrians, walking along and across a main road on a daily basis.

Safety Issues

Throughout the majority of the transportation-related interviews, safety concerns were not mentioned. Therefore, the Hampton Police Department was contacted regarding safety concerns along the Hampton Beach corridor and observations were made regarding existing safety conditions.

Incidents

As indicated above, the traffic along the Beach is traveling at low rates of speed due to the large volumes of pedestrian crossings in addition to vehicles parking and exiting. These low speeds create a safer condition for pedestrians and vehicles alike. The accidents that occur during the day tend to be rear-end accidents and typically not serious. Accidents that are more serious occur at night when traffic speeds are high. According to the Hampton Police Department, during the day the congested condition contributes to some road rage.

Emergency Vehicle Access

One significant safety concern in the Hampton Beach area is emergency vehicle access. During congested periods, emergency vehicles, including vehicles from the police and fire station on Brown Avenue, have trouble accessing properties along the beach. Since the beach traffic also exists on Ashworth Avenue, it can impact the response time of emergency vehicles to non-beach areas as well. Currently, a traffic light exists on Ashworth Avenue to stop the traffic and allow fire response vehicles to exit the station and travel the wrong way on Ashworth Avenue to access D Street and reach points north. The police response vehicles access the north via G Street, but will travel the wrong way on Ashworth from F Street in order to return to the station. These patterns have developed to minimize the congestion that the emergency response vehicles encounter.

Past Problems

In the past, some safety concerns were observed and solutions were developed to deal with these problems. At one time, vehicles were using A Street to reverse direction to head

south on Ashworth Avenue. Because the sight lines were very good at this point, vehicles were not coming to a full stop, and sometimes not even slowing before turning onto Ashworth Avenue during the evening hours when traffic is light. To eliminate this problem, the entrance to A Street was blocked at Ocean Boulevard.

Special Events

Traffic circulation is changed for some special events. Sometimes, portions of Ocean Boulevard are closed, and the police department works to reroute traffic. This road closure is met with mixed results. The traffic backs up significantly in each direction, but the large volume of pedestrian traffic is able to move about freely.

Seafood Festival

During the Seafood Festival, Ocean Boulevard is closed from H Street up to the u-turn to Ashworth Avenue. A high usage of off-site parking lots minimizes the traffic congestion to some extent. In addition, a number of mitigative actions are taken to move traffic along.

Traffic officers and volunteers control the traffic along Ocean Boulevard. The traffic on Ocean Boulevard is reduced to one lane in the vicinity of I and J Streets to accommodate the Ocean Boulevard traffic on H Street and Ashworth Avenue. The Ocean Boulevard traffic is then directed down H Street and accommodated in the northbound direction on Ashworth Avenue. The Hampton Police Department has verified that during this traffic modification, there are a number of congested areas.



View of the Seafood Festival, 2000 Looking North on the Closed Portion of Ocean Boulevard

Fourth of July

During the Fourth of July celebration, an additional area of congestion is created by the opening and closing of the Hampton River Bridge. The Police Department has attempted to mitigate this problem by using lighted signs to direct motorists to use Route 101 to access Route 95 instead of the bridge. However, the access to Route 101 via the beach is

Church Street, a narrow one-lane roadway, severely limiting the capacity of this route. To increase the volume that can exit via Route 101, the Police Department has created temporary lane markings, signage and police control, as described below.

At the ending of the fireworks display on July 4, 1999, the Hampton Police Department set up traffic diversions to ease the congestion of traffic in the westbound direction of Route 101. There was a police officer directing traffic on Route 101 at the intersection of the Town parking lot. Traffic was directed 12 feet to the right by the officer and by traffic cones placed on the road, creating a left turn entrance lane for Brown Avenue, where there is another police officer directing traffic. Traffic continued down Route 101 in two lanes. There were signs along the side of the road directing motorists to stay in two lanes. To add additional space needed for two lanes of travel in the westbound direction, cones were placed three feet south of the centerline, limiting the width of the eastbound travel lane. The two travel lanes and the cones continue to the intersection of Landing Road where there were two officers directing traffic. At the intersection of Landing Road, the existing three lanes of traffic in the westbound direction were reallocated to allow through movements from the right turn only lane. 900 feet beyond the intersection of Landing Road, to the west, the travel lanes merged to one in the westbound direction.

Along Route 101, there were temporary signs to assist with the directing of traffic. The first were placed after the intersection with Brown Avenue, directing motorists to "Form Two Lanes." As the westbound traffic reached the east and westbound split of Route 101, there were signs on either side of the road stating, "Stay In Two Lanes." Covers were also placed over permanent signs stating that, "Travel On Shoulders Prohibited, Emergency Stopping Only."

H. Economic Conditions

Introduction

The Town of Hampton is one of the key anchors of New Hampshire's Seacoast region. Although it is not a diverse employment center like Portsmouth, its tourism economy makes it one of the more important communities on the Seacoast. Hampton posted reasonably strong growth during the statewide economic rebound that began in 1993. Hampton Beach itself, despite having limited year-round population and employment, is a crucial component of the town's economic vitality. To understand Hampton Beach and its role, it is useful to begin with regional trends and then to focus more closely on Hampton and then Hampton Beach. This section summarizes statewide, regional, and local economic and demographic trends.

Statewide and Regional Trends

In the early 1990s, New Hampshire was hard-hit by the lingering effects of the nationwide economic recession that began in the late 1980s. In 1990 and 1991, the state lost over 4.5 percent of its employment base. In 1991 alone, over 12,000 more people left New Hampshire than moved in. Since then, the state's economy has rebounded and has shown consistent growth, with an average annual employment growth rate of 2.0 percent.

In recent years, New Hampshire has proven to be an attractive destination for those fleeing other northeastern states. Since 1990, New Hampshire has posted a net gain of nearly 40,000 residents, with the largest gains coming from the six northeastern states of Massachusetts, New York, Connecticut, New Jersey, Vermont, and Maine. Massachusetts alone contributed nearly 70 percent of these new residents. New Hampshire, however, has posted net losses in population to several southern states, led by Florida, North Carolina, and Virginia.

Rockingham County and the New Hampshire Seacoast have kept pace with both population and employment growth in the state. From 1990 to 1999, the annual average population growth rate in Rockingham County was just over 1.0 percent, slightly above the statewide rate of 0.9 percent. Employment growth in Rockingham has outstripped the statewide rate during the current economic boom, with an annual average growth rate of 2.3 percent. The boom has not been interrupted, however, as both the state and the county stumbled slightly in 1995, then continued growing between 1996 and 2000.

The New Hampshire Office of State Planning issued projections in 1997 for each town and county in the state. According to these projections, Rockingham County will step up its growth during the next decade. Rockingham County is expected to add about 50,000 new residents between 2000 and 2010, an annual growth rate of about 1.6 percent, compared with the state's total projected annual growth rate of 1.0 percent.

Population Profile and Trends

Profile of the Seacoast Towns

Hampton, with an estimated population of 13,496 in 1999, is the largest of the five towns collectively referred to in this report as the “Seacoast towns.” By comparison, the cumulative 1999 population of the other four towns (Hampton Falls, North Hampton, Rye, and Seabrook) was 17,800. Over the past three decades, these five towns have experienced three population trends: steady growth, an increasing number of senior citizens, and sharp declines in household sizes. These three trends have helped contribute to increased demand for new residential construction, which is detailed later in this section.

Among the Seacoast towns, Hampton is most comparable with Seabrook in terms of household income, housing unit profile, homeownership, age breakdown, and housing profile. These two towns clearly lag behind the other three in income and homeownership, and are much younger and have many more multi-family housing units than the others. Hampton’s relationship with Seabrook is particularly important to Hampton Beach, as Seabrook is located adjacent to the beach area. The following points illustrate the differences between Hampton and Seabrook and the other three towns.

- Average Household Income – Hampton Falls, North Hampton, and Rye are all between \$87,000 and \$95,000, compared with \$59,600 for Hampton and \$48,900 for Seabrook. The average income in Rye is skewed by its high concentration of very high-income households, though, as Rye’s median household income is just \$3,000 greater than Hampton’s.
- Housing Units – Only 55 percent of Hampton’s housing units and only 38 percent of Seabrook’s units are single-family units. By comparison, Hampton Falls, North Hampton, and Rye’s percentages are, respectively, 92, 75, and 84. Hampton has the highest concentration of multi-family units on the Seacoast at 40 percent, with Seabrook at 34 percent. The remaining 28 percent of Seabrook’s housing units are mobile homes.
- Owner Occupancy – Since Hampton and Seabrook have such low percentages of single-family homes, it follows that they also have low homeownership rates. Hampton actually has the lowest percentage of homeownership (65.9 percent), as the mobile homes in Seabrook accounts for its 70.5 percent rate. The other three towns’ rates all exceed 80 percent, with Hampton Falls at nearly 95 percent.
- Hampton and Seabrook have much younger populations than the other three towns, as more than 40 percent of the population of each town is under the age of 35.
- The percentage of high-income households is much lower in Hampton and Seabrook, with 14.6 and 4.7 percent, respectively, of their households earning over \$100,000 per year. The other towns’ rates are: Hampton Falls – 29 percent; North Hampton – 19 percent; and Rye – 21 percent.

The table below lists these key characteristics:

Table 12. Characteristics of Seacoast Towns

	Hampton	Seabrook	Hampton Falls	North Hampton	Rye
Average Household Income	\$59,567	\$48,873	\$94,295	\$87,387	\$88,702
Single Family Units as % of Total	54.9%	37.8%	92.1%	74.9%	83.8%
Owner Occupied Units as % of Total	65.9%	70.5%	94.9%	88.4%	81.8%
% of Population Under Age of 35	41.2%	41.3%	36.0%	37.9%	32.8%
% of Households Over \$100K	14.6%	4.7%	28.9%	18.9%	20.8%

Population and Housing Trends and Projections

The New Hampshire Seacoast has been growing steadily since rebounding from population losses in the early part of the 1990s. From 1992 to 1999, Hampton added about 1,200 new residents, and the other four towns added just over 1,500 people. Overall, from 1990 to 1999, Hampton's average annual growth rate was 1.1 percent, and the other towns averaged 1.0 percent.

Projections from the New Hampshire Office of State Planning forecast that Hampton and the other Seacoast towns will grow at an overall annual rate of about 1.4 percent between 2000 and 2010, led by Seabrook at 1.6 percent. During this period, Hampton is expected to add nearly 2,200 new residents, with the four other towns adding 2,900.

As previously mentioned, the combination of a growing population base, an aging population, and a declining average household size have all led to substantial new housing construction along the Seacoast. In total, 1,594 new housing units were built in the Seacoast towns between 1990 and 1998. During the same period, the Seacoast towns only added 2,230 new residents. In percentage terms, the number of housing units increased by 9.6 percent while population only increased by 7.8 percent.

Hampton has lagged in housing construction, with its 659 new units representing only a 7.7 percent increase. In comparison, Hampton Falls' inventory grew by over 22 percent, North Hampton by 16 percent, and Seabrook by 11 percent. Only Rye at 6.8 percent added proportionally fewer units than Hampton. Still, largely due to its concentration of vacation homes, Hampton has more housing units (9,258) than the other four towns combined (8,933).

The vast majority (84.8 percent) of new housing units in the Seacoast towns are single-family units. Of the 659 new units in Hampton, 650 are single-family. Among the other units, only 7.2 percent are multi-family; the remaining 8.0 percent are mobile homes. Nearly all of the 110 new multi-family units are in Seabrook, as no other town gained more than five multi-family units.

Housing Price Trends (from New Hampshire Association of Realtors)

In 1999, there were 1,203 home sales in the Seacoast region, of which 68 percent were of single-family homes, 26 percent were multi-family homes, and six percent were mobile homes. Statewide, the breakdown was 77 percent single-family, 18 percent multi-family, and five percent mobile homes. Despite the fact that more multi-family and mobile home units were sold in the Seacoast, the average sale price was still substantially higher than the statewide average. In fact, the average fourth quarter 1999 home sale price in the Seacoast region was \$243,000, nearly \$100,000 greater than the statewide average of \$151,000.

Home sale prices on the Seacoast have been rising substantially in the past three years; the average single-family price of \$301,350 was 49 percent higher in the fourth quarter of 1999 than it was at the beginning of 1997, and the average multi-family price of \$162,628 was 24 percent higher than three years earlier. While these figures were not available at the town level, the residential market in the Seacoast as a whole is clearly doing quite well.

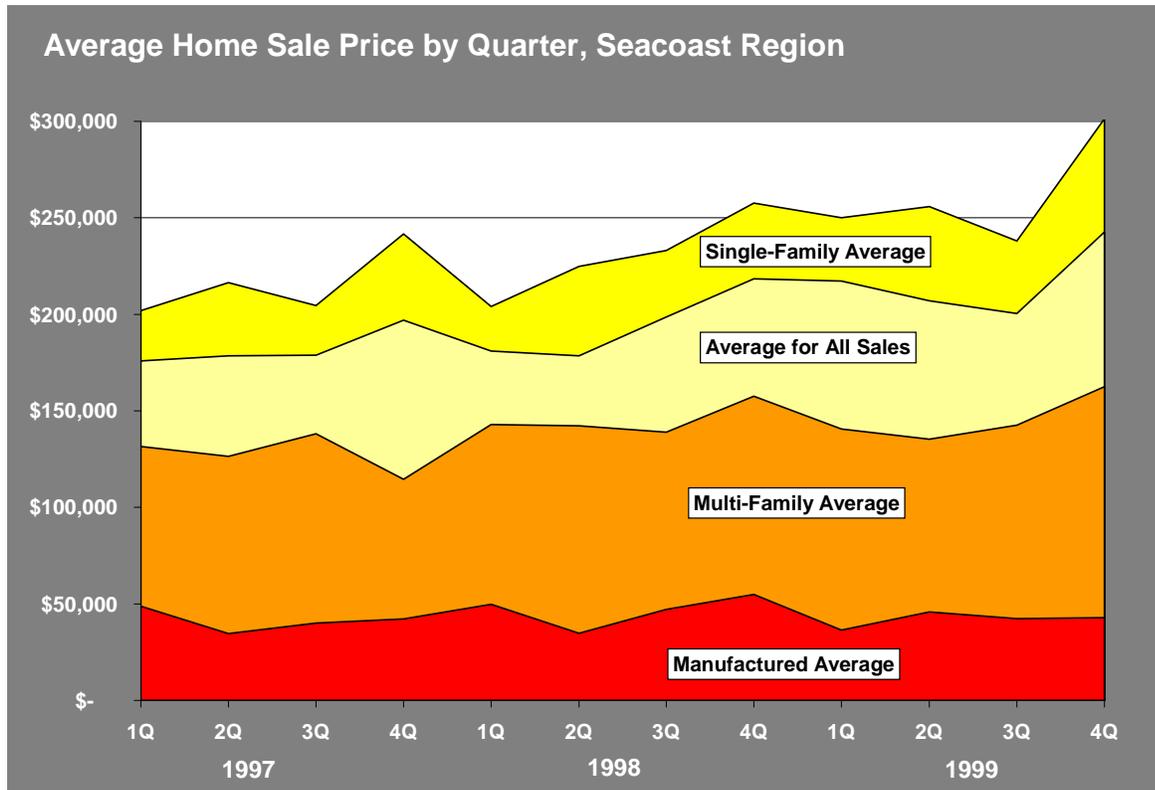
The following chart illustrates prices in the Seacoast region from 1997 through 1999.

Employment Profile and Trends

Hampton and Rockingham County Overview

The economy in Hampton is largely based on tourism, with 42 percent of town wide employment concentrated in the Services sector and 32 percent in the Retail Trade sector. Retail Trade is the lowest paying employment sector per job. Only 10 percent of Hampton's employment is in Manufacturing, and a mere two percent is in Transportation/Communications/Utilities (TCU); these are among the two highest paying sectors. Rockingham County, by comparison, has a far more diversified employment profile, with only 30 percent of its jobs in Services, 17 percent in Manufacturing, and 5 percent in the TCU sector.

Figure 20. Average Home Sale Price by Quarter



Employment in the town’s two largest sectors, Services and Retail Trade, is heavily concentrated in a few subsectors. Nearly 19 percent of Services jobs in Hampton are in the Hotels and Lodging Places category, a figure that far exceeds the statewide average of 5.7 percent. Despite the area’s dependence on tourism, almost 28 percent of Hampton’s Services jobs are in the Engineering, Accounting, and Research Services sector. Another surprising statistic is that only 7.2 percent of Hampton’s Services employment is in Amusement and Recreation Services, a figure equal to that of Rockingham County. In Retail Trade, the overwhelming majority of jobs (60 percent) are for Eating and Drinking Places, compared with 28.2 percent for the county as a whole. Hampton is severely lacking in retail goods stores, as it has no general merchandise stores and is below both state and county employment levels in furniture, apparel and accessories, building materials, and miscellaneous retail.

Employment in Hampton followed state and regional trends throughout the 1990s, with losses in the early part of the decade, strong gains from 1992 to 1994, slight losses in the middle 1990s, and a rebound in the late 1990s. Overall, the Town of Hampton added 330 new jobs during the 1990s, despite losing over 200 jobs between 1990 and 1992. In August 2000 7,590 people were employed in the Town of Hampton. However, since the

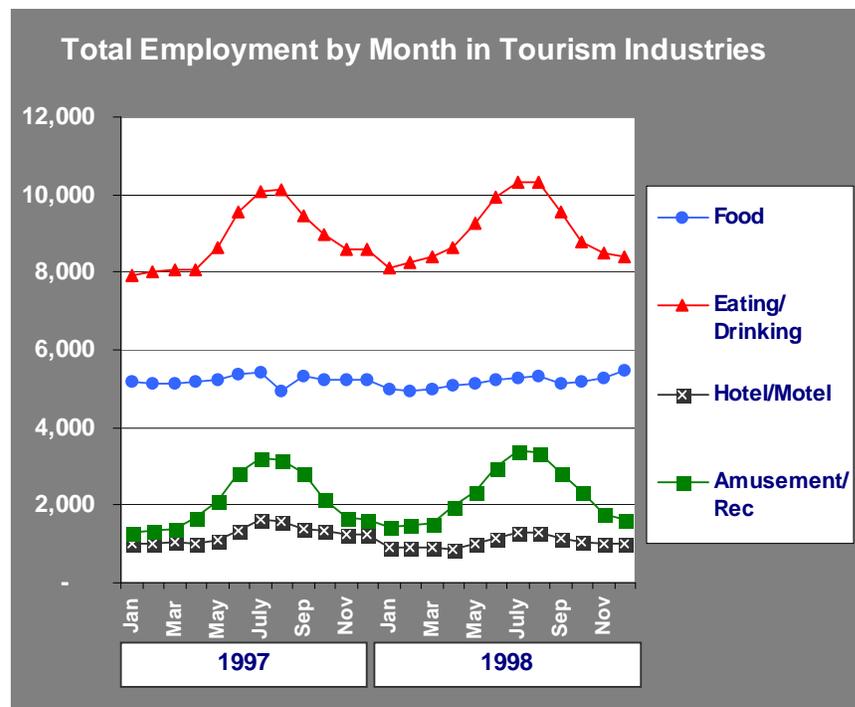
town's employment tends to peak in summer months due to seasonal employment, the figure dropped to 7,360 in September 2000.

Seasonality in Employment and Wages

Employment in both Hampton and Rockingham County varies heavily by season. As already noted, August is the peak employment month in Hampton, and the county follows a similar pattern. In July 2000, 158,280 people were employed in Rockingham County. By September, this number had fallen to 154,400. The increases in employment during the year are due to a larger labor force, not due to a reduction in resident unemployment. In fact, Rockingham's highest unemployment rate during 2000 was in July. Its lowest monthly rate was in May, when some seasonal jobs begin but before most seasonal working residents arrive for the summer.

To gain further perspective on the seasonality issue, seasonal trends were examined in four key employment sectors that are typically affected by tourism-based economies. Since such detailed information was not available at the town level, this analysis only focuses on Rockingham County. The four industries examined were Food Stores, Hotels and Motels, Eating and Drinking Places, and Amusement and Recreation. The following figure depicts seasonal variations during 1997 and 1998.

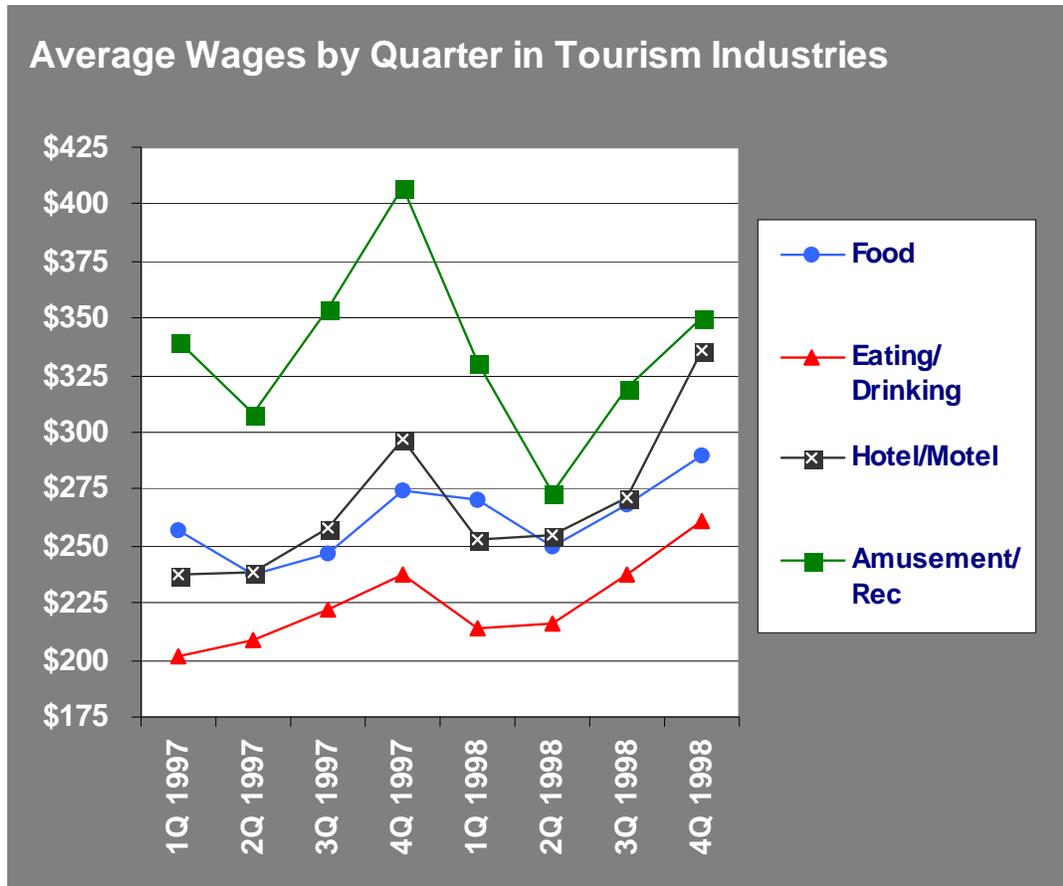
Figure 21. Total Employment by Month in Tourism Industries



- **Food Stores** provide two types of insight. First, they typically serve as a strong indicator of the retail behavior of residents. Second, in tourist areas, they help demonstrate if visitors choose to dine out or to purchase food and prepare it in their lodging places. Clearly, food store employment in Rockingham County does not vary much by season and, if anything, it is slightly lower in the summer than in other times of the year.
- **Eating and Drinking Places** are a good measure of total visitation, both daytrip and overnight, as nearly all visitors will eat at least one meal during their stay. This sector is affected very strongly by seasonal variations in visitation, as the difference in employment between the peak months of July and August and the off-season month of January is about 2,000 jobs, or 20 percent of the peak employment level.
- **Hotel and Motel** employment typically varies greatly by season in tourism economies. While employment in this sector increases slightly in the summer months, it represents a variation of only a few hundred jobs in a county with over 150,000 total jobs. This employment category indicates that the New Hampshire Seacoast is more popular as a daytrip destination than as an overnight destination, a point that is reinforced by the tourism statistics discussed later in this section.
- **Amusement and Recreation** varies the most of the four categories, with peak employment at about twice the off-season level. The high increase is due both to the increased number of people present in the summer months and to the winter closing of most amusement and recreation attractions, so even year-round residents cannot visit them in the off-season.

Another interesting seasonal measure to examine is wages, as seasonal jobs tend to be much lower paying than permanent jobs. The graph below depicts quarterly trends in average weekly wages for each of the four tourism employment categories. Overall, Eating and Drinking has the lowest wages and Amusement and Recreation has the highest. In all four categories, average wages are highest in the fourth quarter, and much lower in the second and third quarters.

Figure 22. Average Wages by Quarter in Tourism Industries



Commuting Patterns

Commuting pattern data have not been collected since the 1990 Census, but it is reasonable to assume that the overall commuter profile has remained stable. In 1990, only 24 percent of employed Hampton residents worked in the town, which is far lower than Portsmouth's ratio of 51 percent. Among out-commuters, 20 percent commuted to Portsmouth, 8.5 percent to Seabrook, and about 5 percent to Exeter, and North Hampton. About 30 percent of employed Hampton residents commute out of New Hampshire, primarily to Massachusetts. In fact, 5 percent of working Hampton residents commute all the way to Boston.

Among people employed in Hampton, one-third are residents of the town and two-thirds commute in. More than 80 percent of commuters live elsewhere in New Hampshire with Exeter, North Hampton, and Portsmouth as the top three towns of origin.

To restate, 76 percent of Hampton residents who work do not work in Hampton, and 67 percent of those who work in Hampton do not live in Hampton. Clearly, there is a mismatch between the residents of the town and the employment opportunities its economy offers.

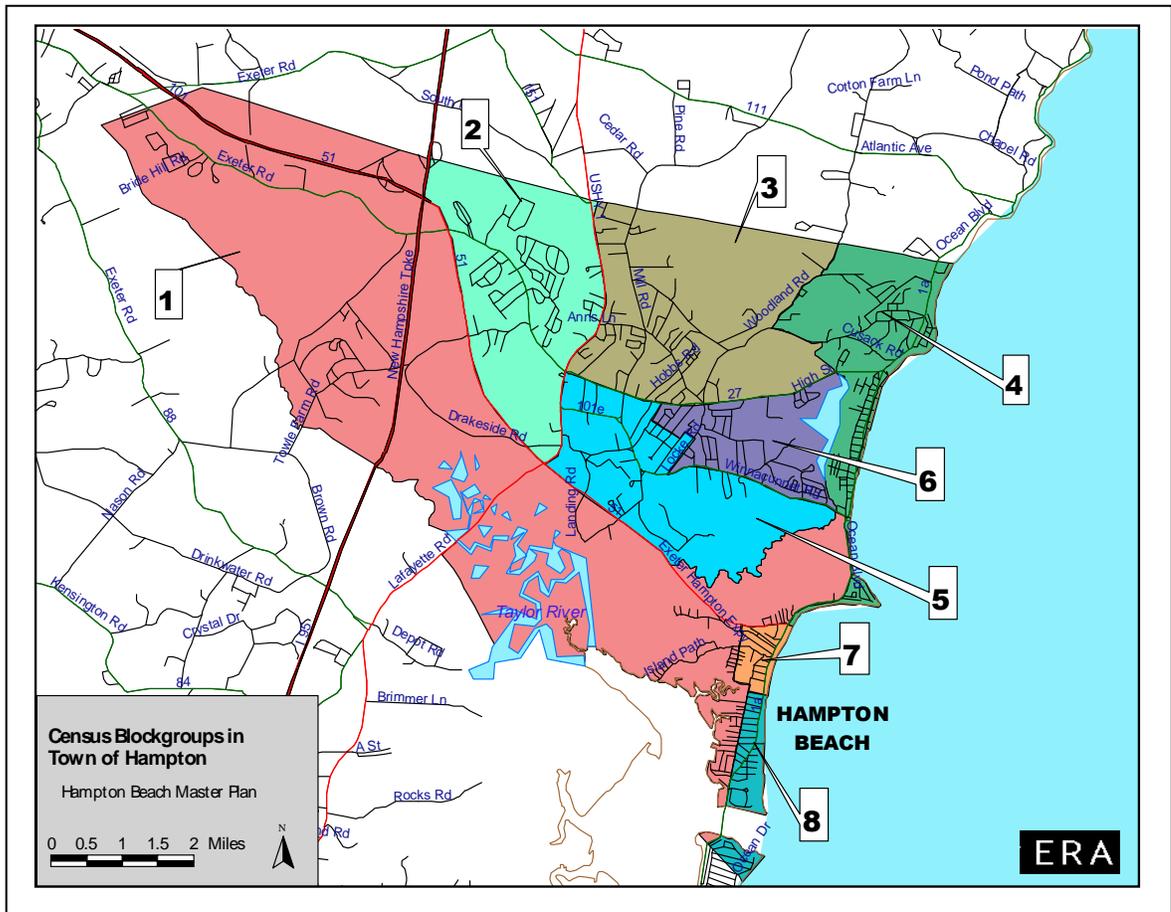
Hampton Beach versus the Town of Hampton

The Town of Hampton contains eight Census block groups. For the purposes of this analysis, Hampton Beach is defined as the two small block groups situated in the southeast corner of the town (see Figure 23) with the following boundaries: to the north, Route 101; to the west, Brown Avenue and Ashworth Avenue; to the south, the Seabrook town boundary; to the east, the Atlantic Ocean. The map below shows the location of Hampton Beach within the context of the town. The organization of the block groups precludes isolating the North Beach area from the rest of the town, as its block group also includes substantial portions of Hampton's inland area.

The permanent population of Hampton Beach is very small and much younger than the rest of Hampton. The beach area has about 1,000 year-round residents, 50 percent of whom are under the age of 35. The majority of housing units in Hampton Beach are renter-occupied (64 percent) compared with the town total of 32 percent. Income levels among Hampton Beach households are extremely low, as 70 percent of households earn less than \$50,000 and only six percent earn over \$75,000 per year.

In the 1990 Census, only 29 percent of the housing units in Hampton Beach were occupied year-round, compared with 59 percent for the whole town. Hampton Beach's population is much larger in the summer, not just from visitors staying in hotels, but also from part-time residents. Another interesting characteristic of Hampton Beach residents from the 1990s Census was that they were generally new residents. Only 41 percent of permanent Hampton Beach residents in 1990 were permanent residents in 1985, and just 14 percent of new residents previously lived in New Hampshire.

Figure 23. Block Groups used in the Hampton Beach Project Area



Tourism in Seacoast Region

Tourism drives the local economy in Hampton, and it is extremely important to understand the dynamics of tourism in the area to understand the overall economic situation. This section examines data that characterizes visitation patterns to Hampton and the New Hampshire Seacoast in general.

In fiscal year (FY) 1998, about 25.1 million people visited New Hampshire, of whom 6.6 million visited the Seacoast region. Of the seven tourism regions in New Hampshire, the Seacoast region had the lowest level of overnight visitation, at about 21 percent of total visitation, representing just 1.4 million visits. For the other six regions, just under 40 percent of total visits were overnight. Not surprisingly, the average days per trip to the Seacoast was also the lowest in the state, at an average of 1.68 days, compared with 2.18 for the rest of the state. These averages include day-trippers, who are assumed to stay for one day each. Interestingly, for those who do stay overnight on the Seacoast, the average

length of stay, 4.27 days, is the highest in the state. This is significant as it illustrates the vast difference in behavior between overnight and daytrip visitors.

Visitors to the Seacoast spend less per day than visitors to any other region in New Hampshire. In FY 1998, the average visitor to the Seacoast spent \$52.61 per day, compared with the \$61.82 average for the rest of the state, a difference of more than nine dollars per person per day. The Seacoast's low per capita spending figure is an outgrowth of the lack of overnight visitation to the region, since lodging comprises a large share of visitor spending. The impact of overnight visitation becomes apparent when examining the average daily spending of visitors to the White Mountains, where 66 percent of visitors stay overnight. That region's average per capita daily spending figure is \$73.65, more than \$20 greater than that of the Seacoast.

Another problem faced by the Seacoast region is its seasonality. More than 37 percent of all visits were in the summer, and 39 percent of visitor spending occurred in the summer quarter. Also, summer overnight visitors to the Seacoast stay far longer than visitors in any other season, with an average of 4.96 days, compared with the year-round average of 4.27 days. As a result, the summer accounts for 39 percent of annual visitor spending in the Seacoast region in FY 1998.

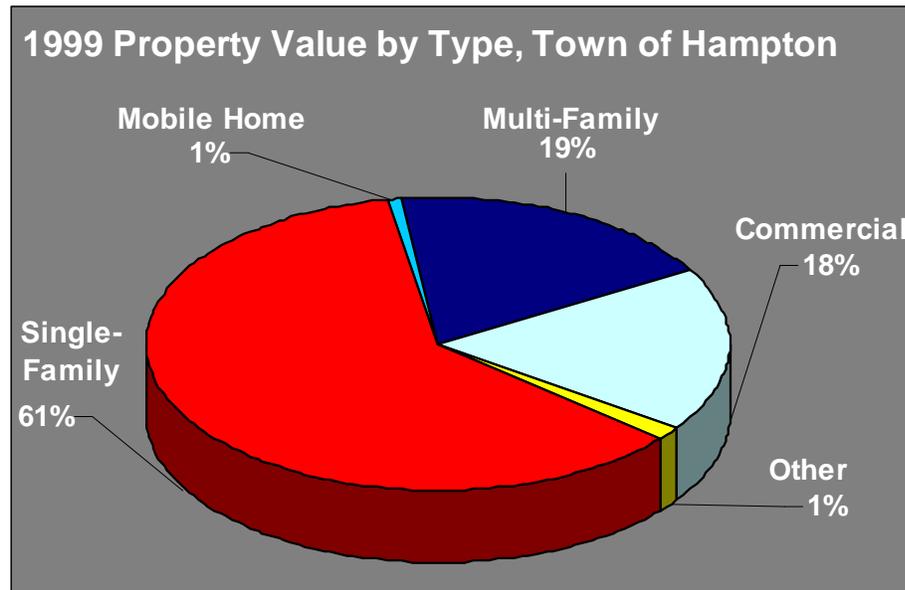
To examine the issue of seasonality further, data was collected on sales tax receipts from tourism industries (restaurants, food service, and hotel rooms) in Rockingham County from September 1999 through August 2000. Of the three, hotels were the most seasonal with receipts ranging from \$134,000 in February to \$778,000 in July, with July and August far above any other month. Restaurant receipts ranged from \$1.9 to \$3.2 million, but they rose more gradually, hitting \$2.5 million in May, \$2.9 million in June, before peaking in July and August. Food service receipts remained relatively steady for the whole year, always staying between \$250,000 and \$500,000. As with the food store employment issue discussed earlier, the lack of pronounced seasonality in this category shows that visitors to the Seacoast do not tend to buy groceries. This fact indicates two things: many residents probably leave town during summer months to avoid the influx of tourists, and most visitors are day-trippers who may go to restaurants but do not purchase groceries.

Property Value Issues

Property value in the Town of Hampton is largely concentrated in residential properties, with 80 percent of the town's total taxable valuation coming from residential land and buildings. Among residential properties, multi-family units account for 40 percent of the total number of units, but only 23 percent of the total residential property value, since single-family units are more valuable per unit. The town's commercial value is largely in office and retail properties, as only about 10 percent of its commercial value is for industrial properties. The total taxable property value of Hampton increased 10 percent from 1998 to 1999, with the increase attributable to rising residential values. During that one-year interval, commercial value actually declined by 7 percent.

The following figure illustrates the breakdown of property values in Hampton from 1999.

Figure 24. Property Values by Type in the Town of Hampton, 1999



Profile of Comparable Beach Communities

In an effort to put Hampton Beach’s situation in a national context, both statistical and anecdotal information was researched regarding comparable beach communities in the eastern United States. The communities selected for comparison include Ocean City, Maryland; Old Orchard Beach, Maine; Daytona Beach, Florida; and Asbury Park, New Jersey. They were selected based on the following criteria: like Hampton Beach they are old and largely built-out communities, largely seasonal in nature, and have seen shifts in the characteristics of their visitors in recent years. .

This review contains two elements: a comparison of key demographic variations of these communities with “upscale” beach towns in close proximity, and profiles of how comparable beach communities have responded to related challenges. This review is intended to both illustrate the economic challenges facing Hampton Beach and provide suggestions for overcoming these challenges. The following table lists the comparable towns, their “upscale” counterparts, and their median household incomes, per capita incomes, and median housing values from the 1990 Census.

Table 13. Profile of Comparable Upscale and Downscale Beach Communities¹

Community	Median Household Income	Per Capita Income	Median Home Value
Hampton, NH	\$40,929	\$18,371	\$161,200
Rye, NH	\$42,143	\$28,020	\$221,800
Ocean City, MD	\$25,959	\$20,570	\$136,100
Rehoboth Beach, DE	\$31,538	\$20,734	\$205,400
Old Orchard Beach, ME	\$28,253	\$14,108	\$93,000
Kennebunkport, ME	\$34,837	\$22,347	\$162,500
Daytona Beach, FL	\$18,631	\$11,901	\$62,000
Ormond Beach, FL	\$32,704	\$18,875	\$91,600
Asbury Park, NJ	\$20,754	\$11,267	\$97,500
Point Pleasant Beach, NJ	\$34,799	\$16,542	\$194,000

1. The first beach community for each area is followed by an upscale beach community.

Demographic Variations of Comparable and Upscale Beach Towns

As the above table illustrates, the median household income, per capita income, and median housing value for Hampton and other similar beach towns is lower in all cases than the same values for their upscale neighbors. However, average income and home value figures alone do not illustrate the differences among these towns, as evidenced by quirks such as Ocean City and Rehoboth Beach having similar average per capita income levels and Hampton and Rye having similar median household incomes.

Many other considerations determine the quantitative differences between the two towns in the five pairs analyzed here. Among these considerations are age profile, income profile (not just average income), owner-occupancy levels, and home value profile. The sections below discuss each of these factors.

Age Profile

In all five pairs, the lower-end community has more residents under the age of 35 and fewer residents over 35. The most dramatic splits are in the 18-34 group, where Daytona Beach and Old Orchard Beach have nearly twice the percentage as Ormond Beach and Kennebunkport, respectively. At the top end of the range, all five upscale communities have significantly higher percentages of people over 55.

Income Profile

As previously mentioned, average income figures can be misleading, a fact demonstrated by the closeness of Ocean City and Rehoboth Beach's average per capita income values and by Hampton and Rye's comparable median household incomes. In the former case, Ocean City has a very high percentage of low-income households (82 percent), and a higher percentage of high-income households than Rehoboth Beach. The high concentration of top-end households inflates mean figures like per capita income; in this

case median household income is a better measure. By this yardstick, Ocean City's median income of \$25,959 is significantly lower than Rehoboth's figure of \$31,538.

In the case of Rye and Hampton, median household income levels are low because Rye has nearly as high a percentage of households earning under \$50,000 per year (59 percent) as Hampton (64 percent). However, Rye has a disproportionate number of very high-income households earning more than \$150,000 per year. The combination of these factors produces a low median household income and a high average per capita income.

Owner Occupancy

A typical indication of economic improvement in a given area is a rising homeownership rate. It should not come as a surprise that, in all five cases, the upscale community has a higher homeownership rate than the downscale one. In fact, all five upscale communities' rates are at least 10 percent above that of their neighbors, with the largest differences coming between Point Pleasant Beach (61 percent) and Asbury Park (24 percent), and Ormond Beach (77 percent) and Daytona Beach (47 percent).

Home Value Profile

As with income, examining a median figure for home value does not tell the whole story. For example, Ormond Beach has a median home value of only \$91,600, compared with Daytona Beach's median value of \$62,000. However, upon examining the range of home values, it is evident that Ormond Beach has much higher property values. Nearly 85 percent of Daytona Beach's housing units were valued under \$100,000 in 1990, compared with just 61 percent for Ormond Beach. At the other end of the scale, six percent of Ormond Beach's units were valued at \$250,000 or more, compared with just two percent for Daytona Beach. This pattern is even more pronounced in communities with a higher percentage of housing units valued over \$250,000, like Kennebunkport and Point Pleasant Beach.

Responses of Other Beach Communities

To gain a greater understanding of the issues affecting Hampton Beach, information was gathered on the responses of some comparable beach communities to their declining economic situations. Information was obtained on redevelopment activities in three comparable locations: Virginia Beach, Virginia; Daytona Beach, Florida; and Myrtle Beach, South Carolina. The responses of these beach communities have ranged from minimal infrastructure and aesthetic improvements to full-scale redevelopment efforts. The paragraphs below summarize the findings.

Virginia Beach, Virginia

Virginia Beach draws about 2.5 million visitors each year, generating \$20 million in tax revenues. Beach-related tourism is therefore key to the city's economic vitality. In 1988, the City of Virginia Beach recognized that it was losing market share and tourism to other

locations because its infrastructure was falling into disrepair and its visual environment was growing increasingly unattractive. In response to these problems, the city spent \$50 million on sidewalks and infrastructure improvements, and enacted a sign ordinance. In subsequent years, the city spent \$125 million to expand and beautify its boardwalk area.

The City recently completed an Oceanfront Resort Area Concept Plan, a document that lays out a general approach to beachfront redevelopment. Key recommendations in the document included an approach that would rely more on public transit, thus mitigating the negative effects of automotive traffic. The plan also advised to concentrate public investment around areas where arterial roads intersect the beach area, since the resort area is 3.5 miles long and just two and a half blocks deep.

Another element of Virginia Beach's strategy focused on ways to stimulate private development. In an effort to upgrade its image, the city engineered a public-private partnership agreement to build a full-service, four-star resort hotel on the beachfront featuring ground-level retail and parking for 800 cars. This project, which would be the first upscale hotel in the city, is currently under review, but has hit a legal snag. A group of local activists wants the redevelopment area to be a public park, and this group has sued the city over the use of the property.

Daytona Beach, Florida

In 1982, the City of Daytona Beach created the Main Street Redevelopment Area in the heart of its tourist zone, and used it as a springboard to improve its convention and leisure business. In 1986, the city opened the Ocean Center, a 225,000 square-foot meeting and convention facility that stimulated a great deal of tourism and development activity. Since then, the city has financed several road, bridge, streetscape, and transit improvements, and has entered into public-private development agreements for hotel, residential, and retail/entertainment projects. The total amount of public and private investment in the redevelopment area exceeds \$350 million. During this process, the city's Community Redevelopment Agency has used its powers of condemnation a number of times to facilitate redevelopment activity.

Recently, the city established a "traffic free zone" in the center of the beachfront area to create a more pleasant environment. Following this, the city issued a Request for Proposals (RFP) in August 2000 to solicit applications from developers to develop an 11-acre site along the boardwalk. The RFP mandates the inclusion of substantial amounts of retail and themed entertainment space, a full-service hotel of 150 rooms or more with meeting space, a parking structure, and a number of streetscape and transit improvements.

Myrtle Beach, South Carolina

The response to decline in Myrtle Beach has been minimal with the focus being on maintaining an attractive environment. Myrtle Beach has taken steps to protect its most valuable asset - its beach. The city has undertaken "renourishment" efforts that involve

pumping sand from the ocean floor back onto the beach to address erosion threatening the shoreline. Renourishment efforts have occurred all along the city's 20-mile shoreline.

In Myrtle Beach's downtown area, the Downtown Redevelopment Association has focused on physical improvements to the commercial district. Several infrastructure-related projects have been undertaken, including streetscaping, the construction of parks, and other beautification efforts. However, few efforts have been targeted at the waterfront.

Impacts of Zoning on Economic Development in the Project Area

The zoning ordinance for the study area has a direct and fundamental impact on the potential for development and redevelopment, which in turn impacts the economic development opportunities. The zoning ordinance impacts development in three separate ways:

- Development is restricted by overlay zoning for environmental concerns such as the floodplain management zone designations. However, these restrictions are based on natural resource conditions and are not expected to change land uses. They are not likely to change the potential development opportunities within the area.
- The designation of allowed uses within each zoning district restricts the options for land uses within each zone. However, the spatial designation and separation of land uses is one of the basic tenets of zoning used to maintain property values by separating conflicting land uses such as commercial and residential. Consequently, for the most part, the designation of uses is not adverse to compatible development and growth.
- The **dimensional requirements** within each zoning district that designate aspects of building and site dimensions such as height, bulk and coverage, limit the potential to increase the size, and consequent value, of properties. These requirements appear to be the main impediment of the zoning ordinance that affects the economic growth of Hampton Beach.

Impact of Dimensional Standards

The existing development within most of the study area is characterized as fully built out. As noted previously, the total existing building coverage is very high at about 40%. Data on the individual land use types also show the maximized nature of the development. While the commercial uses cover only 7 percent of the land area, they house one-third of the total building floor space in the area indicating a maximization of the floor area within the allowed zoning districts. In addition, many buildings exist as non-conforming when compared against the current dimensional requirements. Hence, a large number of variances have been requested from the appeals board.

The extremely high number of requested variances indicates that the zoning ordinance no longer allows the reinvestment desired, or even needed, by property owners within the study area. The Growth Management Ordinance exacerbates this situation by requiring conformance with the dimensional standards even though the average lot does not conform to the most recent dimensional standards. The required variances to make modifications to the property or building further adds to the property owner's costs and schedule. Permitting time and costs can be a determinant in deciding whether to proceed on a certain project.

Related Impact on Land Use

The restriction on multi-family development within the Business Seasonal district presents other way the dimensional standards of the zoning ordinance impact potential redevelopment opportunities. The requirements limit new multi-family units from being built in Hampton Beach for the following reasons:

- The average lot dimensions in the Hampton Beach areas are 50 wide by 100 feet deep. However, the minimum frontage, or width at the road, under the present regulations is 100 feet.
- In addition, no units are allowed within 40 feet of another lot line or building and driveways must be at least 25 feet from the front of any building, which again conflict with the existing lot dimensions in the area.

While it may be possible to accumulate properties for a larger development project that meet the dimensional standards, this does not appear to be an option considered by the area's property owners at this time. Consequently, when seeking new and reinvestment in the area, zoning ordinance standards should be considered a major impediment to promoting new economic development.

I. Infrastructure and Public Services

This section describes the public services and facilities that serve the Hampton Beach area. The Town of Hampton provides police and sewer services, and uses various properties located west of Ocean Boulevard to provide town services such as police and parking. Both the Town and the Hampton Beach Precinct presently provide fire protection. Private businesses provide water, gas, electric, and telecommunication services.

Town Public Facilities

The Town maintains and operates several facilities in the Hampton Beach area. A police station is located on Brown Avenue. A new station is being planned for the area, and would occupy the same property. The town also owns and operates several parking lots. The largest lot, located on Ashworth Avenue, holds approximately 500 vehicles.

The fire station, located at the corner of Ashworth Avenue and Brown Street, across from the police station, is currently owned and operated by the Hampton Beach Precinct. There is now a discussion, however, that the Town may assume responsibility of this facility.

The combined uses and activities at the Hampton Beach area demand that the police and fire departments provide a safe place for people to live, work, and visit. This following section identifies some of the conditions and safety concerns of these departments.

Fire Safety

The Fire Department, which has a station centrally located on Ashworth Avenue provide both fire and limited medical services for the Hampton Beach area and beyond. The Department has the ability to adequately serve the public and address several safety concerns for the Hampton Beach area.



View of the Fire Station on Ashworth Avenue

New Fire Station

There are current plans to build a new fire station since the existing one on Ashworth Avenue does not adequately serve the public. However, the Town and the Precinct are presently discussing options since the Precinct owns the building and the three trucks at this station, and the Town pays for wages and the ambulance. When the situation is resolved, it is expected that a modern facility would either replace the existing building, which was built in the 1920s, or be re-located nearby. It should also be noted that research was conducted to consider a

combined police and fire dispatch center with personnel in one building, but there were too many challenges to carry these plans forward.

Water Supply

The Hampton Water Works Company supplies water to the Hampton Beach area. There is a 500,000-gallon water storage tank that could service the area in the event of a large fire. Although there is a 12-inch main on Ashworth Avenue, the Department feels that the 6-inch main on Ocean Boulevard should be replaced with a 12-inch pipe.

Insurance Rating

The Town of Hampton is considered an ISO 3 area due to the high density of wooden structures. This rating has important implication regarding insurance rates and the potential for investment by developers. A better rating, such as ISO 1 or 2 would lower insurance premiums.

Medical Facility

There is a small medical room at the fire station that handles about 150 walk-ins per year. EMTs and an ambulance are also available for medical emergencies.

Police Safety

The Hampton Police are in charge of maintaining order and providing safety for the people in the Town of Hampton. They are also responsible for policing Hampton and North Beaches areas. The police station is located at the corner of Ashworth Avenue and Brown Street. Although this is an excellent location for the area, there are sometimes problems accessing areas due to vehicle congestion on the main roads and during the summer and special events.



View of the Hampton Police Station

New Police Station

There are current plans for a new police station. It would be located behind the existing station on Brown Avenue. The existing station is not adequate in size and facilities to serve the needs of the police, especially during the summer when there are large numbers of people.

Focus of Police Efforts in the Hampton Beach Area

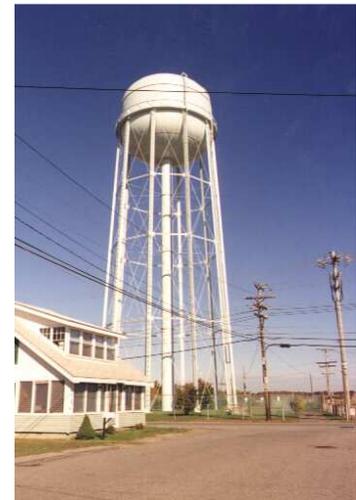
The Police Department’s focus for the Hampton Beach area is to maintain a safe environment for all the visitors and residents. A police presence, especially during large events and with large crowds, helps to maintain order. Issues that need constant attention during the summer season include drinking, parking, and noise violations. Off-season issues include domestic abuse and juvenile crime. Although not all of these issues are directly related to the land uses in the area, the types of buildings and businesses affect the activities and actions of people who come and use its resources.

Signage

There is a lack of signage to direct people in need of the police to appropriate areas. A resort area should have adequate signage throughout the area for this purpose.

Water Supply

Water supply systems are set up in response to the level of demand and services within a geographic area in a town or region. The high seasonal population at Hampton Beach area places an increased demand on water service during the summer. Recent deficits in water supply meeting demands on the Hampton Water Works Company (HWWC) system have led the New Hampshire Department of Environmental Services (DES) to impose a “new connections moratorium” on substantial new commercial and residential additions to the water system. A review of the Town’s population growth provides some insight to this problem.



The Town of Hampton encompasses approximately 13 square miles and is located in Rockingham County on the seacoast of New Hampshire. The land uses are primarily urban and tidal marsh with large seasonal fluctuations in businesses and visitors. Development in the study area is primarily residential and recreational. The Town has experienced a growth rate of approximately 2.6 percent a year for the last thirty years. Population history is summarized in Table 14.

Table 14 Town of Hampton Population Summary 1970 – 2000¹

Year	Population	Increase (%)
1970	8,011	-
1980	10,493	31%
1990	12,278	17%
2000	14,300 (estimated)	16%

(1) Based on Town of Hampton Growth Management Oversight Board Annual Report 9/29/2000

Existing Water System

The Hampton Water Works Company (HWWC) supplies potable water to customers in Hampton, North Hampton, and portions of Rye Beach. Table 15 summarizes the Average Day (ADD) Demands on the HWWC system. The Maximum Day Demand (MDD) for 1989 to 1998 varied from 3.69 to 4.99 million gallons per day (mgd). In 1999, it was measured at 5.1 mgd. This occurred during the summer weekends when visitors outnumber residents over 10 to 1.

Current demand in the Hampton Beach area ranges from approximately 0.3 to 0.5 mgd during the off-season (October to April) to 0.75 to 1.0 mgd during a peak summer weekend. The transient, day-trippers, to the beach do not have a major impact on the water system as, other than an occasional trip to a public bathroom.

Table 15. HWWC Water System Demand

	ADD (mgd)	% of Total ADD
Residential	1.14	52.50
Commercial	0.60	27.65
Industrial	0.01	0.50
Other: Schools, Municipal	0.03	1.40
Non-Revenue	0.07	3.20
Unaccounted for Water	0.32	14.75
Total	2.17	100%

Source: HWWC Integrated Resource Plan – Demand Summary 1989 – 1998.

Water Supply

Water is obtained from 14 wells located throughout the service area as summarized on Table 16. Four wells are deep bedrock over 380 feet deep below the surface. Ten wells are relatively shallow and developed in gravel formations. All wells have been determined to be groundwater not under the influence of surface water. The DES imposed the moratorium restricting approvals for significant new water connections on April 7, 1995 due to a source of supply deficit. With new supply added to the system in 1997 (well #16) and 1998 (wells #17, 18, and 19), the moratorium was briefly lifted from February to December 1999, and then reimposed due to the drought during the summer of 1999.

As it stands, HWWC can supply new service to pre-approved projects and “in-fill” the systems they already serve. However, new expansion of the system is not permitted. For example, they cannot, at this time, commit to serving the domestic water needs of new subdivisions; they can serve them with fire protection. Then, when the moratorium is lifted, water connections to the new properties would be allowed. As it currently stands, this moratorium should not have an impact on the Hampton Beach Planning process as the area is almost entirely developed and new connections would probably be unnecessary. Re-development would probably only replace existing development, and even new

development with more units, such as a hotel, might place less of burden on the water system because the plumbing, faucets and fixtures would most likely be lower-flow models that use substantially less water than old fixtures do.

Table 16. HWWC Well Summary - Million Gallons a Day (mgd) (1)

Well #	Size/type	Peak Well Capacity (mgd)	Estimated 1999 Sustained Yield (mgd)
5	18" gravel	0.14	0.10 – 0.14
6	18" gravel	0.86	0.14
7	24" gravel	1.00	0.35
8	25" gravel	0.65	0.13
9	24" gravel	1.00	0.50
10	18" gravel	1.000	0.33
11	24" gravel	1.30	0.8
12	12" gravel	0.29	0.22
13A	12" bedrock	0.52	0.18
14	24" gravel	0.36	0.05 (2)
16	18" gravel	0.35gpm	0.25
17, 18, and 19	8" bedrock	0.17 (#17), 0.22 (#18), 0.29 (#19)	0.35 (3)

- (1) All wells discharge into the Main Pressure District except for Well #5 which discharges into the Rye Beach Pressure District at the Jenness Beach Tank.
- (2) Well capacity limited to 0.05 mgd with the well operating only for 12 hours per day.
- (3) The three wells operate on an alternating basis.

The 14 wells have an estimated yield of 4.4 mgd that exceeds the 2000 Maximum Day Demand (MDD) of 4.31 mgd but is less than the 1999 MDD of 5.1 mgd. The entire well network has a maximum projected capacity of 6.40 mgd under optimum, groundwater recharge conditions. This capacity is capable of meeting projected demands under average conditions. However, during the extreme dry weather in 1999 certain wells were not able to sustain previously estimated production rates.

HWWC is currently undertaking a comprehensive review and analysis of the hydrogeologic conditions of their existing wells as part of their Aquifer Management Program. The intent is to better understand the history and ability of water delivery for their 14 existing wells so they can optimize their ability to deliver water during dry conditions. They are assembling an operations manual to guide them throughout the year to meet the objectives of this program and they use a computer SCADA System to monitor conditions in real time on a daily basis. They have also instituted a Water Supply Update that is issued to local officials and news media twice a month to update them on the status of water system conditions, demands and their ability to meet those demands. The intent is to inform the public before any water emergency or water restrictions that may occur, and trends toward or away from implementing them.

Additionally, HWWC is addressing the moratorium by these approaches:

- Investigating and potentially acquiring sites for new wells
- Investigating the potential for desalination, either as a peaking, summertime, source or as a larger, regional facility
- Continuing work with the Town of Hampton to investigate the possibility of using the treated effluent from their wastewater plant to recharge some of the well sites
- Pursuing interconnections with other water systems in the area (Exeter, Portsmouth, Rye) for emergency backup and possible regionalization. There is currently one interconnection with the Town of Seabrook on-line that allows for an additional 250 gallons per minute (gpm).

Water Quality

Water produced from the wells is of good quality. It requires only moderate treatment with chlorination for disinfection, and pH adjustment and corrosion control as needed.

HWWC has a wellhead protection program. The Hampton Zoning Board of Adjustment has created an Aquifer Protection district to limit the impact of development. Lot sizes and dwelling area requirements are increased to control the quantity of new developments. In addition, the impervious area per lot is limited to promote infiltration that recharges the water supply aquifer.

Radon levels in all wells may exceed the EPA Maximum Contaminant Level (MCL) of 300 pCi/L once the rule is promulgated. However, the rule may require Multi-Media-Mitigation that will set the MCL at 4000 pCi/L. HWWC has plans for construction of aeration facilities to reduce radon levels if required by future radon regulations, dictating treatment of the HWWC wells.

System Monitoring and Control

HWWC operates nine treatment stations that are unmanned, but visited by an operator during daily operation. A radio-based Supervisory Control and Data Acquisition System (SCADA) operates and monitors pressure, flow, and water elevations for all wells, pumps, pressure reducing valves, tanks, chemical feed systems, and some valves. The SCADA system is expandable and is located in the distribution building near Well No. 8. This system was put on line in the mid-1990's and has been expanded each of the following years. A final upgrade, which is planned for 2001, will optimize the systems efficiencies and ability to comprehensively monitor the system in real time.

Distribution and Storage

The HWWC distribution system consists of approximately 135 miles of water main ranging from 1 to 16 inches in diameter. The water system at the beach area is a mix of original cast iron water main, installed in the early 1900's, asbestos cement, and ductile iron main. Good water flows were evidenced by the system's ability to deliver approximately 3,000 to 3,500 gpm during the Old Salt fire in June 1999.

The system has two booster stations and four distribution storage tanks. Table 17 provides a summary of the storage facilities. The total system storage, 2.06 million gallons, is adequate to meet the current peak hour equalization and fire reserve needs. The system is divided into three pressure zones: Main Service gradient, Rye Beach Low Service gradient, and Hampton Beach Low Service gradient. There is a fire booster pump located at the Rye Jenness Beach tank capable of pumping 2,500 gpm. The company holds land for a fifth tank, located in North Hampton, for future construction.

Table 17. HWWC Storage Tank Summary

Name	Pressure District	Year Built	Type	Capacity (MG)	Diameter (FT)	Pump	Overflow Elevation, ft (USGS)
Exeter Road	Main	1982	Elevated	0.750	64	No	249.0
Mill Road	Main	1914	Standpipe	0.308	25	Yes	172.2
Jenness Beach	Rye Beach	1966	Reservoir	0.500	52	Yes	70.0
Glade Path	Hampton Beach	1953	Elevated	0.50	50	No	171.2

Wastewater System

Wastewater Treatment Plant

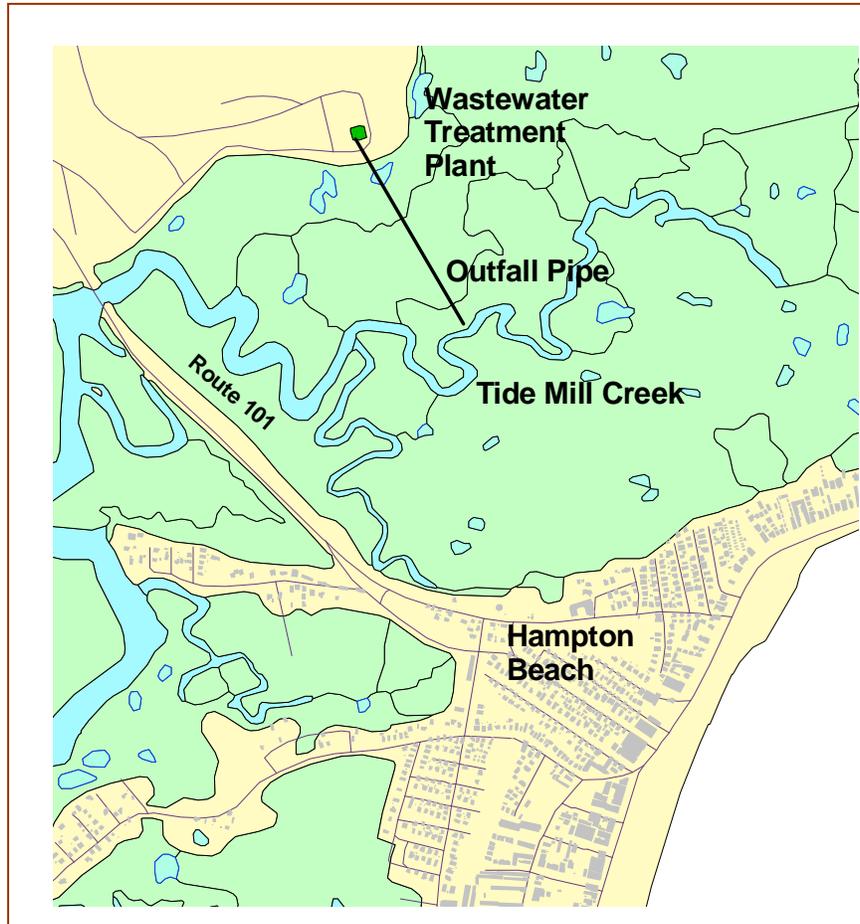
The Hampton Wastewater Treatment Plant is an activated sludge treatment facility presently permitted for 2.5 mgd with a discharge to the Tide Mill Creek (see Figure 25). The Town imposed a moratorium for sewer extensions effective October 1, 1999. This plant is undergoing short-term upgrades to increase capacity to 3.0 mgd. Improvements are expected to increase the capacity to 4.5 mgd, but will not be complete before June 2001.

The National Pollutant Discharge Elimination System (NPDES) permit expired on October 22, 1999, and was certified by NHDES on January 19, 2001. The expired permit required limits for copper and ammonia. NHDES water quality standards adopted in December 1999 would call for more stringent limits for these parameters. Tide Mill Creek appears to offer little to no dilution, making it difficult to meet the stricter limits. The existing plant treatment process is unlikely to meet any more stringent limits. Therefore, the plant would need to significantly improve the treatment process and/or possibly relocate the outfall pipe to achieve more dilution. Water supply corrosion control is one measure that can be considered to aid in meeting the anticipated structure limits.

Hampton Beach Area Collection System

The existing collection system within the study area consists of pipes ranging from 6 to 12 inches. The system is installed in roads, under buildings, and through private property. To the best of our knowledge, there are no stormwater drains connected to this system according to its design.

Figure 25. Location of Outfall Pipe at Tide Mill Creek



The collection system discharges to the Church Street Pump Station. The station has three 2,000 gallon per minute pumps which convey the flows to the WWTP.

Since hydraulic capacity is limited within the system, the town periodically flushes out the system to dislodge obstructions and debris. Another typical measure to increase capacity is to reduce the amount of Inflow and Infiltration (I/I) to the system. I/I is water that enters the system from cracks in the pipes and other sources, and is not intended to contribute to the system. Substantial amounts of I/I may burden the wastewater collection system, reduce its efficiency, and increase operational costs. To date, no I/I studies have been conducted, but should be considered.

Storm Water Drainage

The Hampton Beach area storm drainage system is a separate storm sewer system according to the Town's maps. The predominance of the runoff discharges into the tidal

wetlands on the west side (or backside) of the main beaches. Increased amounts of impervious surfaces, such as driveways, roofs, and roads, have exacerbated flooding. Drains have been added to the system over the past 100 years due to increased development near the low-lying wetlands and the need to displace surface water.

Several stormwater devices are located on Ancient Highway and at Haverhill Street. There are also regularly spaced storm surge tide gates along the beach seawall and associated catch basins for 18th Street to the intersection of Dumas Avenue.

Flooding in the Hampton Beach area occurs for two reasons:

1. High tides caused by storm and lunar events
2. Runoff from rainstorms that collects in low areas which have been covered with high amounts of impervious surfaces such as parking lots, roads, driveways, and buildings.

Most of the areas that flood usually are located near wetlands and do not have a means to discharge runoff water that collects from the surrounding areas. The recommendations section describes flood mitigation measures for the Hampton Beach area.

Utilities

Gas

Baystate Gas and Northern Utilities Company provide gas service to the project area. Some of this service area is presently being monitored because it has limited capacity to increase loads or add new services. Hampton Beach has been serviced by gas since the early 1960s.

Electric

Electric service is provided to users in the project area by Exeter and Hampton Electric Company (Unitil). Current and peak service meets user demands and loads. There is sufficient capacity to support additional loads over the next several years based on current trends. The system substation, located on Church Street next to the water tower, has one 13,000-volt circuit and three 2,400-volt circuits.

The distribution of electricity within the project area is above ground except for the boulevard area that has an underground street lighting system. The Town and the State are responsible for any upgrades to this lighting system.

Telephone

The Hampton Beach area is serviced by Verizon telephone company. They have a mixture of approximately 15 old and new sub-networks that support the area.

J. Hampton Beach Flooding and Storm Damage

Introduction

Increased development and urbanization of the Hampton Beach area and the Coastal Watershed has depleted the amount of land and vegetation available to absorb precipitation and thus has increased the amount and rate of storm runoff. Impervious pavement for parking areas and additional roads, building roofs, compacted soil and infiltration of runoff into community storm sewer systems have together increased the amount and rate of peak stormwater discharge, thereby augmenting the flooding conditions both in Hampton and the Hampton Beach area. The impact of this increased runoff into the Hampton-Seabrook Estuary and the Taylor and Hampton Rivers when combined with ocean storms and potential sea level rise due to climate change make the Hampton Beach area highly vulnerable to destructive flooding and storm damage.

History of Flooding and Storm Damage in the Hampton Beach Area

The history of flooding and destructive storms in Hampton Beach dates back to 1723. Since that time, the state and Hampton have experienced approximately 50 major floods. Flooding can occur at any time during the course of the year. Normally, a single intense heavy rainfall would cause minor to moderate flooding. The most severe flooding usually occurs when there is more than one event—such as when two storms occur during a seven-day period or when coastal surge/heavy wind and rain occur simultaneously. A recent example of such an event was Hurricane Floyd in mid-September 1999. The types of natural storm events in Hampton that could lead to flooding and storm damage include hurricanes, northeasters, heavy rain and snowstorms, snow-pack melt, blizzard, or ice storms. The following table summarizes significant flooding events in the Town of Hampton over the last 30-year period with emphasis on the Beach area.



*(Above) Flooded houses, White Rocks Island, 1920s. Courtesy Alzena Elliot.
(Below) Storm damage, White Rocks Island, March 1931. Courtesy Ansell Palmer.*

Table 18. Recent Significant Flooding Events in the Hampton Area Since 1968

Date	Type of Storm	Comments
March 1968	Heavy rain/snowmelt	Caused river flooding
Winter, 1972	Winter northeaster	Hampton Beach seriously damaged; federal disaster declaration.
April 1973	Heavy rain	5-7 inches in 36 hours plus high tide; extensive flooding in Hampton Beach
February 1978	Blizzard	Coastal surge plus high tide; extensive public and private damage in Hampton Beach
September 1985	Hurricane Gloria	Moderate to extensive flooding
August 1991	Hurricane Bob	Moderate to extensive flooding
October 1991	No Name Storm	Convergence of two storms; heavy wind and rain; extensive damage to Hampton Beach
October 1996	Heavy rain	Up to 18 inches in 36 hours; Hampton Beach experienced moderate flooding
June 1998	Heavy rain	Flooding conditions from rain over 7-day period

Source: Hampton Flood Hazard Mitigation Draft, 2000

Flood Mitigation Activities

The early development of Hampton Beach consisted of farmhouses, a few boarding houses, small hotels, and a few summer cottages. With the introduction of rail and trolley service and the 99-year lease by the Hampton Beach Improvement Company in the late 1880s, lands comprised of sand dunes located between present day Ashworth Avenue and Ocean Boulevard, experienced rapid development including construction of roads and parking lots. The sand dunes that acted as a barrier to ocean storm surge and provided open space were destroyed. In the early part of the 20th century, the Town provided the State with beach land to construct seawalls or breakwaters to protect the private development of the Hampton Beach area. Since that time, there have been a number of structural improvements designed to prevent or mitigate flooding in the Beach area (see Table 19). The Town, the State, and the US Army Corps of Engineers funded these improvements.

Table 19. Chronology - Flood Mitigation Projects

Year	Activity	Comments
1900s	Breakwater construction	Construction to the Casino
1913	Extension of Breakwater	Construction to 150 ft south of Casino
1915	Three breakwaters under construction	Wall 22 ft above high water mark
1955	Construction main seawall – 3,300 ft combined with ACOE beach restoration	Steel and concrete structure from end of Main Beach to Boar’s Head and then steel sheet pile at North Beach; 6,450 feet of beach restoration
1965	ACOE – Hampton Harbor project	0.7 mile long channel at entrance to harbor
1973	ACOE – Beach restoration	Repair damage from 1972 winter storm
1988	Seawall replacement	\$5.2 million state project to replace North Beach steel seawall

Sources: Town of Hampton, Flood Mitigation Plan, June, 2000.

Hampton Beach Report, prepared by Warren Manning, December, 1931.

Flood Mitigation

The Town of Hampton recently completed a Flood Mitigation Plan. It identifies areas that are prone to flooding, and proposes a list of strategies and specific projects that can be undertaken to mitigate against loss associated with future flood events. Additional information regarding flooding and mitigation can be found in the *Flood Mitigation Plan: Town of Hampton*, June 2000.

This Plan mentions that runoff needs to be retained and treated before it is discharged. However, no stormwater treatment facilities or detention basins have been identified in the Hampton Beach area. Furthermore, current town land-use ordinances do not require that post-development runoff be detained and treated before it is discharge. State law, however, requires this treatment if over 100,000 square feet is disturbed.

The *Flood Mitigation Plan* proposed ten flood mitigation project areas near Hampton Beach, most of them adjacent to tidal wetlands. Several projects proposed new tide gates, drainage facilities, redesign of road drainage, and culvert replacement. Regardless of which methods are chosen, the amount of mitigation identified in these areas provides a good understanding of the need for improving the impacts of flooding and the level of development that has occurred in and near the tidal areas.

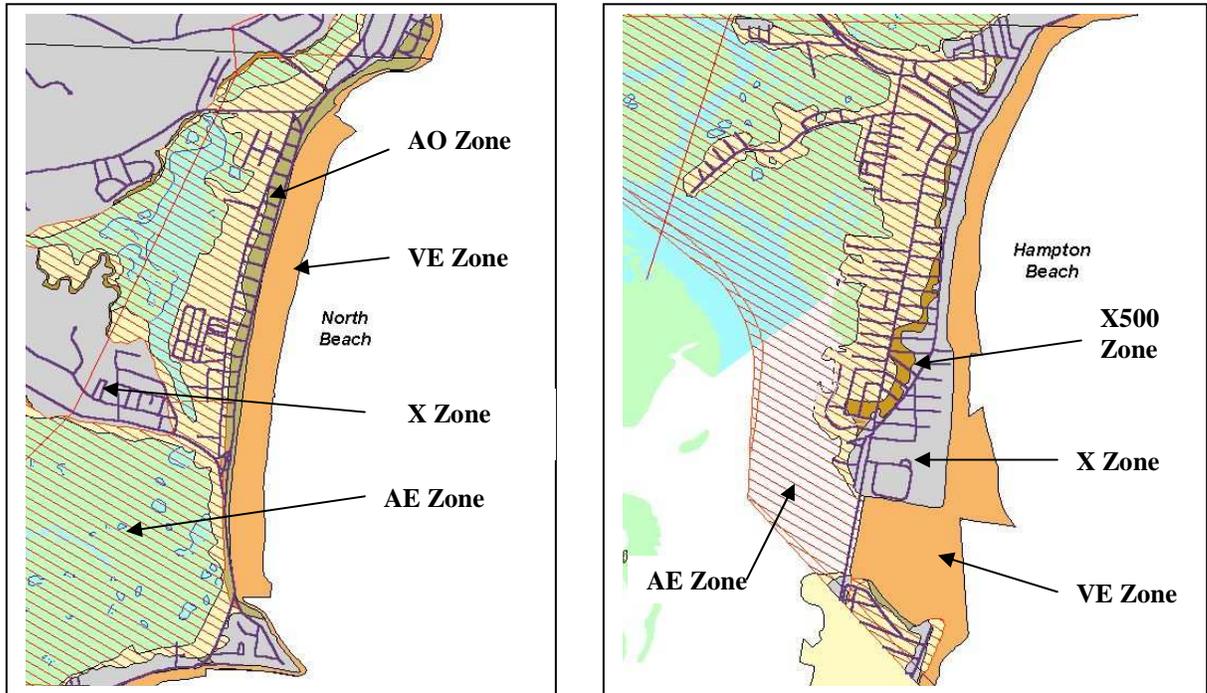
Regulatory Approach to Flood Hazard Mitigation

FEMA Program

The Town of Hampton is protected by the flood insurance program of the Federal Emergency Management Agency (FEMA). This program, administered in New Hampshire through the NH Office of Emergency Management (OEM), allows individuals and businesses residing in communities that participate in the National Flood Insurance Program (NFIP) to obtain flood hazard insurance at subsidized rates. The program is aimed at reducing risk to life and property and enhancing flood storage capacity of a given area. The NFIP regulations require development to meet strict federal building codes while discouraging unsound development in flood hazard areas.

In 1986, the Town adopted a model flood insurance development ordinance that has allowed it to continue participation in this program. As part of the program, FEMA produced an updated Flood Insurance Rate Map (FIRM) that indicates the extent of flooding during a 100-year frequency flood (see Figure 26). Another way to describe the 100-year flood is to state that it is a flood with a 1 percent chance of occurrence in one year. The National Flood Insurance Administration uses the FIRM as a tool to identify the level of risk associated with specific properties located in the flood hazard area. The map is divided into various zones based on the vulnerability of a given area to flooding and storm surge. The most susceptible areas are in the V-Zone (subject to flooding and wave action) and the A-Zone (subject to significant flooding). Table 20 provides a brief description of the revised zones.

Figure 26. Floodplain Zones in the Hampton Beach Project Area



Source: Town of Hampton Zoning Ordinance, 1999.

In Hampton Beach, many properties are in the most flood prone zones. Table 21 identifies the number of lots, structures, and total square footage in each of the zones as well as totals for the Beach area. Over 60% of the lots and structures are within the AO and AE zones while less than 1% are in the VE zone, the most hazardous. The remaining properties are in the X zones, which are subject to minimal or moderate flooding.

Local Regulations

At present, Hampton has complied with the FEMA requirements for flood hazard areas by adopting minimum standards through a Special Flood Hazard Area zoning overlay in 1987 and amended in 1994. The *Flood Mitigation Plan* of June 2000 reviewed this section of the Town's ordinances and suggested amendments. There were a range of suggestions including additions to the Definition Section such as "Structure" and "Substantial Improvement", review of allowed uses, additions to the General Requirement Section and stricter guidelines for the Building Inspector.

Table 20. Flood Zone Descriptions

Zone	Description
AE	Areas subject to inundation by a 100-year flood as determined by detailed methods. Base flood elevations are shown within these zones.
AO	Areas subject to inundation by 100-year shallow flooding (usually sheet flow on sloping terrain) where average depths are between one and three feet. Average flood depths derived from detailed hydraulic analyses are shown within this zone.
VE	Coastal area subject to inundation by a 100-year flood having additional hazards due to storm-induced velocity wave action. Base flood elevations derived from detailed hydraulic analyses are shown within these zones.
X	Areas of moderate or minimal hazard from the principal source of flooding in the area as identified in the community FIS. Buildings in these zones, however, could be flooded by severe, concentrated rainfall where local drainage systems are not normally considered in the community's FIS. The failure of a local drainage system creates areas of high flood risk within zone X. Flood insurance is available in participating communities but is not required by regulation.
X500	Areas of moderate or minimal hazard from the principal source of flooding in the area as identified in the community FIS.

Source: FEMA, Technical Mapping Advisory Council, 1999.

Table 21. Hampton Lots and Buildings in Flood Zones

Zone	Buildings			Lots		
	Structure Size (sf)	Structures	% of Total	Number	% Total	Area (acres)
Zone AE	2,347,020	2,285	56.9	1,519	56.2	1,311
Zone AO	294,593	260	6.5	180	6.7	25
Zone VE	5,632	5	0.1	16	0.6	175
Zone X	1,724,845	1,277	31.8	872	32.3	1,052
Zone X500	233,430	188	4.7	116	4.3	14
Totals	4,605,520	4,015	100	2,703	100	2,577

There are numerous structures in the Beach area which pre-date current flood hazard regulations. Any new structures would have to be constructed in accordance with state flood hazard requirements. New or substantially improved non-residential buildings must either have the lowest floor elevated to or above the base flood elevation if it is in the V-zone or be flood-proofed below the base flood elevation with solid walls if it is in the A-zone. The walls would have to be impermeable to the passage of water with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy.

Flood Hazard Planning May Lead to Federal Monetary Assistance

In recent years, the Town has taken a more proactive approach to mitigating flooding and storm damage. It has prepared a flood mitigation plan and developed an Emergency Management Plan and applied for federal mitigation assistance for two flood prone areas in the Hampton Beach area. The Hampton Conservation Commission has requested conservation easements adjacent to and within floodplains as part of development projects.

To better plan for flooding events and to minimize losses from flooding, the Town of Hampton contracted with the Rockingham Planning Commission to prepare the *Town of Hampton Flood Mitigation Plan*. The Plan provides an analysis of flooding conditions in the Town of Hampton and includes both structural and non-structural flood hazard analysis. This Plan is a pre-requisite to future federal disaster assistance. Many of the issues and recommendations apply to the Hampton Beach area.

One of the more significant findings of the study was the amount of loss the Town has sustained from floods over the past 20 years. FEMA tracks claims that have been made through the NFIP. Rockingham County has 1,959 policies with a record of over \$5M paid out since 1978. In Hampton alone, there are 935 NFIP policies, almost half of the county as a whole. More striking is the amount paid out in claims over the same period—over \$2.6M or over 50% of the claims in the county. Most of these claims come from the Hampton Beach area.

In addition, FEMA monitors the properties that have been subject to continued flooding insurance claims. In an effort to track properties that have sustained repetitive losses from flooding, the Town has requested a full accounting from FEMA. Although not a full record, the Town received a list of 16 repetitive loss properties, many of which are in the study area in the following locations: Concord Avenue, Plaice Cove, and the area south of Hampton River. As part of the flood hazard mitigation process, each of these property owners was contacted to determine their interest in participating in a flood hazard mitigation project for their property to minimize personal and economic costs associated with flooding events.

Flood Hazard Mitigation Recommendations

Hampton's Flood Mitigation Plan identified a number of recommendations that would be necessary to mitigate damage from flooding. These actions included policy and regulatory activities as well as specific projects. Many of these would directly affect the Hampton Beach area. The Flood Mitigation Plan, accepted by FEMA, will provide the Town with a pathway to apply for and receive federal mitigation implementation assistance.

The Plan has identified the following non-structural flood hazard mitigation activities:

- A pilot program to provide incentives to owners of residential and commercial properties

- Enhancements to the Town’s Floodplain Management regulations;
- A conservation program to acquire land for flood storage purposes and prime undeveloped land in the flood hazard or floodplain area
- A grant or loan program for residential flood proofing
- Public information and education programs regarding building in the flood hazard and floodplain areas
- Apply for designation as a FEMA Project Impact Community (PIC) which encourages a community to incorporate the multi-hazard planning process into its ongoing comprehensive planning process
- Participation in the National Flood Insurance Program’s (NFIP) Community Rating System (CRS)

As a PIC community that participates in the CRS, the Town may achieve lower flood insurance rates for property owners if it undertakes flood mitigation projects that are approved by FEMA in the Flood Mitigation Plan. The Plan also identified the following proposed flood mitigation projects in the Hampton Beach Study area (see Table 22).

In addition to the above, the Plan identifies the following projects as **High Priority** projects: Little River area, Railroad track (Marelli Square), Kershaw/Moore, Police Department (Brown Avenue), and the Plaice Cove area.

Recent Activities and Conditions

During the past few years, Hampton has taken more proactive management actions for its floodplain areas. A number of activities have recently taken place or are currently underway. Aside from the actions in *Flood Mitigation Plan* High Priority Flood Mitigation Projects, many of these directly affect the Hampton Beach study area.

Meadow Pond Flooding/Eel Creek Restoration

The Town replaced the culvert in Eel Creek under Winnacunnet Road with a larger culvert a few years ago to alleviate the flooding caused by Meadow Pond. This action restored tidal marsh in the area that had been invaded by purple loosestrife and has assisted with the flow of water from Meadow Pond into the Hampton River and eventually into the Atlantic Ocean. There is still some concern about the impact of tidal flow on adjacent properties. The Town and the Rockingham County Natural Resource and Conservation Service (NRCS) are undertaking further study of this area to determine if any other actions need to be taken.

The Town of Hampton has begun to implement a number of the recommended activities in the *Flood Mitigation Plan*. These include the following:

Table 22. Very High and High Priority Proposed Flood Mitigation Projects

Very High Priority Flood Mitigation Projects

Name /Location	Hazard	Risk	Activities Recommended
Meadow Pond; Gill Street/ Redman Lane area	Tidal flooding; storm overflow	High tide >9.5'; Poor drainage design	Engineering assessment; elevation; improved drainage system
Kings Highway; East of Meadow Pond	Flooding; tidal events	Poor drainage; lack of culvert maintenance	Re-design Kings Highway; tide gates; review with Meadow Pond

High Priority Flood Mitigation Projects

Name /Location	Hazard	Risk	Activities Recommended
Brown Avenue area	Drastic flooding; tidal events; poor functioning tide gate/back valves, Culvert backup	Poor drainage, drainage patterns blocked with newer development; lack of maintenance of tide gates and catch basins	Replace culvert; add self-regulating tide gate. engineering assessment; elevation improved drainage system improved, raise structures; maintain tide gates, culverts, and catch basins
Police and Fire Stations	Flooding from storm and tidal events	Poor drainage, buildings flooded causing damage; public safety concerns.	Engineering assessment, possible new structures to FEMA standards
Lower end of High Street; from Mill Pond Lane to Kings Highway	Flooding, tidal events, dam washes away	Poor drainage, Meadow Pond floods culverts back up	Engineering assessment, design better drainage— culverts, etc.; reduce risk to residential properties— flood proofing, structure elevation
Island Path/Glade Path	Tidal flooding	Poor road construction	Re-deign and raise road
Great Boar's Head	Rain/tidal events	Poor drainage; coastal surge overtops seawall	Engineering assessment; elevate structures; flood proofing
Ocean Boulevard north of harbor to the Seashell, the "Island Area"	Rain/tidal events; storm surge	Poor drainage; catch basins lower than high tide; storm surge into structure	Engineering assessment; flood proofing; re-vegetation
Hampton Harbor and north of bridge to Casino east of Ocean Boulevard	High tides and large rain/storm events	Poor building construction; flood from spillover; storm overtop; poor drainage	Engineering assessment; flood proofing; elevate structures; re-vegetation, purchase of development rights

Source: Town of Hampton Flood Mitigation Plan, June 2000.

Project Impact Community Designation

The Town applied for and received designation as a FEMA Project Impact Community. This designation will provide it with incentives to incorporate the multi-hazard planning process into its ongoing comprehensive planning process and allow the Town to participate in the NFIP Community Rating System.

Mitigation Projects

The Town is implementing recommendations from the Flood Mitigation Plan. They are applying for federal mitigation assistance for two high priority projects, the Island Area north of the Harbor to the Seashell Stage, and Plaice Cove. Both of them include a number of repetitive property losses. The Town is also undertaking a Stormwater Management Plan for the Brown Avenue area that includes both the Police and Fire Stations.

Sea Level Rise

NH DES is currently assessing the impacts of sea level rise on the coast due to global climate changes. Recent analyses have shown that storms are expected to be more extreme. The sea level is also rising, approximately 1/8 inch every year. This will cause increased inundation of ocean water into low-lying areas. In fact, storm surge and wave runoff is likely to cause more of a problem than inundation since the built areas will be affected by storm waves. Other impacts include: erosion of beach cliffs, loss of low-lying land, loss of sediment along beach fronts, salt intrusion into aquifers and surface waters, and higher water tables.

Hazard mitigation planning will have to incorporate regulations and polices that reduce the impacts of storm surge, wave runoff, and sea level increase. Current law, for example, requires structures to be elevated to the 100-year flood elevation, which does not consider sea level rise. New regulations may involve enhanced flood controls, stricter building codes in flood areas, and similar actions that change the types of structures that are built near in high-velocity wave areas, such as the beaches, and in the wetlands. For example, houses along North Carolina's Outer Banks must be built on piles, and cannot have any permanent walls on the ground floors. Furthermore, uses and activities in these areas will also have to be addressed. The Cape Cod Regional Policy Plan sets performance standards for buildings and restricts enlargement of buildings in the FEMA V flood zones (areas of high wave potential).

Conclusion

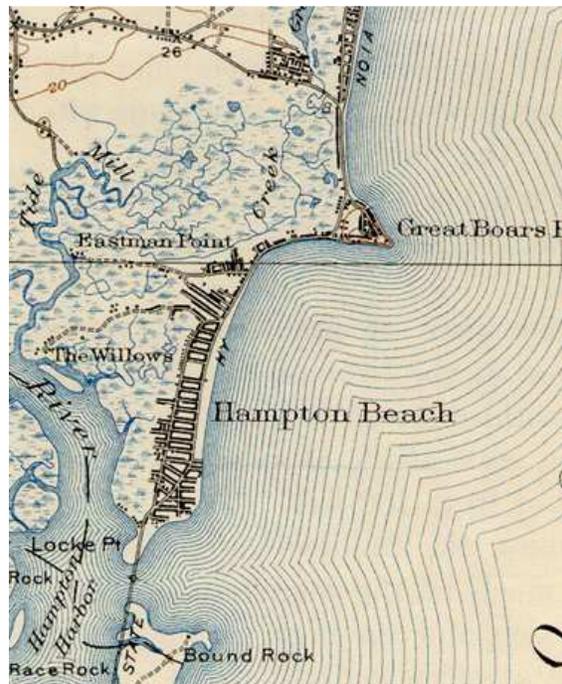
The Hampton Beach area will continue to be subject to flooding from heavy rains, tidal events, and severe storms. Almost all of the study area is within the flood hazard area as defined by FEMA. In the past, the State and the Town looked to structural solutions to alleviate this problem. At present, the Town with the assistance of FEMA and the state OEM is pursuing a number of actions—structural, regulatory and non-regulatory—to better manage and mitigate flood hazards.

IV. RECOMMENDATIONS

A. Recommendations for Revitalization and Improvement

This section of the Hampton Beach Area Master Plan presents a series of general strategies and specific planning recommendations to help realize the vision for Hampton Beach. Strategies and recommendations reflect the primary planning needs and issues that were researched and studied during the planning process and respond to the current conditions at Hampton Beach, and the directions of the town's citizens expressed at meetings and through the Hampton Beach Master Plan Advisory Committee.

The strategies are organized around five planning elements: Land Use; Economy and Tourism; Transportation; Environment; Infrastructure and Public Facilities. Each of the strategies provides a basis for implementing a series of actions or recommendations. The transportation and land use recommendations also include illustrations to explain physical relationships between uses and planned activities. Note that in most cases recommendations that are independent of other events such as investment decisions, zoning changes, and environmental regulations, specify a timeframe for implementation whereas those that do depend on these events, do not.



A table of recommendations is presented in the Implementation Section to facilitate the reader's understanding and relationship of the various planning elements.

B. Land Use

Land use improvements are at the core of this plan to revitalize Hampton Beach. These strategies propose a more coherent land use pattern that reinforces the value of land and improves the image of the beach, traffic patterns, economic activity, and recreational areas for visitors and residents alike. These strategies consider zoning regulations, business improvement and housing programs and incentives, and existing and potential land use activities and are intended to be developed in combination with other appropriate

strategies. Design for new commercial and residential development or re-development shall reflect achievement of the environmental priorities stated within the master plan.

Short-term Strategies (0 - 2 years)

Strategy 1. Establish visible changes to the various physical amenities at the beginning of the implementation program.

Visible changes serve a dual purpose: They can make the areas more attractive and aesthetically pleasing, and they can send a message to visitors about the quality of life in the area. Visible changes will help reinforce the perception of positive change as part of the Master Plan. The plan envisions physical improvements that include landscaping along the boulevard and main and side streets. This type of strategy has been used successfully in the National Main Street Program.

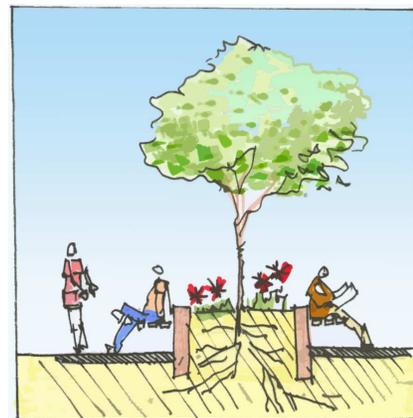


Wider sidewalks with landscaping improves the appearance and safety for pedestrians.

People need to see changes early in the revitalization process. Painting sidewalks, new benches and signs, and other visible improvements will remind visitors and merchants that the Master Plan is underway and succeeding. These changes should occur on both the state and town properties so that people see and enjoy the area as a complete experience. They should not have inconsistent or negative impressions when they cross the street.

Specific recommendations for visible changes include the following:

- New gateway entrances at Highland Avenue and the State Park
- New boulevard lighting, benches, and other streetscape improvements
- Side street sidewalk improvements
- Interpretive and directive signage improvements.

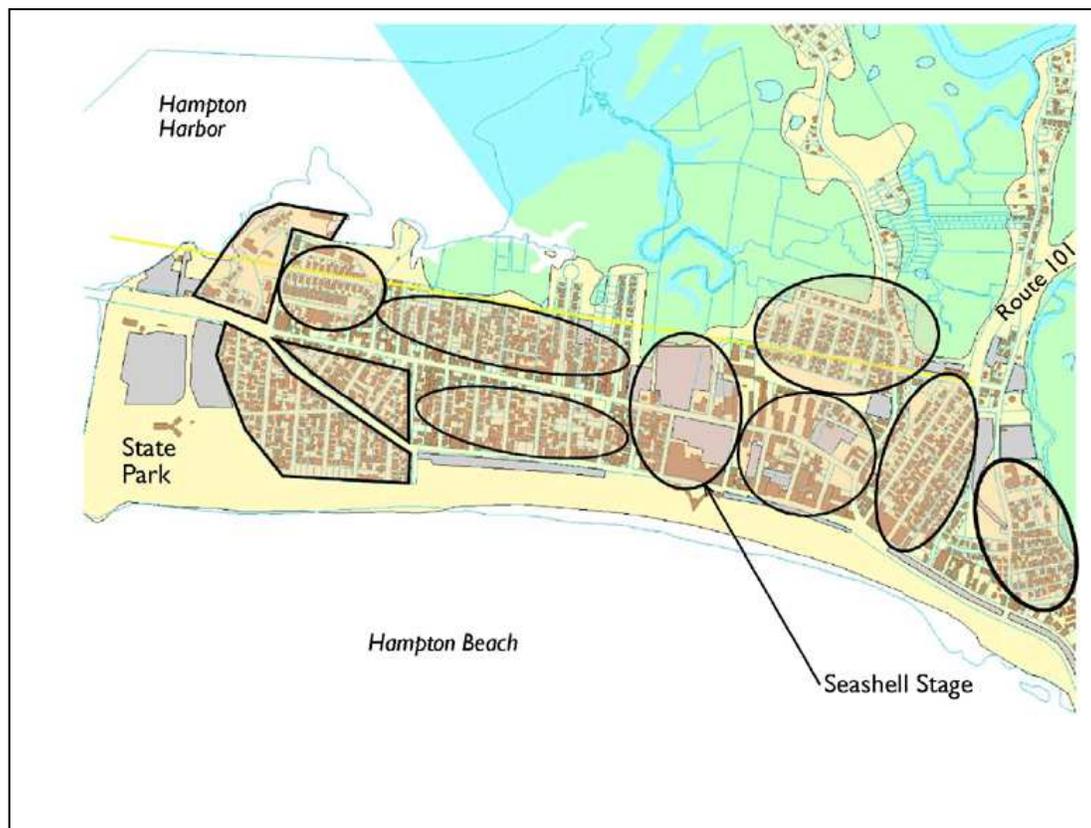


Strategy 2. Define neighborhood sub areas between the State Marina and Great Boars Head to provide a sense of place and to target specific areas that can be incrementally revitalized.

Distinct residential, recreational, and mixed-use areas near Hampton Beach and along Ashworth Avenue serve different populations and uses (see Figure 27). Many of them need building and street improvements, which need to be coordinated and implemented incrementally. Improvements could be focused on individual neighborhoods and sub-areas as a way to improve and reinforce the existing look and character as well as provide a sense of place. Although other areas such as many of the neighborhoods near North Beach need improvements, they would not necessitate a program that focuses on distinct sub-areas.

Each of these neighborhoods has different characteristics and qualities that need to be enhanced and reinforced. For example, there are many seasonal “camps” on the west side of Ashworth Avenue. The neighborhood known as the “Island” located east of Ocean Boulevard and north of the State Park parking lot is comprised mainly of larger, owner-occupied homes. The strategy for these sub-areas needs to address the distinct characteristics of each neighborhood.

Figure 27. Neighborhood Sub-areas of Hampton Beach



Strategy 3. Coordinate all design review, streetscape, signage, and zoning changes to establish an overall look and character of the area.

The Hampton Beach area, in particular the mixed-use district, needs to be updated by the actions of a coordinated program that addresses all design, streetscape, signage, and zoning issues simultaneously. The building fabric, street life, sidewalks, benches, and other amenities all play an important role in the overall appearance of the area. A central theme and designs should be visible throughout the area so that it provides continuity and a sense of place.

Plans before, during, and after construction improvements all need to be scheduled and coordinated. Zoning changes should reflect desired outcomes that agree with other regulatory and physical improvements such as establishment of view corridors to enhance the visual aesthetics of the area and off-season building façade requirements to reduce the “boarded up” look. For example, programs could be established to encourage painting of building exteriors by establishing a completion for creative designs or by starting a community painting program and give out free paint to property owners to paint boards or murals. These and other programs should be thoroughly organized to ensure that property owners are current with and understand themes and designs, and have some direction about how to improve their homes and businesses.

Strategy 4. Identify and recognize important historic buildings and landmarks.

Hampton Beach has a history that can be developed and enhanced by identifying the historic buildings and landmarks in the area and providing interpretive information about these historic assets. Some of the buildings could be updated and preserved as part of the community’s preservation program. North Hampton, for example, developed the *Heritage Walks* pocket guide that describes some of the areas in this town and homes within different parts of them. Great Boar’s Head in Hampton Beach is one example of a similar area that could describe its history and the old beach homes. The Casino is a landmark that could be included as well. Recognizing the Town’s historic assets is critical to developing a diverse beach community and destination.

Strategy 5. Change the zoning ordinance to improve the design and quality of buildings and uses at Hampton Beach.

Changes to the Hampton Zoning Ordinance will help improve the design and quality of buildings and uses at Hampton Beach. This is one component of the overall changes recommended in the Master Plan that will work with other land use, transportation, economic, and environmental recommendations. This section identifies changes to the zoning ordinance, and does not express specific zoning language, which must be carefully expressed as part of a specific zoning study and ordinance. Additionally, updates are recommended to reflect changes in state land-use law, case law, remove internal inconsistencies, and improve the manner in which the ordinance is presented so that the ordinance itself becomes user-friendlier.

Zoning Districts

- Reduce maximum amount of sealed surface per lot in RA and BS districts.
- Establish front yard setbacks according to street conditions.
- Increase minimum square footage per dwelling unit in the BS and RB districts.

Parking

- Consider either on-site commercial parking or a contribution to a parking fund that will create parking within designated commercial use areas.
- Protect raised landscape beds in parking areas.
- Provide parking and landscaping standards.
- Allow shared parking for commercial uses in the BS district to increase utilization of parking lots and allow businesses to grow.

Design and Site Review

- Establish design guidelines.
- Expand site plan review of all projects, which could include an addition or new construction regardless of use. Exterior appearance will be regulated through standards established for exterior design review.
- The design standards will consider the types of materials and design qualities that are appropriate for the district in which they are located and the uses and buildings occupying adjacent and nearby sites.
- Establish landscape standards.
- Require shrubs and trees in appropriate areas.

Signage

- Establish design review of signage.
- Limit the total number of signs to one principal sign that identifies each business. Exceptions will be made for identifying signs on principle entrance doors, awnings, or canopies. One secondary sign should be allowed in these locations.
- Change the definitions of the “area” of a sign to encourage interesting signs.
- Limit the number of signs on each building.
- Limit the amount of sign area as a fraction of the total facade surface.
- Prohibit signs that advertise a product and the name of an establishment together.

Enforcement

- Ensure that the Zoning Ordinance standards are upheld.
- Establish a clear set of written policies regarding variances and other exceptions to the ordinance that ensure state codes are followed. The intent is to discourage the incremental problems with granted changes, and to improve zoning and adhere to it.

Flood Plain Development

- Ensure that the zoning ordinance reflects current flood zones including AE and AE500 zones

Mid-term Strategies (3 - 9 years)

Strategy 1. Revitalize and enhance the uses at the State's park areas with more recreational activities, upgraded buildings, and improved services, access, amenities, and events.

The State Park needs to take advantage of the amenities that it offers to thousands of people in the region. As the State's main coastal recreational area, the State has the opportunity to enhance the area substantially and make it more of a year-round place to live and recreate. Although the Parks Division of DRED is self-funded, the state and/or federal sources will have to provide significant levels of funding to support improvements.

A new gateway from the south along Route 1A and a reconfigured State Park and RV Park can substantially improve the quality of the visitors' experience as well as the visual attractiveness of the area as whole. Figure 28 provides a potential configuration for the Hampton Beach State Park and gateway area. A new gateway would have appropriate signage, identifying Hampton Beach as a recreational area and directing visitors where to park and get information. The new lot would have the following improvements:

- Reconfigured parking lot with 1,000 parking spaces
- New visitor center and trolley stop with 15 parking spaces
- New restaurant with 20 parking spaces
- Parking for 10 buses
- New playground
- Bike rental facility
- Retention of original number of RV sites (28)
- Walking and bike path along the river that connects to the State Marina lot. (Since the height is limited under the existing bridge, the path may have to be built when the new bridge is constructed.)

The parking lot would be reconfigured to hold about 1,000 vehicles. This net increase of 100 spaces from the original 900-space lot would maximize the use of this parking area. Since this parking lot typically fills with about 600 vehicles on peak days, that would leave about 400 parking spaces that could be used for remote parking for the main beach area. There would also be reconfigured lanes Route 1A to help reduce congestion when the bridge opens. These changes are explained in the Transportation Strategies.

Figure 28. Potential Gateway and State Park Design



Strategy 2. Make the boulevard friendlier by enhancing its amenities for all non-motorized vehicle and pedestrian users.

The Boulevard area is where most of the interactions and activity occur: people go there to walk, ride bicycles, sit, stand, watch and be watched, participate in the events, and similar boulevard-related activities. However, it could be more attractive if there were these additional park features:

- Benches – places for people to rest along the boulevard wall and other locations
- Sun or shade awnings – places for people to seek shade from the hot sun and or rain
- Bike racks – places for people to store vehicles while at the beach or in the commercial areas
- Trees – places for people to rest from the sun
- Lighting – places to provide security for users of the boulevard
- Picnic tables – alternative places to eat than on the sand.

These and other amenities could be added to attract more people to different areas of the beach instead of concentrating them at the Seashell Stage area.

Strategy 3. Redistribute the people along the Boulevard by adding several beach pavilions along the central area of Hampton Beach.

The Hampton Beach area is a relatively small and dense area that supports a diversity of uses focused on recreational and commercial opportunities. It should capitalize on these features and characteristics by enhancing pedestrian uses and linkages.

A large percent of people tend to utilize the services provided at the Seashell Stage area, and at times it becomes overcrowded, especially the bathrooms. The State should build two pavilions at two other areas on the boulevard (see Figure 29). The intent is to redistribute the people along the Beach, reduce lines and overcrowding at the Seashell Stage, and provide the following benefits:

- A variety of alternatives for users
- Higher quality experience for users
- Redistribution of large crowds to other areas of the beach and boardwalk
- Improved utilization of the boardwalk and beach
- Reduced demand for parking spaces near the Seashell Stage area
- Provision of shaded areas with benches for people to sit, rest, or eat
- Reduced wait times at the Seashell and Ross Avenue restrooms.

Furthermore, the pavilions should be universally accessible for persons with disabilities and have appropriate amenities such as benches, landscaping, and bike racks. Walking and bike paths should also be established between and through the main parks and parking lots.

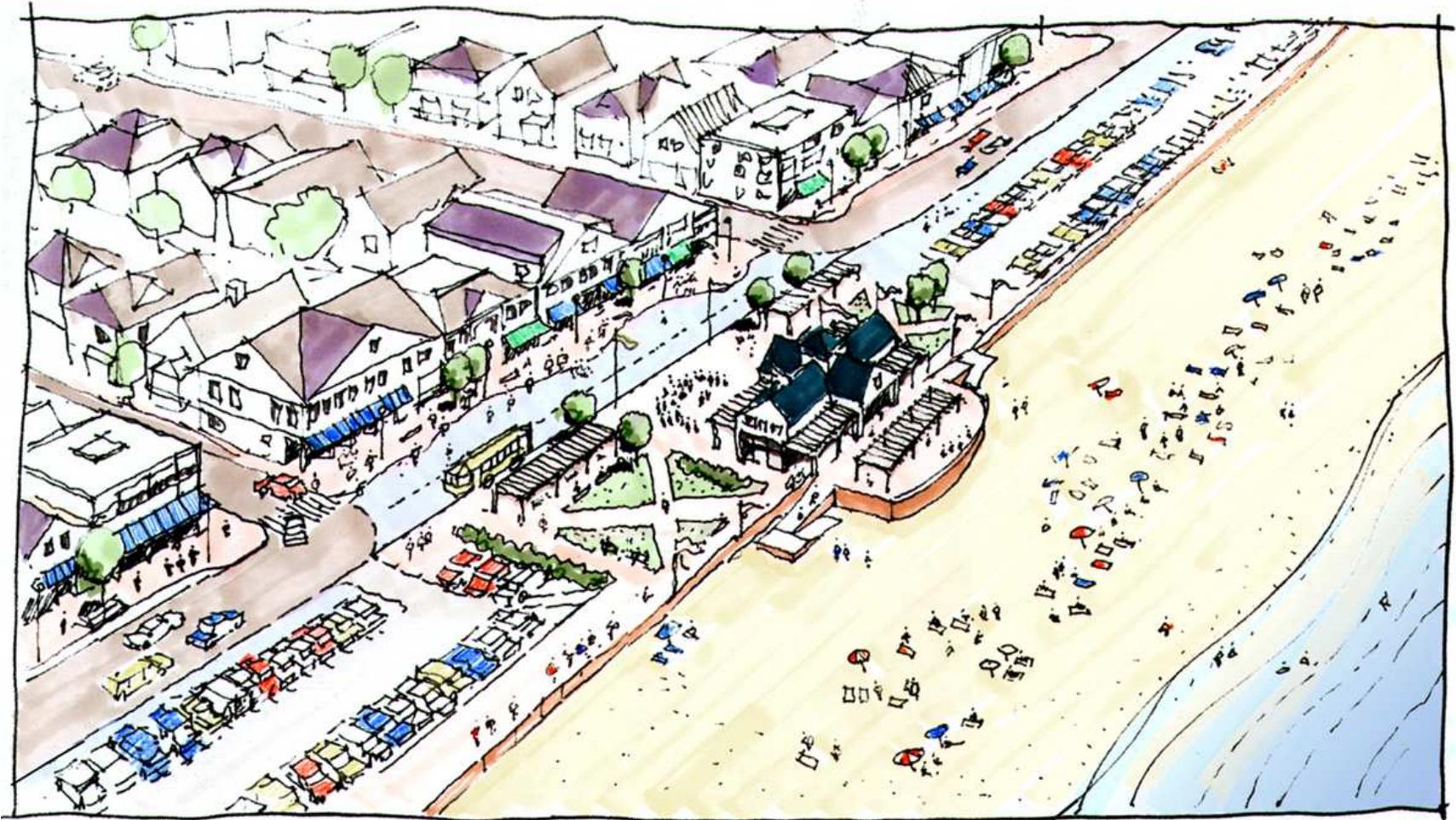
The location of these pedestrian and pavilion areas are illustrated to help understand the principle of making the area more pedestrian friendly and distributing the people along the beach. The final locations would be determined after careful consideration of the street patterns and the adjacent uses. This is also explained in the transportation section.

Strategy 4. Establish development programs and change the zoning to encourage investments and improvements to the commercial and residential areas.

This strategy, in conjunction with other baseline improvements, would help improve the overall condition of the core area. The intent is not to change the land uses, but to significantly build up and improve the existing activities. Potential actions could include the following:

- Changes in setbacks
- Building design standards and review
- Streetscape and park improvements, and new pocket parks
- Parking, pedestrian, and bicycle linkage improvements.

Figure 29. New Pavilion and Pedestrian area along Ocean Boulevard



Long-term Strategy (10 - 50 years)

Strategy 1. Change the land uses at the core commercial and beach activity areas to create the image and character of a neighborhood village.

The current uses at the center of the commercial area do not represent the highest and best uses for that area, nor do they enhance the uses of adjacent areas. However, the large lots and strategic location of the town parking lot, Casino facilities, the Seashell Stage area, and the adjacent properties have high potential to become developed as a main anchor of mixed-use facilities for the commercial area.

A new village center with small businesses, restaurants, and other small-scale businesses would help create a new image of this area. Some buildings may have to be rehabilitated or demolished to support this strategy.

Strategy 2. Maintain the existing character and scale of the residential areas in both Hampton and North Beaches.

The image of the residential areas in North and Hampton Beaches is typical of many older beachfront communities. Although most of these areas are very dense and built out, their scale is small with low building heights and many narrow streets. These features should be preserved and enhanced as part of future building, street, and façade improvements are planned and zoned for the areas. Building heights should be kept the same, design review should encourage building types and facades that represent the area, and streets should only be widened to eliminate vehicular bottlenecks.

Hampton Harbor and Waterfront

Hampton Harbor has the capacity to support a variety of activities and uses. Management of the harbor area, however, requires a coordinated effort to overcome constraints and issues and ensure a long-term, sustained use that enhances the commercial, recreational, and economic value of the Hampton Beach area. This section provides the land-use, infrastructure, and management recommendations for Hampton Harbor and the adjacent land uses.



Land Uses

Land along the harbor waterfront is used for residences, businesses, and parking. Most of the businesses are either water-dependent such as charter boats and marinas, or water related such as a bait and tackle stores. The parking areas support mainly commercial and recreational users of the water. There is a small amount of vacant land, and it could support additional water-related or water enhanced businesses. The following recommendations for land use in the harbor area include:

- The Town and the State should develop programs and policies that support water-dependent and water-enhanced uses.
- Options for public access to the waterfront such as public viewing areas and a designated waterfront walk should be explored and provided.
- Maintain diversity of residential and commercial uses in this area.

Harbor Infrastructure

The Harbor continually shoals due the river and tidal currents and its morphology. The commercial fishing fleet, recreational vessels, and other users, have the following needs:

- Sufficient channel length and depth including the federal navigation project
- Sufficient depth and size of mooring fields to accommodate these vessels
- Safe navigation to and from Hampton Harbor, especially through the Hampton River Channel and the Hampton River Bridge (Route 1A).

In addition, repairs to the floats, piers, and some equipment are needed at the Hampton Harbor State Marina. The State is currently addressing the marina's infrastructure.

Recommendations to increase the utilization and public access to Hampton Harbor, including the Hampton State Marina, are as follows:

- Implement a periodic schedule of maintenance dredging to ensure that Hampton Harbor and the State Marina provide adequate navigation and berthing for fishing vessels and pleasure craft. Such dredging should provide for the following:
 - A harbor channel depth at six feet and mooring fields that will allow for vessels with drafts of up to six feet
 - A depth of six feet at the state marina facility.
- Implement a Seacoast dredge management plan to be prepared by relevant state agencies through the Dredge Management Task Force that would identify specific projects, project priorities and costs, and a timeline for implementation.
- Address the immediate capital needs of the state marina as outlined in the June 2000 facilities assessment report by Design Development and Maintenance Section of DRED. These needs included repairs to the office/restroom facility and the following waterfront structural improvements:
 - Pile replacement
 - Float dock replacement and upgrade
 - Concrete dock repair
 - Dockside hoist replacement and minor repairs to pier walkways, railings, and pier.
- Establish a short and long-term capital investment strategy for all the marina's fixed assets.
- Explore the sharing of costs with the Pease Development Authority, Division of Ports and Harbors.

Management and Coordination

At present, there are many harbor users from commercial fishermen to recreational boaters to day rental jet skiers. Consequently, during the boating season conflicts often occur among these various users. Safety can be an issue. There are at least five state agencies and several federal agencies that have responsibility for specific activities in the harbor area. For example, the Pease Development Authority, Division of Ports and Harbors, controls the number and placement of moorings while the NH Marine Patrol controls vessel movement and speed. It is recommended to establish a coordinated approach to harbor management involving local, state, and federal interests.

There is also a need to ensure opportunity for public access to the waterfront and harbor area. At present, there is minimal accommodation for pedestrians and bicyclists. The vehicular parking facilities need to be managed to maximize vehicular parking demand while ensuring safety for pedestrian users.

- Establish a Harbor Advisory Group comprised of a broad representation of local and state governments and private entities with interests in the harbor, including Seabrook. Representation could be from such state agencies as the Pease Development Authority, Division of Ports and Harbors, NH DES, NH DPR, Fish & Game, and private interests such as commercial fishing and recreational boating. The purpose of such a group would be to help coordinate harbor use policies, operations and maintenance, and capital improvements. They could address such issues such as a coordinated parking program for waterfront users, and an allocation of use areas within the harbor. This group could also provide guidance for policies and infrastructure maintenance at the state marina and play a role in the development of a Seacoast dredge management plan. Such a group might be under the auspices of the Pease Development Authority, Division of Ports and Harbors.
- Prepare a comprehensive harbor management plan for Hampton-Seabrook Harbor that is compatible with the Hampton Beach Area Master Plan.
- Establish a coordinated set of policies and programs to manage Hampton State Marina, including parking, access, fish-pier activities, and harbor use allocation. Such policies and programs must be coordinated with any agreements that the Division of Parks and Recreation has with private concessions at the marina. These policies might be incorporated into the comprehensive harbor management plan.
- Continue to support the presence of the NH Marine Patrol vessel in Hampton Harbor and personnel during the boating season to ensure safe use of vessels within the harbor.
- Coordinate with the NH DOT to institute a more predictable policy for opening the Route 1 Bridge over the inlet during the boating season.
- Since there is large fleet of commercial and recreational vessels on the south side of the Harbor in Seabrook, the harbor managers and vessel owners should be informed about any plans to change uses with the Harbor.
- Ensure adequate parking for all users. Potential changes in the road may require overflow parking to occur in the State Park lot during peak periods.

Harbor Capacity and Access

- Determine the potential for a physical pedestrian connection between Hampton Beach State Beach State Park and Hampton State Marina with a feasibility study, and define the pedestrian flow pattern in and adjacent to the State Marina. This waterfront project should be coordinated with an overall pedestrian/bicycle plan for the Hampton Beach Area. This recommendation is also mentioned in the Land Use Strategy section.
- Conduct a feasibility study to assess alternatives for additional vessel capacity in the harbor, including dry stack storage.

C. Economic and Tourism Recommendations

This section begins with a summary of the proposed vision for economic revitalization in the Hampton Beach area. The vision section restates many of the points made in both the Economic Conditions sections to provide a basis for the suggested economic strategy. The remainder of this section outlines specific short, medium, and long-term steps that will help Hampton Beach achieve its vision for future economic vitality.

Overall Vision for the Economy of Hampton Beach

Recap of Present Situation

The economy of Hampton Beach is primarily based on tourism despite gains in office and industrial employment in other sections of Rockingham County. Employment in the Town of Hampton is heavily concentrated in seasonal, low-wage retail and service jobs, with Service jobs largely comprised of hotel and restaurant employment. The labor pool for many of these seasonal jobs is extremely limited, and business owners in Hampton Beach have found it necessary to hire international students to fill summer season positions in recent years.

During the non-peak tourism months, the economic identity of Hampton Beach changes completely. Many of the summer cottages in the beach area become low-rent “permanent” homes for people working in southern New Hampshire and the Merrimack Valley of Massachusetts with few of Hampton’s residents actually working in the Town. Many of these off-season residents work in jobs with odd hours; and therefore; are not even in Hampton Beach during business hours to support the retail businesses that stay open throughout the year. The truly permanent population of Hampton Beach—mainly retirees—does not represent the target market for the beach area’s retail businesses, even though these people could potentially spend their retail dollars in Hampton Beach. Clearly, the year-round population of Hampton Beach is not inclined to support the existing retail businesses in the area.

From an economic standpoint, Hampton Beach has the least desirable type of tourism, as the typical visitor does not spend much money but contributes negatively to traffic and environmental problems. Visitors to the Seacoast are more likely to be day-trippers and spend less money than do visitors to any other region. One positive sign is that those who do stay overnight on the Seacoast actually stay longer on average than do visitors to any other region in the state.

On a national scale, the statistics of Hampton Beach’s population are far more comparable with those of middle-class beach towns like Old Orchard Beach, ME, Ocean City, MD, or Asbury Park, NJ than with upscale communities like Kennebunkport, ME, Rehoboth Beach, DE, or Point Pleasant Beach, NJ. Key areas in which Hampton Beach differ from

these upscale towns are its younger population, lower average household income, high proportion of renter-occupied housing units, and low median home value.

Economic Vision for Hampton Beach

Based on the above review of the economic situation in the Hampton Beach area and feedback from the findings of the Economic Needs Assessment, ERA has formulated an economic vision for Hampton Beach. Part of this vision was based on the fiscal impacts of establishing different types of year-round residential populations (see Appendix III).

This vision offers a snapshot of Hampton Beach at some point in the future, following the implementation of the Master Plan. The points below outline the elements of the suggested economic vision for Hampton Beach:

- Hampton Beach is an economically diverse, year-round community, with a stable base of residents and businesses.
- Tourism to Hampton Beach is a vital element of its economy, with tourists of all income levels and interests staying at many hotels, inns, and cottages in the area.
- In addition to its summertime appeal as a recreational destination, vacationers also find the natural beauty and beach town atmosphere of Hampton Beach attractive in the spring and the fall.
- A large number of retirees from Boston, Manchester and other larger cities in New England call Hampton Beach home and provide a significant market for retail and service businesses in the beach area.
- Hampton Beach is a haven for small businesses as it offers ample opportunities for entrepreneurs to start and expand businesses in an attractive waterfront setting.
- Hampton Beach's growing business community attracts new, permanent residents to the Town of Hampton, who come to take new jobs with good wages.
- Residents and visitors alike enjoy strolling along the pleasant beachfront and shopping in the stores in the commercial district of Hampton Beach.

To make the above vision a reality, a number of major interventions must occur. Hampton Beach in the year 2001 is dramatically different than the above statement. The following subsection contains short, medium, and long-term economic strategies aimed at helping Hampton Beach realize the vision for its future economy.

Economic Strategies for Hampton Beach

Particular economic strategies for the Hampton Beach area will need to be implemented in various phases over time. For planning purposes, proposed action steps can be divided into three different time frames: short-term (1-2 years), mid-term (3-9 years), and long-term (10-50 years).

Economic strategies fall into one of three categories: economic incentive and economic development programs, marketing programs and special events, and physical improvements. The three following sub-sections outline suggested short, medium, and long-term economic strategies, as well as a matrix of these strategies, divided into the three time periods and three categories, is included at the end. The recommended economic strategies follow.

Short-term Strategies (0 - 2 years)

Strategy 1. Establish a Business Improvement District.

Historic downtown areas around the country have found themselves at a competitive disadvantage over the past several decades with shopping malls and retail “power centers.” A major contributor to the inability of downtown areas to compete is that malls and shopping centers are owned and managed by one entity that can very effectively control the visual environment on and around the property. In contrast, in a downtown area, each parcel is owned by a different entity with different levels of commitment to maintaining an attractive and safe environment.

Business leaders in many historic commercial districts around the country have reacted to the decline of downtown by adapting the “central management” model that has proven so effective in shopping malls by creating Business Improvement Districts (BIDs) or other commercial district management organizations. A BID functions by raising money from all property owners in a special assessment district with a district tax; this tax money is then pooled to fund efforts like landscaping improvements, marketing services, public safety, street and sidewalk cleaning, and transit services. Taxes can be assessed in many ways, including a percentage of property value, a charge per square foot of commercial space, or a charge per linear foot of street frontage.

Hampton Beach is fortunate to already have a BID-like organization in place—namely its Village Precinct, which could be substantially changed to become a BID organization. The Precinct, which was established in 1907 to provide fire protection to the beach area, is funded through a property tax assessment to all properties, residential and commercial, located in its district. Over time, the Precinct has taken on several of the roles of a BID including advertising and marketing, and special event programming. The Precinct is, in fact, planning to cease its fire protection activities in the immediate future and turn that role back over to the Town of Hampton, and in doing this will free up additional resources to expand its activities.

The only disadvantage of the Precinct’s current structure is that BIDs are usually structured as non-profit organizations that are able to receive foundation grants and state and federal money for façade rehabilitation, pedestrian improvements and other capital investments. The Precinct, as a public taxing jurisdiction, is not eligible to tap into such resources. It is,

however, able to raise money through public means, and it could feasibly have the Town float a revenue bond to pay for new parking construction and the acquisition of shuttle buses, and then take responsibility for managing the parking facilities.

Another issue that needs to be rectified is the limited operational period of the visitor center at the Seashell Stage. It operates from April through October due to its location in a seasonal structure. There are plans to improve the facility so that the visitor center can remain open year-round, but these plans hinge upon decisions made at the state level. In order to help create a better environment for visitors, a temporary year-round location should be obtained, either through funds from the Town, Precinct, Chamber, a newly established management entity. If the state park does opens a permanent facility, the visitor center could move back into the park.

As such, a BID organization should be established to manage core area of Hampton. The Hampton Beach Village Precinct is a possible candidate for the job only if its present organizational structure is substantially changed to take on the legal and financial obligations of a BID.

Strategy 2. Establish a network of economic development resources.

The primary obstacle to economic change in many communities is a lack of available capital or technical knowledge to undertake real estate redevelopment or to start new businesses. Without capital, potential investors and entrepreneurs are unable to qualify for necessary financing from lenders to initiate economic activities. Without technical knowledge, those with capital may be unwilling to take on investment risk.

In recent years, governments and private enterprise have teamed up on countless occasions to provide potential investors with the capital and technical skill they need to forge ahead with their projects. The State of New Hampshire offers a number of economic development services aimed at closing the capital and skill gaps, including its Community Development Finance Authority, its Community Development Block Grants Program (CDGB), and its Small Business Development Center.

In addition to these public sources, a nationwide network of Community Development Venture Capital (CDVC) funds have popped up in the past 15 years. CDVCs are geographically-targeted, non-profit organizations that provide capital and technical assistance to community-based entrepreneurs lacking the necessary equity and/or expertise to start or expand a business. At least two CDVCs could potentially serve Hampton Beach: the Seacoast Business Alliance Corporation in North Hampton, and the New Hampshire Community Loan Fund in Concord. The former provides funding and technical assistance programs for businesses on the Seacoast, and the latter provides capital for the development of low to moderate-income housing all over the state.

In the short term, the Town of Hampton should create a resource manual of economic development assistance programs and provide a contact person, either with the town

government or with the Rockingham Economic Development Corporation (REDC). These locally based sources can put potential investors and entrepreneurs in touch with people who can provide them with the capital and technical knowledge that may be preventing them from reinvesting in Hampton Beach. REDC can also offer funding through its regional loan fund that targets CDBG dollars to help bridge the capital gap for specific economic development initiatives in the region.

Strategy 3. Create incentives for reinvestment in existing lodging properties.

Many of the hotels, inns, and rental cottages in Hampton Beach have deteriorated in recent years. As long as lodging properties continue to generate steady income each year, operators and property owners have little incentive to renovate their properties. As the condition of properties worsens, the overall visual environment becomes blighted and the public's perception of the area becomes more negative. Although towns in New Hampshire cannot offer property tax abatements, other options are available. One option would be for the local redevelopment authority to borrow low-interest State of New Hampshire Business Finance Assistance (BFA) Corporation loans for redevelopment and pass these loans along to investors. Improving the condition of the stock of lodging accommodations in Hampton Beach will set the stage for drawing more overnight visitation and, in turn, increase the per capita spending of visitors.



First impression of a lodging business for visitors that arrive from the southern gateway

Strategy 4. Create more activities in Hampton Beach during the shoulder and off-peak tourist seasons.

As with many other beach communities, Hampton Beach suffers from being too crowded in the summer and not crowded enough in the winter. Since the beach area's main attraction is the ocean and the beach itself, its popularity is at its peak during July and August when people seek these attractions to swim, sunbathe, and enjoy other beach activities. Since these months coincide with the summer school break, families flock to Hampton Beach *en masse*, creating huge crowds. Visitation and tourism drops significantly once children go back to school and the weather starts to get colder.

In order to extend the tourist season, Hampton Beach needs to create more activities and excitement in the "shoulder" months of April, May, September, and October when the weather is still nice enough for other outdoor activities and performances. There are opportunities for the winter months as well. The Town already holds a "Penguin Plunge" in the winter. Other communities have winter events that attract thousands of people by using themes that revolve around holidays, food, and outdoor activities.

This can be accomplished in the short-term by establishing ongoing programs like a farmer's market or by having a seasonal, weekend-long festival such as a regatta or a hot-air balloon race. Programs like these could continue to be organized by the Hampton Beach Village Precinct, Hampton Chamber of Commerce, or a business improvement district. Once such programs are in place, the gaps can be filled in with effective marketing programs.

Furthermore, most events at the Beach are held between May and October. There are only a couple advertised events during the winter or spring seasons. The New Hampshire Special Olympics sponsors the Penguin Plunge, a mid-winter event that has attracted several thousand people over the past two years. Other communities in New England have sponsored successful winter events such as Hot Chocolate Follies in Fall River, Massachusetts. Possible off-season events could include "First Night," "Winter Festival," or a spring kite-flying contest.

Strategy 5. Create incentive programs for construction of new and varied types of housing.

Housing construction in the Town of Hampton has not kept pace with construction in neighboring communities on the Seacoast. A likely reason for the lack of construction is that the value of land is correlated with its proximity to the ocean, and high land prices are common deterrents to housing development. Since housing prices in Hampton Beach are simply not as high as in nearby beach areas like Rye, the development economics for new housing simply do not work for developers. For this reason, the Town of Hampton should create incentive programs to encourage the construction of new housing. This can be accomplished in a variety of ways, including land cost write-downs for developers, low-interest construction loans, federal rehabilitation tax credits (for reconstruction), and density bonuses for low to moderate-income housing set asides.

The availability of low to moderate-income housing is becoming more important as home values rise on the Seacoast. In fact the New Hampshire Housing Finance Authority reports that the “affordable” housing payment for a moderate income family (80% of median income) was only 62 percent of the payment required to purchase a home at Rockingham County’s median housing price in 2000, the lowest ratio since 1990.

Beyond the issue of new housing is the issue of housing diversity. A hallmark of a vibrant community is its ability to support a range of housing styles and prices. Since much of the existing population of Hampton Beach is low to moderate-income, it is important to not foster “gentrification,” where current residents become priced out of the market. Developers can be enticed to build at higher densities in appropriate areas if their projects include units set aside for low to moderate-income residents. Age diversity is also a factor since many buyers of retirement homes will prefer a luxury condominium to a similarly-priced house and often do not want to take on the hassle or expense of home maintenance.



Growth of condominiums has characterized the housing market of Hampton Beach.

Strategy 6. Provide access to capital and technical assistance for professional businesses.

Hampton Beach is conveniently located on the Atlantic Ocean, within easy driving distance from airports and employment centers in Boston, Manchester, Portsmouth, and Portland. As such, it is a potentially desirable location for “lone eagles” that can work independently from their homes or “urban refugees” who want to maintain their businesses, but are seeking a more relaxed environment than in a larger city. A major component of access to any capital or technical assistance programs should be aimed at

such migrating businesses. The State of New Hampshire and the REDC are constantly developing these contacts and can provide leads for businesses that may find Hampton Beach attractive.

Another way to assist prospective businesses would be for the Town and/or a redevelopment authority to acquire an older commercial building and refit it as a business incubator facility. This sort of facility may hold appeal for small, growing technology firms that may be unable to afford conventional office space in the Route 128 corridor around Boston, and would be willing to move a bit further away to get affordable space in an attractive location.

Mid-term Strategies (3-9 years)

Strategy 1. Acquire sites for housing and solicit development partners.

Once the Town of Hampton has begun the process of overhauling the character of the housing stock in Hampton Beach, interest should build among developers to build new units in the beach area. As developers show interest in Hampton Beach, it will become crucial to maintain control over the type, density, and character of new housing so that it fits in with the future vision of the beach area.

In the interest of encouraging development while remaining faithful to the Hampton Beach Area Master Plan, the Town can be proactive by acquiring priority sites and issuing Requests for Proposals (RFPs) to developers. The Town may choose to manage such a process either directly through its government or by creating a redevelopment authority with municipal powers such as eminent domain and the ability to issue bonds. Through this process the Town can encourage a development that is “developer ready” by assembling parcels, updating site infrastructure, and obtaining the proper zoning itself, thus removing potentially costly and time-consuming barriers to private developers. If developer interest is lacking, the RFP process can be aided by offering incentives to developers such as land write-downs, ground leases below market value for the first few years of operation, or low-interest construction loans. Land write-down is an incentive program that reduces the cost of acquiring land to a potential developer. Land cost is often the primary barrier to making the economics of a project work, and many towns and redevelopment agencies choose to acquire land and sell it below market value to overcome this barrier and stimulate development.

Strategy 2. Diversify retail offerings in the beach area.

Most businesses in Hampton Beach either operate only in the summer months or have significantly lower sales in the non-summer months. The key reason for this falloff is that retail businesses in Hampton Beach tend to be aimed at the tourist market. While increasing the length of the tourist season would certainly help retail businesses remain competitive, a more viable strategy would be to attract retail businesses that serve the year-round resident population.

Since New Hampshire does not have a local sales tax, the “leakage” of retail dollars to the next town does not have the obvious fiscal effects on a town that it does in other states. Retaining retail dollars does, however, have three positive impacts on a place. The first is that greater retail sales equal higher property values, thus increasing the tax base. The second is that retail businesses tend to act synergistically in that ancillary businesses such as dry cleaners, video stores, and bakeries tend to cluster around anchors like grocery or drug stores. For this reason, if Hampton Beach had a full-service grocery store, other retail businesses would find it more attractive. This feeds into the third benefit of retail—developing a critical mass of retail goods and services creates a sense of place and contributes to the image of a place. Potential locations for these uses would need to have adequate access and visibility, such as along Ashworth Avenue.

For all of these reasons, Hampton Beach needs to attract more year-round retail businesses aimed at its resident population by using various incentives. This task logically falls to the Business Improvement District, which can leverage its resources to market space and/or vacant land in Hampton Beach to either local or national retail tenants. The Village Precinct can put together an attractive brochure containing information on the location, market demographics, and natural environment of Hampton Beach and use it as a marketing tool. Local commercial real estate brokers should be included in the development of marketing materials, as they are likely to be the source of tenant leads. The Town or Village Precinct can offer potential retailers a certain amount of money per square foot to help install furniture, fixtures, and other items to renovate retail space.

Strategy 3. Acquire sites for new lodging development

One way to help change the type of visitor that comes to Hampton Beach is to diversify and improve lodging options. The development of one or more new full-service hotels would not only draw a more affluent tourist, it would also provide opportunities for residents to hold events like weddings and banquets in a special environment right on Hampton Beach. As with the residential development initiative, the most efficient way to accomplish this would be to assemble and prepare a site (or sites) for hotel development and issue an RFP to prospective developers with either the town or a redevelopment authority managing the process. Again, some economic incentives may be warranted.

Strategy 4. Create new transit options.

Building on the parking shuttle program, a more comprehensive circulator bus system should be introduced in Hampton Beach. This bus can be modeled on the municipal bus system in Ocean City, Maryland, where a \$1.00 charge buys an unlimited daily pass. If beachgoers want to take a break from sunbathing to visit restaurants or shops, the trolley system would allow them to travel around Hampton Beach without moving their cars, or it would allow them to return to their cars more easily with their beach equipment. In addition to buses, the network of trails being developed will allow pedestrians, in-line skaters, and cyclists to circulate without driving. Some areas may have to have separate uses such as in-line skaters and pedestrians along the boulevard.

Long-term Strategies (10 - 50 years)

Strategy 1. Keep tabs on existing businesses.

The double-edged sword of business development is that businesses that move to a new location today could grow unsatisfied with the location over time and may re-locate again. While long-term improvements to Hampton Beach will undoubtedly create an increasingly attractive business environment, other considerations may eventually cause businesses to rethink whether or not they want to be located in the beach area. For this reason, the Town must coordinate with the Village Precinct, the Seacoast Business Alliance Corporation, and other economic development organizations to track the growth and the changing preferences of businesses. By conducting an annual or semi-annual survey of businesses in Hampton Beach and maintaining active dialogues with businesses, the Town can keep accurate statistics on its business activity and can continue to serve its business community effectively.

Strategy 2. Tie into regional transportation networks.

Traffic along the Interstate 95 corridor continues to increase, making the experience of driving up and down the Seacoast more difficult with each passing year. Additionally, growth in the Interstate 93 corridor from Boston to Manchester and the completion of Route 101 is adding to east-west traffic in southern New Hampshire.

As automobile traffic worsens, other modes of transportation are becoming more and more important. Later in 2001, the Boston and Maine Railroad is set to reopen as part of Amtrak's network, providing rail service from Boston to Portland with a stop near Hampton in Exeter. While this train will initially only run four trips per day, it is likely to spur more rail development in Northern New England over the next several decades. Tourism to Hampton Beach could be helped substantially by running an express bus service from the Exeter station to Hampton Beach to offer a car-free alternative for travelers coming from Boston or Portland. Over the next 50 years as more train lines are reopened, perhaps someday Hampton could again have a train depot of its own.

Strategy 3. Identify new housing markets.

Demographers have a saying: "You cannot expect people to change; you can, however, expect them to die." As a result, retirement housing will only continue to be successful in the long-term if the supply of retirees continues to grow. Unfortunately, for communities banking on retirement as an economic engine, the baby boomer population that is retiring right now is far larger than the Generation X population that will be retiring in 30 to 40 years.

The long-term implication of this generational shift is that retirement housing in Hampton Beach will be a very important part of its population in the short to Mid-term; other populations, however, must be attracted in the long-term to ensure the continued vitality of the area. This relates to the issue of stability—if children grow up in the same house in

Hampton Beach and do not move around each year, they are more likely to return as adults and raise their own families there. As the available populations change over time, the ability to attract successive generations as residents is very important in maintaining a stable residential base.

Matrix of Economic Strategies

The following matrix page summarizes proposed economic strategies for Hampton Beach. Strategies are divided by time frame (short, medium, long-term) and by type of initiative (economic incentive and economic development programs, marketing programs and special events, and physical improvements). This matrix is intended for use as a discussion tool during the review of the Master Plan.

Table 23. Matrix of Proposed Economic Strategies

	Time Frame		
	Short-Term (0-2 Years)	Mid-term (3-9 Years)	Long-Term (10-50 Years)
Economic Incentive and Economic Development Programs	<ul style="list-style-type: none"> • Create incentives for reinvestment in existing lodging properties • Create incentive programs for construction of new and varied types of housing • Provide access to capital and technical assistance for professional businesses 	<ul style="list-style-type: none"> • Create incentives for redevelopment of properties • Prepare land and property packages that are “developer ready” 	<ul style="list-style-type: none"> • Keep tabs on existing businesses
Marketing Programs and Special Events	<ul style="list-style-type: none"> • Strengthen the role of the Village Precinct • Establish network of economic development resources • Create more activities in Hampton Beach in the off-peak tourist seasons 	<ul style="list-style-type: none"> • Diversify retail offerings in the beach area 	<ul style="list-style-type: none"> • Identify new housing markets
Physical Improvements	<ul style="list-style-type: none"> • Enact changes to parking and transportation on the beachfront 	<ul style="list-style-type: none"> • Acquire sites for housing and solicit development partners • Acquire sites for new lodging development • Create new transit options 	<ul style="list-style-type: none"> • Tie into regional transportation networks

D. Transportation Recommendations

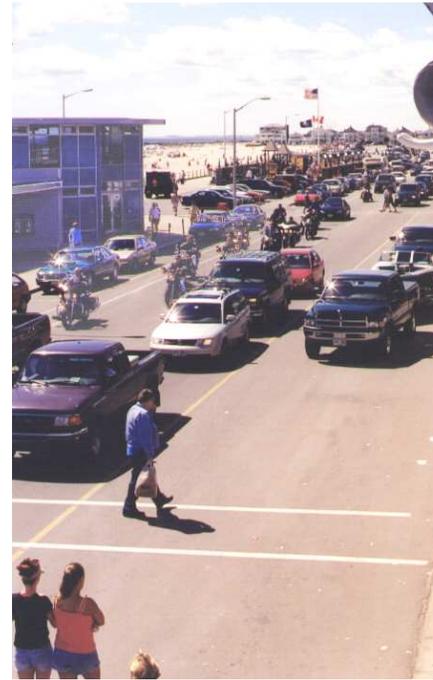
As a result of the circulation pattern created by the roadway network and the high density of parking along the beach during peak summertime conditions, Hampton Beach faces significant circulation and parking problems. These problems include the following:

1. Congested beach access and egress
2. Lack of convenient and manageable parking
3. Traffic congestion due to vehicular “cruising”
4. Significant pedestrian activity
5. Provision of a safe environment for multiple users (vehicles, pedestrians, bicycles, etc.)
6. Back ups at parking areas on weekend mornings due to money collection

This section proposes strategies and recommendations to address these issues and improve transportation conditions for Hampton Beach visitors and residents.

Many of the recommendations herein address local traffic issues of Hampton Beach. The regional traffic issues, such as access from Route 101 and points north and south on Route 1A extend into other towns and south to the State Line. Access from Route 101 has been greatly improved by the recent widening of this highway and interchange improvements. Access and egress issues from this direction are most critical near the beach. Route 1A to the north does not appear to pose traffic operations concerns, however, through the public involvement process, issues have been raised with respect to the operations of the signalized intersection of Route 1A and Route 286 in Seabrook. This intersection is located near the State Line approximately 2.5 miles south of the Hampton River. At a minimum, signal timings should be evaluated and optimized to enhance traffic operations. In addition, the Town of Seabrook, with the Rockingham County Regional Planning Commission could apply for CMAQ funds to construct improvements at this location.

Additional data and analysis such as a random survey or license plate survey will need to be conducted to quantify the volume of circulating traffic and support the proposed transportation improvements. Furthermore, there are on-going plans and projects that should be continued. They include, but are not limited to, the development of multi-modal visitor facilities along the Coastal Byway by NH DRED and NH OSP, and the seawall/sidewalk improvements along Ocean Boulevard.



Pedestrian and vehicle interaction along Ocean Boulevard

Strategies

A future transportation plan, referred as the “50-year Vision” for Hampton Beach, provides a foundation for transportation strategies. Key elements recommended as part of the 50-year transportation vision include the following:

- Reconstruct the Route 1A bridge over Hampton River to allow greater clearance for boats and reduce vehicular congestion by reduce the number of bridge openings.
- Reconstruct Ocean Boulevard to provide one northbound lane; re-stripe parking along the beach; provide 15-foot sidewalks; designate commercial loading zones, and provide bike lanes.
- Reconstruct Ashworth Avenue to provide travel in two directions with one lane each way and one middle turning lane, and a sidewalk on each side.
- An improved one-way circulation on minor streets connecting Ashworth Avenue and Ocean Boulevard.
- Reconstruct intersections at beach entrance and exit locations.
- Install additional traffic signals at key locations along Ocean Boulevard and Ashworth Avenue.
- Provide pedestrian crossing areas along Ocean Boulevard along with several pavilions (Possibly close off Ocean Boulevard during peak beach times).
- Encourage and provide additional off-beach parking.
- Improve directional, informational, and regulatory signage.

These measures are shown on Figure 30 and described in detail below. They are not organized by phase or priority since many of them occur during two or three of the phase periods. However, a matrix at the end of this section identifies specific actions and times.

Strategy 1. Reconstruct the Bridge over Hampton River (Mid-term Improvement)

Today, the existing drawbridge over the Hampton River causes vehicular delays on Route 1A at the south end of the study area. This delay extends back to the Ashworth Avenue / Ocean Boulevard “u-turn” intersection creating added congestion to the one-way loop system. Boats also experience delays waiting for the bridge to open. According to the NHDOT District office, which maintains this bridge, it is raised up to 15 times per hour during peak boating season. To address this issue, the grade of the roadway leading to the bridge should be raised and the bridge reconstructed with sufficient clearance to allow the majority of the boats to pass under. This will reduce the frequency of raising the bridge, relieve traffic congestion southbound, and improve traffic conditions at Ocean Boulevard/Ashworth Avenue.

The reconstruction of this bridge can be recommended through the Regional Planning Commission and the MPO for inclusion in the State’s Ten Year Plan. With community support, solicitation for the project can begin in the winter of 2002. With continued support

and representation from the town to the Governor's Advisory Committee on Intermodal Transportation (GACIT), the project can be classified as high priority and be placed on the Ten Year Plan. This is a lengthy process, but the benefits associated with this type of large-scale improvement cannot be overlooked. Although it may take a long time to complete the permitting, design, and construction of the bridge, the process should begin in the first phase of the Plan implementation.

A new bridge can also improve existing needs and activities. It should have sufficient width to accommodate a bike lane for bicyclists to travel safely along Route 1A, and a designated area for people to fish. Currently, bicyclists have to contend with automobiles in unsafe conditions, and people fishing and their fishing gear impede pedestrians.

Strategy 2. Reconstruct Ocean Boulevard (Long-term Improvement)

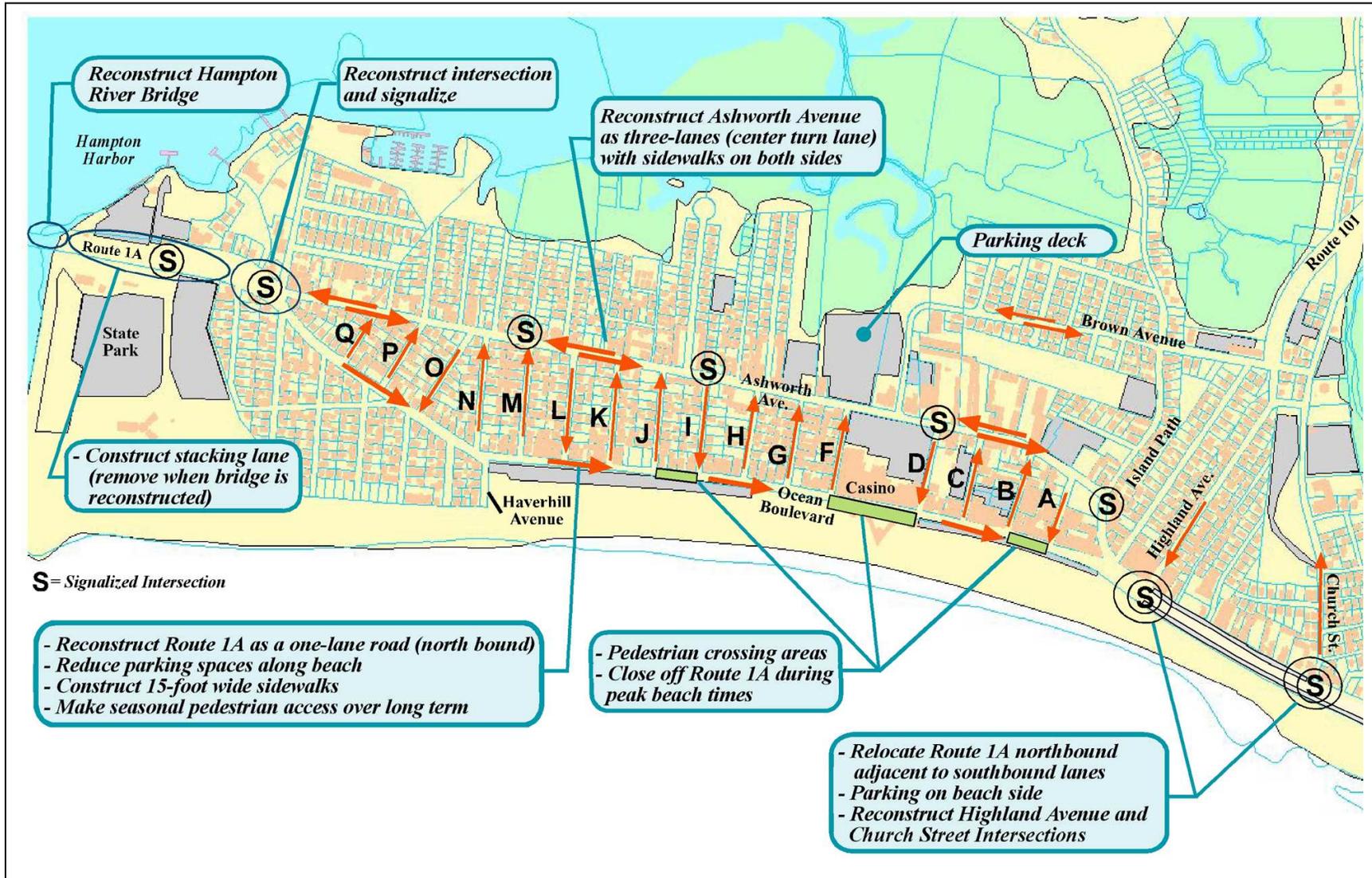
The portion of Ocean Boulevard between Island Path and Duston Avenue/Dover Avenue currently provides two lanes in the northbound direction. Four to eight-foot sidewalks are provided on both sides of the street, but no separate facilities are provided for bicycles. Ocean Boulevard forms a one-way couplet with Ashworth Avenue, which provides two travel lanes in the southbound direction. This roadway configuration creates a circulation pattern in the vicinity of Hampton Beach that contributes to (and almost encourages) the vehicular "cruising" along the beach. Vehicles "cruise" the beach to find parking spaces or just for fun, resulting in vehicular-pedestrian conflicts and unnecessary traffic congestion on Ocean Boulevard.

It is recommended that Ocean Boulevard be reconstructed to provide one vehicular travel lane in the northbound direction and an exclusive bicycle lane over the short term. In addition, the number of parking spaces along the beach should be reduced, and removed where possible, to provide 15-foot sidewalks. Reconstruction of Ocean Boulevard would include geometric improvements to the sidewalks, curbing, crosswalks, and the roadway to provide safe passage for bicyclists, pedestrians, and motorists.

The elimination of parking revenue, however, would have to be compensated for with other sources of revenue, such as increased RV fees or meter rates, or from concessionaries at the State Park parking lots. Parking at the edge of the beach could be directed to less-utilized parking areas, such as the State Park lot or at lots along Ashworth Avenue, or remote parking areas. The use of remote lots and a shuttle is encouraged during major events such as is done now during the annual Seafood Festival in September.

To achieve the desired cross section for motorists, bicyclists, and pedestrians, on-street parking may have to be eliminated along portions of Ocean Boulevard (see Figures 31 and 32). These improvements would discourage cruising and provide a more attractive, pedestrian and bicycle-friendly environment along the beach.

Figure 30. Transportation Improvements Over the Next 50 Years



Carrying this concept one step further, the town could explore with the NHDOT the possibility of closing portions of Ocean Boulevard on weekends during the peak season. Vehicles could still access businesses and residences by “looping” around side streets, and using designated drop-off and loading zones. This arrangement is described below in the recommendation for pedestrian crossing areas.

Since Ocean Boulevard (Route 1A) is outside the Town’s Urban Compact, this project would be eligible for inclusion in the State’s Ten Year Plan. In addition, since the focus of the improvements is to enhance the area for pedestrians and bicyclists, the project is a good candidate for Transportation Enhancement (TE) and/or Congestion Management and Air Quality (CMAQ) funds available under the TEA-21 program that is administered by the NH DOT.

Strategy 3. Reconstruct Ashworth Avenue

Ashworth Avenue is a two-lane, one-way roadway for vehicles traveling in the southbound direction. As mentioned, Ashworth Avenue forms a one-way couplet with Ocean Boulevard, contributing to vehicular cruising along Hampton Beach. The sidewalks along Ashworth Avenue are not well defined, and the roadway is currently in need of repair.

To address these issues, it is recommended that Ashworth Avenue be reconstructed as a two-way street with three travel lanes (including one center turn lane) and sidewalks on both sides of the street. The final lane arrangement, be it two-lane with left turn pockets at key locations or the suggested three-lane cross section, needs to be determined with additional traffic data collection and analysis. The current average daily traffic volumes in one direction on Ashworth, coupled with new northbound traffic indicates that a center turn lane will be required to allow turning vehicles to move out of through travel lanes.

Ashworth Avenue is situated within a 40-foot right-of-way and primarily consists of 30 feet of travel way with eight to ten foot paved shoulders. Two of the more restrictive areas along the roadway, with respect to structures close to the right-of-way, are between M and N Street, and F and G Street, with just over 55 feet between buildings. The proposed improvements would provide a cross section of 48-feet from the back of sidewalk to back of sidewalk. This would require acquisition of four feet of land on both sides of the street and possibly full acquisition of some parcels.

Reconstruction of Ashworth Avenue, in combination with Ocean Boulevard improvements, would discourage vehicular cruising, improve circulation by increasing flexibility and mobility, and provide a safer environment for vehicles and pedestrians. As a result, Ashworth Avenue would carry a higher percentage of motorists, and Ocean Boulevard would become a more pedestrian-friendly environment.

Figure 31. Proposed Cross-sections of Ocean Boulevard and Ashworth Avenue.

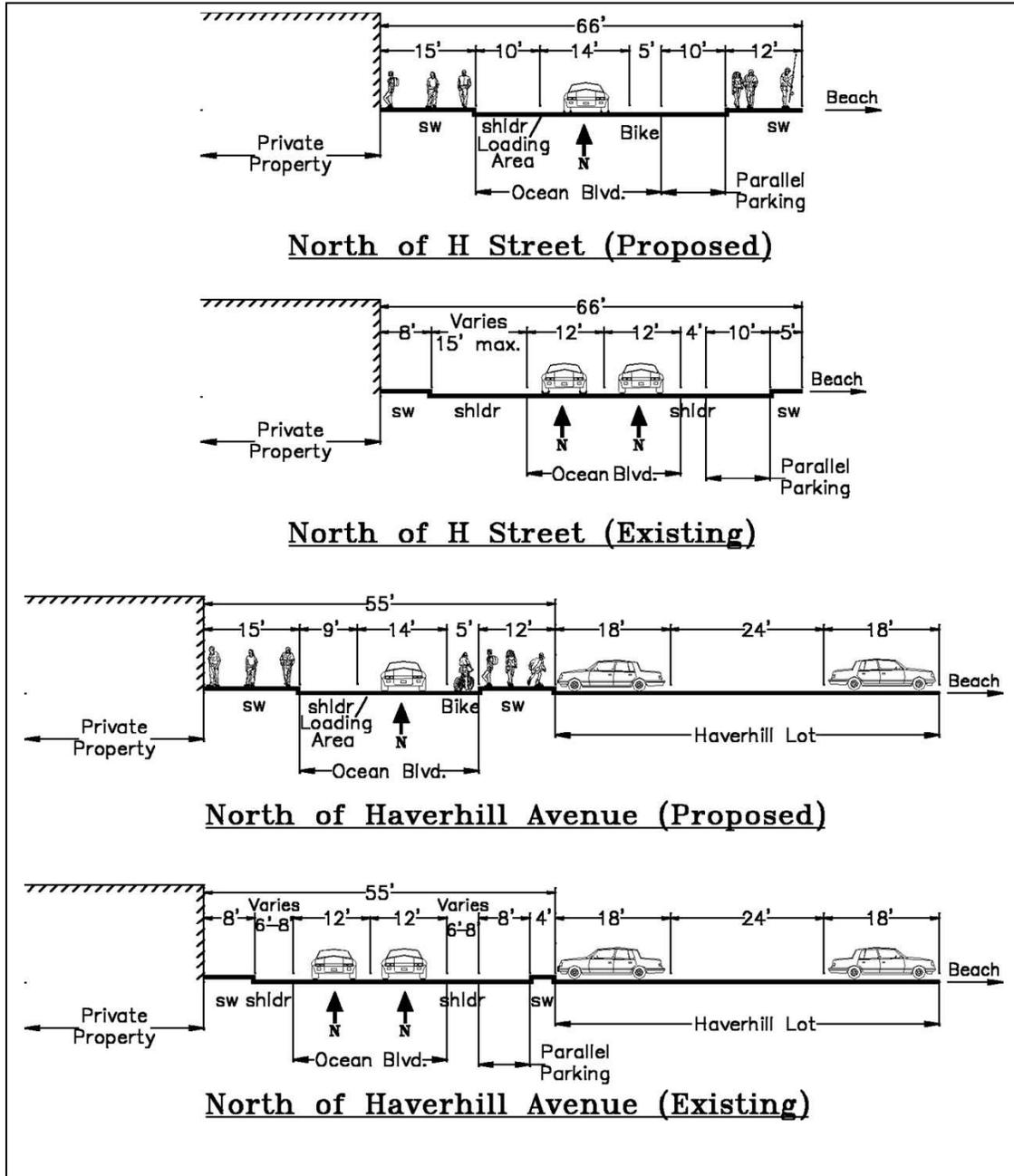
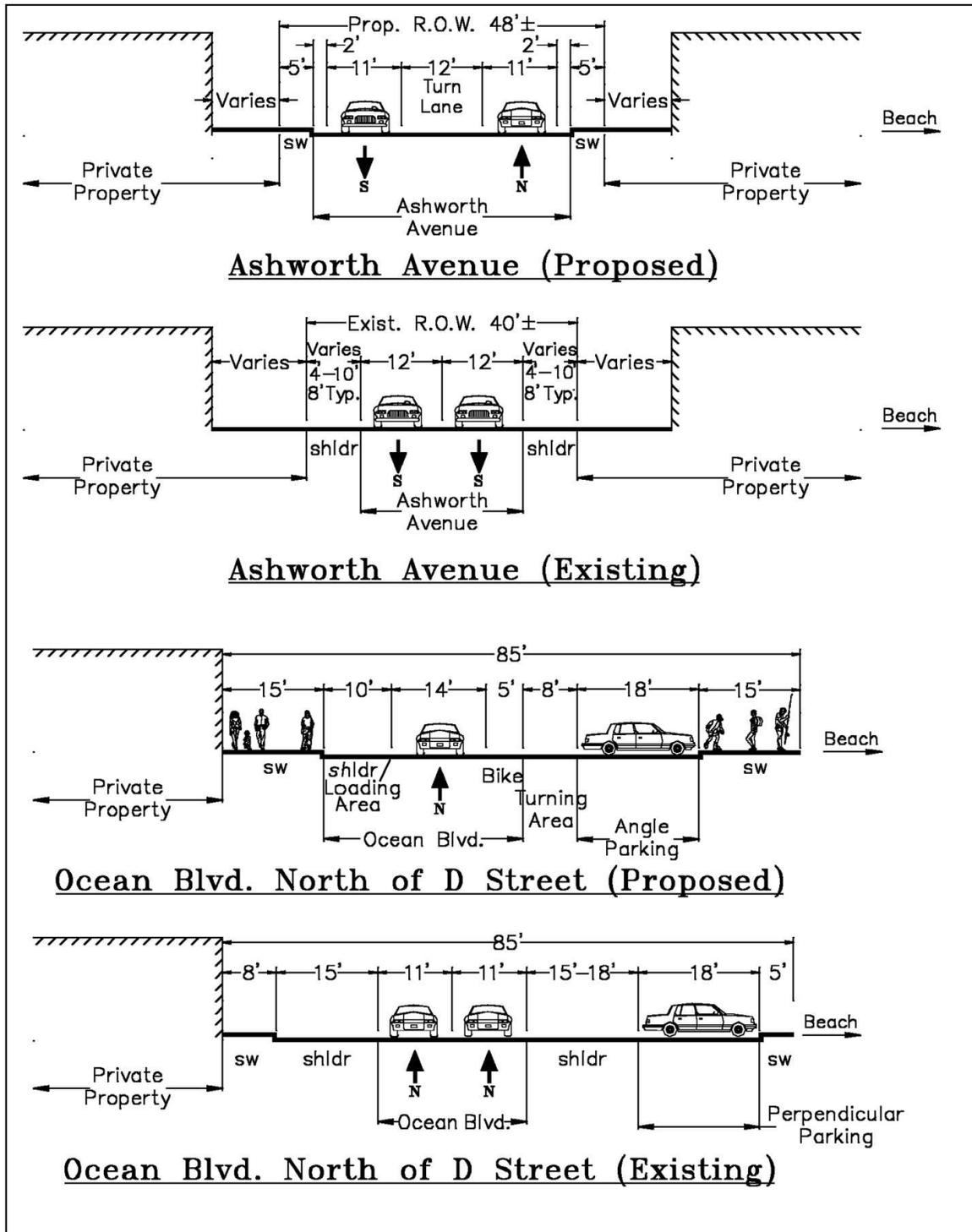


Figure 32. Proposed Cross-sections of Ocean Boulevard and Ashworth Avenue.



Strategy 4. One-Way Circulation on Side Streets

The side streets that connect Ocean Boulevard to Ashworth Avenue in the vicinity of Hampton Beach are very narrow (generally less than 30 feet wide) and there are often multiple cars parked along these streets. Currently all side streets, except B, D, G, I and K Streets provide one-way traffic westbound. To improve circulation and safety, it is recommended that these streets be studied in more detail and in connection with Ashworth Avenue and Ocean Boulevard improvements to provide a more efficient alternating one-way travel. A suggested one-way roadway pattern is shown on Figure 30 and summarized below.

One-way eastbound	One-way westbound
Highland Avenue A Street D Street I Street L Street O Street	B and C Streets F, G, and H Streets J and K Streets M and N Streets P and Q Streets

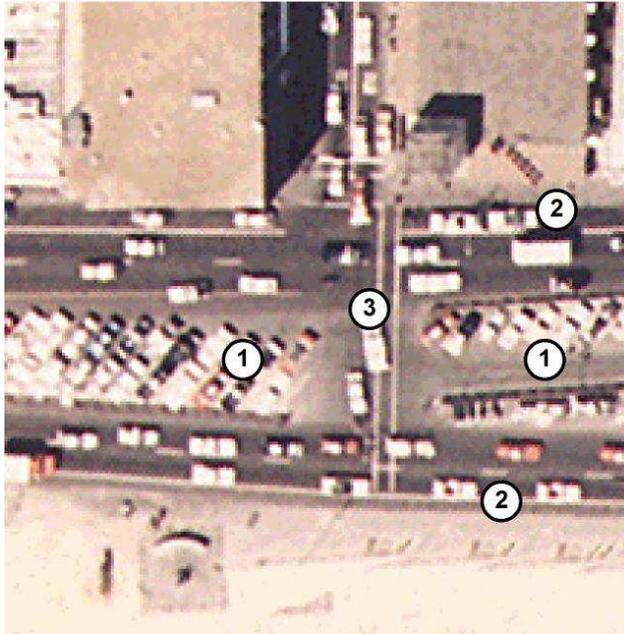
The circulation pattern shown in Figure 30 provides six eastbound streets and eleven westbound streets. A greater number of westbound movements are provided to facilitate traffic movements away from the beach during peak summertime conditions. This pattern may provide improved circulation and safety for moving vehicles and parking vehicles as well as pedestrians.

Strategy 5. Reconstruct Intersections at Beach Entrance/Exit Locations (Mid-term Improvement)

A large percentage of the traffic enters and exits the study area via the intersections of Church Street/Ocean Boulevard and Highland Avenue/Ocean Boulevard (see Figure 33). Because of significant constraints presented by environmentally sensitive areas to the west of Hampton Beach, it is difficult to provide alternate measures of access and egress from this direction. However, if additional off-street parking is provided on the lots off Ashworth Avenue, access and egress from the west would be encouraged to use Brown Avenue. Beyond that alternative, efforts should be focused on improving current entrances and exits.

Because the capacity of these locations is limited, geometric improvements are recommended. Physical improvements at Church Street/Ocean Boulevard would likely require property acquisition to provide a sufficient roadway cross section on Church Street and to construct turn lanes on Ocean Boulevard. Signalization is recommended to improve operations at the intersection of Highland Avenue/Ocean Boulevard. Providing one-way (eastbound) circulation only on Highland Avenue (discussed above) facilitates beach access from Route 101. These improvements would enhance operations, provide better access to and from the beach, and provide safe pedestrian crossing locations.

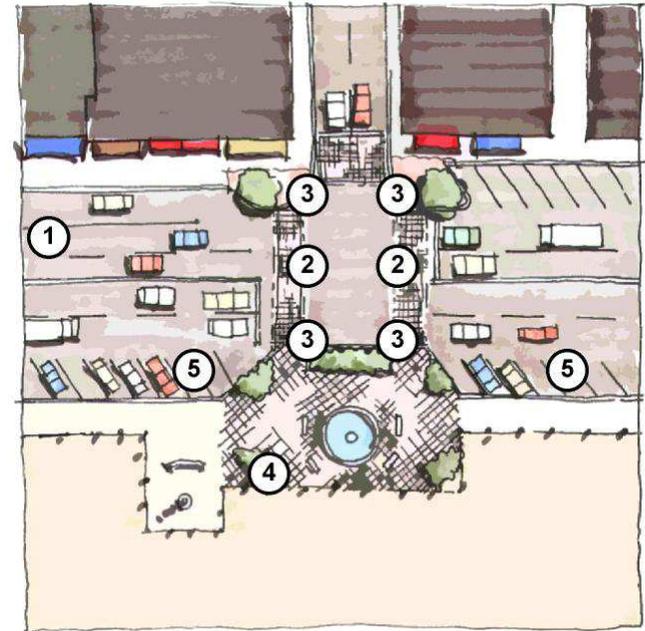
Figure 33. Reconstruction of the Highland Avenue/Ocean Boulevard Gateway



Before Reconstruction

Features:

1. Two lanes of parking in center
2. Pedestrian sidewalk next to moving traffic
3. Difficult to exit Highland Avenue across parking area.



After Reconstruction

Features:

1. Two lanes each way adjacent to each other on Ocean Boulevard
2. Specially-paved crosswalks identify pedestrian crossings
3. Vehicle and pedestrian signals improve safety
4. Landscaped gateway with fountain or similar attraction
5. Angled parking along road, improving circulation.

Geometric and safety improvements are also recommended for the intersections of Ashworth Avenue/Ocean Boulevard (Route 1A)/Duston Avenue/Dover Avenue and Route 1A/State Park Drive. These locations experience the highest level of congestion, and analyses indicate the poorest level of operations. For example, the intersection of Ashworth/Ocean/Duston/Dover experiences significant delays during summer peak hours due to the high volume of southbound “u-turns” (southbound Ashworth Avenue to northbound Ocean Boulevard) that occur. Improvements at these two intersections should focus on improved traffic channelization, lane arrangements, and traffic control. Sufficient area appears to be available within the Route 1A right-of-way to complete physical changes at these locations while not significantly impacting abutting properties. Signalization and intersection reconstruction would significantly improve the safety and operations at these two locations.

Strategy 6. Install Additional Traffic Signals

One traffic signal is provided along Route 1A at High Street on the northern end of North Beach. In the vicinity of Hampton Beach, there are currently no signalized intersections along Ocean Boulevard or Ashworth Avenue. To improve safety along these corridors, further analysis and potential signalization are recommended at the following locations:

- Route 1A/State Park Drive (noted above)
- Ashworth Avenue/Ocean Boulevard (Route 1A)/Duston Avenue/Dover Avenue (noted above)
- Ashworth Avenue/Riverview Terrace/M Street
- Ashworth Avenue/Keefe Avenue/I Street
- Ashworth Avenue/D Street
- Ashworth Avenue/Island Path
- Ocean Boulevard/Highland Avenue (noted above).

The proposed locations for traffic signalization are shown on Figure 34. Providing signals at these seven locations would improve operations and safety for Hampton Beach visitors and residents.

Strategy 7. Pedestrian Crossing Areas along Ocean Boulevard

Since significant pedestrian activity occurs on Ocean Boulevard, it is important to provide a pedestrian-friendly environment. To improve pedestrian safety, the long-term improvement plan includes the designation of full-block pedestrian areas along Ocean Boulevard. The width of each pedestrian crossing area will enable large volumes of pedestrians to cross Ocean Boulevard safely. Variable surface crosswalks or raised crosswalks constructed of brick, stone, or an aggregate concrete would provide a clear distinction of the walkway, provide a traffic calming effect, and improved safety.

Figure 34. Phased Improvements along Route 1A and the Boulevard



Phase 1	Phase 2	Phase 3
<ul style="list-style-type: none"> • Reconfigured streets with 2 travel lanes • Traffic calming methods and techniques through sidewalk extensions • New street trees • Stronger connections to beach with improved crosswalks, pavers, and signage. 	<ul style="list-style-type: none"> • Removal of parallel parking along Ocean Boulevard • Replace parking with plantings and improved bike lane • Provide sidewalk extensions around street corners at intersection with Ashworth Avenue. 	<ul style="list-style-type: none"> • New plaza by redirecting traffic away from pedestrian area marked by pavers • New boulevard pavilion • Additional streetscape improvements with plantings and benches.

Specific locations for these areas would have to be developed through careful thought and consideration of the traffic patterns, businesses, relationship with other pedestrian areas, and other characteristics of the streets and uses. For example, two areas may be appropriate individually, but they may be too close to each other. Some area businesses, such as hotels and restaurants, may need scheduled delivery times for service trucks.

As a way to illustrate the principle of several pedestrian areas and associated pavilions, three locations are shown in Figure 30 and listed below:

- Block between A Street and B Street
- Block between D Street and F Street
- Block between I Street and J Street.

The locations identified for pedestrian crossing areas are evenly spaced along the most highly trafficked portions of Hampton Beach. These locations are high activity areas due to the Seashell Stage, the restroom facilities, retail uses, and close proximity to off-beach parking lots. Providing distinct pedestrian crossing areas along Ocean Boulevard separates vehicular and pedestrian activity and provides a safer environment for all users. Signalization of these pedestrian crossings results in even greater safety benefits.

Pedestrian crossing improvements can be implemented over a period, with short-term improvements focused on providing clear crossing areas with variable finishes and sufficient width to pass the volume of pedestrians. These locations can be enhanced over time, eventually achieving the long-term vision.

Strategy 8. Encourage and Provide Additional Off-Beach Parking

Parking is currently located along the beach as well as in several off-beach lots. As part of the 50-year Vision, it is recommended that some of the on-beach parking be eliminated. Thus, off-beach parking must be enhanced and encouraged. It is recommended that policies or programs be established to encourage or direct visitors to park in remote parking areas, and as necessary, to proceed to on-street parking. The number of parking spaces can be increased at the State Park lot by reorganizing it, and should be expanded at other off-site lots where possible.

It is likely that additional off-beach parking areas will also be needed. A potential site for construction of a new parking deck structure is Town parking lot, next to the police station at the corner of Brown Avenue and Ashworth Avenue (see Figure 30). This site is centrally located and a convenient walking distance (within two tenths of a mile) from the beach. Another location is further north off Highland Avenue.

Since it costs nearly \$10,000 per parking space for structured parking, the desire would be to locate areas that create efficient parking layouts. Ideally two-way aisles with parking on both sides, creating parking “bays” of 60 feet would be developed. The two areas noted are of sufficient size to create parking decks with dimensions in multiples of 60 feet.

Another option would be to designate remote (existing) parking areas and provide a shuttle bus service. The shuttle bus service could transport people to and from parking areas, the beach, and other attractions. With the reconstruction of Ocean Boulevard, designated shuttle bus stops could be provided along the beach. This alternative may require the implementation of the circulation and mobility improvements noted above.

Strategy 9. Improved Signage

An immediate, low cost improvement to the traffic issues at Hampton Beach is the installation of new and improved directional and regulatory signage. They could be planned in conjunction with improved private signage and/or exclusively for transportation enhancement. In particular, improved directional signage should be provided for destinations on Route 1, Interstate 95, and Route 101. Signage associated with parking lots, specifically noting full lots or availability of spaces for both on-street parking and lots, would also improve traffic circulation. For example, automated signs that provide information to drivers such as “Parking Lot A Full, Go to Lot B” could be employed. This would both minimize confusion and reduce the number of cars that “shop” for parking spaces close to the beach.

In addition, improvements should be made to pedestrian and bicycle signage. Pedestrian and bicycle signage can be directional and regulatory, and would improve the safety for all beach users. Examples include “Walk/Don’t Walk” and Pedestrian Crossing” signs to alert pedestrians and drivers of designated crossing areas.

A long-term strategy would be to establish signage policy and design guidelines. They would identify themes, structural elements, and other methods to provide signage that is appropriate and functional. Examples of areas with established design guidelines include Manchester, New Hampshire, Burlington, Vermont, the Connecticut River Byway, and many beachfront cities in Florida.

Strategy 10. Enact changes to parking and transportation on the beachfront.

Presently, most day trippers to Hampton Beach choose to drive along the beachfront, park there for \$1.50 per hour, walk a short distance to the beach from their cars. While this arrangement is undeniably convenient for visitors, it creates a high volume of automobile traffic on streets that have many pedestrians, fills the visual environment with cars, and encourages re-circulation of vehicles and cruising along the oceanfront.

Automated centralized parking meters that provide tickets for display in car windows could be employed at some of the parking lots. Similar systems have proven to work well in Florida. This type of system would save the state operational money by reducing time and staff that are necessary to write tickets and remove coins from the meters. It would also replace mechanically operated meters that are used at every parking space along Ocean Boulevard, thus reducing the cost of maintenance, and seasonal storage, removal and placement of the meters.

One method to reduce automobile traffic along the beachfront would be to raise parking prices substantially for spaces close to the beach or to reduce the number of parking spaces on the oceanfront. However, reducing that number of spaces would create demand for more parking at other spaces. A short-term solution would be to expand existing public and private lots or create new lots that are located away from the main beach areas, and run shuttle buses to the beach.

Implementation of the 50-Year Vision – Transportation

The combination of transportation improvements described in the strategies above comprises the 50-year Vision for Hampton Beach. To meet future demands at Hampton Beach, the ultimate goal is to complete all of the improvements described above. To reach this goal, it is recommended that interim improvements be implemented that will eventually lead to the 50-year plan. For example, improvements that are low in cost and easy to complete can be implemented immediately, while more extensive improvements can be planned for the mid- to long-term future. Table 24 summarizes the recommended 50-year Vision improvements in terms of short, medium, and long-term projects.

Table 24. Summary of 50-Year Transportation Improvements

Short-term Improvements:

- Establish a Parking Management Program or policies to encourage or direct visitors to remote parking areas, including improved directional and regulatory signage
- Improved pedestrian and bicycle signage
- Provide distinctive pedestrian crossing areas along Ocean Boulevard
- Begin process of building a bridge over the Hampton River by seeking funds and permitting.

Mid-term Improvements:

- Signalize the designated pedestrian crossing areas along Ocean Boulevard
- Expand existing off-beach parking areas
- Provide remote parking facility and provide shuttle bus service to beach and other attractions
- Geometric/safety improvements and signalization at Ashworth Avenue/Ocean Boulevard/Duston Road/Dover Avenue and Route 1A/State Park Drive
- Install additional traffic signals at key locations along Ocean Boulevard and Ashworth Avenue
- Geometric/safety improvements and signalization at Church Street/Ocean Boulevard and Highland Avenue/Ocean Boulevard
- Reconstruct the Route 1A bridge over Hampton River.

Long-term Improvements:

- Provide additional off-beach parking structure
- Reconstruct Ocean Boulevard to provide one northbound lane; reduce parking along beach; and provide 15-foot sidewalks and bike lanes
- Reconstruct Ashworth Avenue to provide three lanes and sidewalks
- One-way circulation on minor streets connecting Ashworth Avenue and Ocean Boulevard.

E. Environmental Recommendations

Introduction

As Hampton Beach includes a beach and dune system that plays an important role both in supporting the fragile habitats of the Hampton Seabrook Marsh and Estuary, and the maintenance of man-made features such as roads, buildings, and walls, it needs to develop a plan that protects both of these interests. This section proposes strategies and recommendations that are consistent with the protection and wise management of both natural resources and the built environment.

The Hampton Seabrook Marsh and Estuary

The Hampton Seabrook Marsh and Estuary is one of the state's most valuable natural resources. While its overall health is generally good, there are a number of concerns that threaten the long-term quality of this resource. There has been incremental encroachment into the marsh for many years and the water quality needs to be improved and maintained. Fragmentation of this habitat by development, encroachment, and individual ownership activities risks habitat loss and endangers marsh species.

Several projects are underway to improve the health of the marsh by increasing tidal flow, improving water quality, and restoring natural marsh vegetation. For example, the NH DES supports a shellfish restoration program that promotes a viable, long-term solution for shellfish health by targeting water quality improvement.

To ensure the continued health of the marsh and estuarine system, invasive species, such as phragmites, need to be monitored and controlled through restoration or mitigation projects. The impacts from development activity in the watershed, such as stormwater runoff, also need to be regulated and monitored. Additional initiatives will provide a long-term benefit to this ecosystem that will ensure its health, a suitable habitat for fish, shellfish, and birds, and additional opportunities for the residents of and visitors to Hampton Beach. Low impact recreational activities from kayaking to bird watching can occur with minimal affect on this outstanding resource.



Sand Management

Strategy 1. Continue with and enhance existing environmental programs and regulations.

At present, there are a number of regulatory and non-regulatory management programs in the Hampton Beach area that help protect the natural and marine environment. The uses and activities that occur in the Hampton Beach area need to be managed to minimize environmental impacts to the surrounding estuarine and beach habitat. To ensure long-term protection of these resources, it is necessary to enhance the current programs and

regulations. One of the main goals is to protect the water quality of the estuary and harbor and the natural habitats of the area.

Specific recommendations related to this strategy include the following:

- Continue to fund the state's shellfish restoration program.
- Continue to require conservation easements on projects that may impact the marsh-estuarine system.
- Enhance the local school program on dune protection.
- Ensure appropriate use of Best Management Practices (BMP) for stormwater management. BMPs are techniques for controlling non-point source pollution. These techniques can be physical features such as swales and detention basins or maintenance procedures such as periodic sweeping of parking lots.

Strategy 2: Encourage an appropriate balance between actual use and protection of the area's natural and marine environment.

The Hampton-Seabrook marsh and estuarine system not only provides a significant habitat for fish, shellfish and wildlife, it also provides opportunities for appropriate uses by tourists and residents. The beach can allow heavy use on the beach, while the dunes can provide protection of property from ocean storm events. For example, the scenery along the beach and marsh is probably one of the area's greatest assets. The estuary provides opportunity for boating, fishing, clamming, and similar activities if properly controlled.

Hampton and North Beaches offer many viewing locations and vantage points. Aside from the designated viewing areas such as at the Seashell Stage and the Marine Memorial, many other locations provide not only panoramic views, but also "snapshot" views such as one looking east through the path of the State Park dunes, or through the narrow corridor of Tuttle Street to the marsh. These and other scenic views should be enhanced. For example, there could be enhanced views of the beach or marsh along street corridors, along the water's edge, or even at the main gateways to Hampton Beach. The use of interpretive signs, benches, and viewing scopes could supplement these viewing areas.

There are some streets, however, that have restrictive or unsightly views due to the development or particular use of the property. For example, Duston Avenue is blocked by a high wooden fence, and Ashworth Avenue has several, large parking lots. To improve the views, these and other areas should be landscaped or have the barriers removed.

The following viewing and scenic areas should be preserved and enhanced:

Designated Viewing and Scenic Areas

- Seashell Stage area
- Marine Memorial
- Coastal Byway
- Independence Byway

Non-Designated Public and Private Viewing Locations

- Great Boar's Head
- Top of the water slide on E Street
- State marina
- Boardwalk
- Tower at Seashell Stage
- Bicentennial Park.

The use and appreciation of the area's natural features could be enhanced as a means to preserve and improve their benefits. Any use of the dunes should be properly managed by using controlled footpaths. Passive recreational and educational activities that provide alternatives to the busy beachfront activities should be encouraged and enhanced.

Specific recommendations for this strategy include the following:

- Plan bicycle paths along the marsh and pier extensions that connect to main routes.
- Encouraging a balanced use of harbor for commercial and recreational boaters.
- Establish a dune management program.
- Promote marine education programs.

Natural Resource Protection—Regulatory

- Adopt the *Model Stormwater Management and Erosion Control Regulation*, prepared in 1997 by the NH Association of Conservation Districts and the Water Quality and Urban Conservation Committee, as part of both the Town's Subdivision and Site Plan Review Regulations. Require all developments of significant size to have the stormwater and erosion and sediment control plans reviewed and approved by a third party professional engineer.
- Amend the appropriate sections of the Hampton Subdivision and Site Plan Review to reference the *Stormwater Management and Erosion and Sediment Control Handbook for Urban and Developing Areas of New Hampshire*, 1992, as amended.
- Continue to encourage conservation easements on development projects that incorporate significant areas of sensitive or valuable natural resources.
- Enhance the monitoring of development activity adjacent to the marsh and estuary to ensure that it conforms to all applicable local and state laws as well as any conditions for subdivision or site plan approval. Such monitoring may require additional personnel that might have multi-community jurisdiction.
- Add a provision to the Hampton Subdivision and Site Plan review regulations to require developers to provide specific structural and maintenance measures (BMPs) for large developments for oil/gas separation from storm water.
- The NH Marine Patrol should enforce the state's headway standard for areas within 100 feet of the shore and consider the need to limit areas for the use of jet skiing particularly adjacent to the salt marsh edge.

Natural Resource Protection—Non-Regulatory Strategies

- Work closely with non-profit agencies, such as The Nature Conservancy or Rockingham Land Trust, to acquire properties with high natural value through easement or purchase.
- Seek local, state, and federal funding for acquisition in fee or by easement of strategic properties within or adjacent to the marsh.
- Continue to ensure that the Marine Patrol of the NH Department of Safety maintains an active presence in Hampton Harbor and the estuary to control jet skis.
- Continue to fund and implement the state’s shellfish restoration project including the water quality monitoring and sanitary shoreline survey programs.
- Continue to work in partnership with the Natural Resources Conservation Services (NRCS) and NH DES to control invasive species such as phragmites through restoration work. One specific marsh project, “Area 210” (NRCS *Evaluation of Restorable Salt Marshes, 1994*), is located south of Island Path. Improvements would include a culvert clean out and the repair of the headwall.
- NH DRED, NH DES, and the Town of Hampton should establish a dune management plan and program that includes re-planting dune grass and constructing dune boardwalks to control the *random* use of the dunes by beachgoers. It should involve state and town agencies due to the uses and activities that occur in and near the dunes.
- The Division of Ports and Harbors of the Pease Development Authority and the Bureau of Public Works (NH DOT) should continue to replenish the beaches of the Hampton Beach area--Hampton Beach and North Beach-- as part of the dredge program for Hampton-Seabrook Harbor.
- Establish a “carry in, carry out” trash program at Hampton Beach

Education

- Continue the dune education and restoration program currently sponsored by the NH DES in cooperation with Winnacunnet High School.
- Design and construct a salt marsh observation platform and pathway on Hampton Conservation Commission land adjacent to the salt marsh on Island Path.
- Initiate a dialogue with established Seacoast education centers to implement an education program that takes advantage of Hampton’s marsh-estuarine system and the beach and dune system. Such programs could include field programs and studies that focus on a) the Hampton Seabrook marsh-estuarine system, and b) the beach and dune system systems of Hampton and Seabrook.

F. Infrastructure and Public Facilities Recommendations

The water and sewer systems of the Hampton Beach area may need significant improvements depending on the amount of development in the main commercial areas, and to some extent, the level of demand from houses that are converted to year-round units. Public services including police and fire protection also have specific needs, mainly adequate buildings to support their operations. Utilities such as electric and telecommunications currently meet the needs of the users, and generally are upgraded on an as needed basis. This section proposes strategies and recommendations that range from continuing with proposed infrastructure improvements to making major investments in water and sewer projects.

Strategy 1. Provide adequate public facilities to support the needs and operations of the police and fire departments.

Public facilities should support the needs of residents, visitors, property owners, and those who work in the area. As an extremely popular summer resort, the Town and State should maintain an image that lets people know they are safe and can access medical and police services as necessary. Property owners and businesses should also be assured of adequate police and fire protection, and the town's enforcement of building codes and ordinances.

Strategy 2. Continue implementing plans to upgrade the water, sewer, and stormwater systems so that public facilities are on line as necessary and reduce flooding and improve water quality.

This strategy focuses on long-term plans for the overall improvement of the area's water, sewer, and drainage infrastructure. The area is already built out, and the responsible agency will need to replace existing water and sewer mains. Adequate timing and scheduling of construction of this infrastructure should also be coordinated among various town departments.

Since more and more areas are being covered with impervious surfaces, the zoning and subdivision ordinances should be changed to help minimize the impacts of increased runoff. Examples of methods to help reduce flooding and improve water quality include improving storm drain structures and imposing limits on the number of impervious surfaces such as paved driveways.

Strategy 3. Link investments and plans for water and sewer systems to the capital improvement programs as part of land use and development policies.

Redevelopment and revitalization of the Hampton Beach area may require upgrades to the sewer and water systems. Both these systems have long-term capital improvement programs that would accommodate anticipated growth. Policies that affect the needs of these systems, such as a low-flow water fixture program, should be linked and coordinated with the development needs of public services.

The Hampton Water Works Company has an ongoing program to improve both the supply and distribution of water. Plans for new connections should be linked as part of the implementation and management of this Plan and other project improvements.

The sewer system is comprised mainly of two types of infrastructure: (1) the streets and associated pipes; and (2) the treatment plant, which has capacity to handle increased flows. Investments in facilities that significantly increase sewer flows to Hampton Beach should be identified in the early planning stages to ensure additional capacity over the long term.

The treatment facility current discharges its treated sewer into an un-named tributary of Tide Mill Creek that is connected to Hampton River. The town is currently weighing three options for improving water quality in response to license requirements set forth by the National Pollution Discharge Elimination System.

1. Recycle gray water back into the Hampton Water Works treatment and filtration process to be distributed ultimately as drinking water.
2. Dump the treated wastewater directly into the ocean via an extended discharge outfall pipe.
3. Add separation equipment to the plant's processing equipment and discharge the treated wastewater into Tide Mill Creek.

Furthermore, other state agencies such as the NH Coastal Program are discussing impacts, costs, and benefits of this issue. Regardless of the final option, water quality should be improved, and the changes to the wastewater system should be upgrade to accommodate additional load, if any, due to expansion and redevelopment of Hampton Beach.

The following section provides more details about specific recommendations within the strategies.

Strategy 4: Rehabilitate and enhance the State Marina with upgraded facilities for both commercial fishermen and recreational users.

The State Marina provides a variety of facilities for both commercial fishermen and recreational boaters. However, to ensure a long-term, sustained use of this resource that takes full advantage of the marina's assets, a more coordinated management effort must address physical and institutional constraints. Any future planning and improvement to the marina should be undertaken in conjunction with the State Park and the southern Gateway to the Hampton Beach area.

Specific recommendations for this strategy include the following:

- Establish a Harbor Advisory Group.
- Undertake a comprehensive harbor management plan that includes the Town of Seabrook and other state and federal stakeholders.
- Implement capital improvements to the marina.

Public Facilities and Services

Police and Fire

Police protection and the safety of residents and visitors to the Hampton Beach area is a top priority for the Hampton Police Department. To maintain adequate police protection, the Department is currently planning to replace the old police building with a larger station in the same area at the intersection of Brown and Ashworth Avenue and the adjacent town parking lot.

Current building plans, however, would reduce the number of town parking spaces from approximately 600 to fewer than 200 spaces. As the town nets over \$200,000 per year from this lot, a reduction in available parking spaces would most certainly reduce these revenues. The town should reconsider plans for use of this lot for two reasons:

1. Loss of yearly parking revenue for the town
2. Loss of potential use of the lot for future development that could be part of a larger development with other adjacent lots (see *Land Use*).

The Fire Department provides fire and medical service for the Hampton Beach area as well as other parts of the town. A new station would help improve these services, especially during peak demand times. This Department has identified the present location, the exact lot to be determined, near Brown and Ashworth Avenues as the best location to build a new station.

The police and fire departments have decided to maintain separate facilities. However, it would be economical from a land-use perspective to combine the facilities since there is minimal amount of developable land in this area.

Several other recommendations include the following:

- Provide an improved medical facility to meet demands of the larger summer population.
- Provide adequate signage that directs those who need police, fire, and medical attention.
- Ensure water supplies meet the needs of the fire department.
- Reduce congestion along the streets to ensure fire and police vehicles can access incidents as needed.
- Ensure buildings meet fire codes and setback requirements to increase fire safety measures.

Sewer Systems

Sewer Collection System

The sewer systems in the Hampton Beach area are owned and operated by the Town of Hampton. The system is installed in roads, under buildings, and through private property. The Town makes periodic replacement of old pipes as problems are detected. Although some of the pipes are cleaned during the year, they still have problems with grease and sand infiltration.

The Town does not have a sewer pipe replacement program for the Hampton Beach area. However, the Town identified sewers lines, interceptors, and tributaries in need of replacement along Ashworth Avenue as part of the 201 Facilities Plan. The Town should implement these plans to achieve the following:

- Provide capacity for future improvements.
- Complete an infiltration and inflow study, and then take steps to reduce the sources of infiltration and inflow.
- Eliminate problem sewers.

Construction should begin after the summer season when there is generally the least amount of flooding and be finished before the beginning of the summer season when the beach area becomes heavily populated. The Hampton Public Works Department should conduct an infiltration and inflow (I/I) study to prioritize the areas that need replacement before plans are made for replacing pipes and pumps. Any digging of streets should also be coordinated with other improvements such as water lines and streetscapes.

The Town is currently replacing a section of sewer main as part of the Highland Avenue reconstruction. A new 18-inch pipe is scheduled to replace a pumping station along King's Highway.

Wastewater Treatment Plant

The treatment plant discharges treated wastewater into a tributary of the Tide Mill Creek, which discharges into the Hampton River. The plant uses an activated sludge process. Its capacity is expected to increase to 4.5 million gallons per day (mgd) as of June 2001.

The highest wastewater loads occur during the summer months. Although there has been an increasing amount of seasonal to year-round home conversions in the Hampton Beach area, this trend is not expected to increase wastewater flows to the system significantly. However, changes in the amount of wastewater flow to the system depend on the type of uses that occur. Families with children generally produce higher wastewater flows than those without children, such as retirees. Families also generally prefer single-family homes. Should there be many conversions of apartments to condominiums, there would probably not be any substantial increase in wastewater. On the other hand, conversion of

seasonal residences to year-round homes may increase the number of families and correspondingly increase wastewater flows.

The Town may need to assess current wastewater flows from Hampton Beach and determine the potential buildout of the area and resulting flows. Based on these results, the Town would have to respond with several actions that range from increasing plant capacity to instituting programs that educate users about reducing flows and use low-flow fixtures.

Stormwater Drainage

The stormwater system was built over the past 100 years. As new development was built, storm drains were added to reduce flooding, especially in low-lying areas. Flooding issues continue to plague this area, especially during high storm tides when stormwater cannot discharge from upland areas.

The recent replacement of a tide gate along Winnacunnet Road will help reduce flooding in the area. Currently, the Town is reconstructing the tide gate that crosses under Highland Avenue.

This stormwater drainage system needs to be thoroughly mapped so it can be used as an aid to detect additional flooding issues. The Town, with assistance from the Federal Emergency Management Agency and the State Office of Emergency Management, is currently pursuing a number of structural and regulatory actions to better manage and mitigate flood hazards. The Town should continue with these efforts as well as ensure funding is maintained to support the program requirements. Other actions as part of this strategy include the following:

- Implementation of the Town's Hazard Mitigation Plan
- Adoption of a stronger Floodplain Management Ordinance
- Work with owners of repetitive property loss from flooding
- Use best management practices (BMPs) for new development.

Water Systems

Water Distribution

The same water distribution system supplies all the public and private facilities in the Hampton Beach area. This system, which is investor-owned and operated by the Hampton Water Works Company (HWWC), supports current demand at normal times. However, supply is sometimes inadequate during peak demand. HWWC is currently addressing this problem. Redevelopment of the different parts of this area is not expected to require major upgrades.

Should a large development or a new connection be needed, the project cost would be determined on a case-by-case basis and may be negotiated between the developer and the HWWC. Although the State of New Hampshire currently has a moratorium on new water

connections to new developments, this applies only to new multi-family units and subdivisions, and should not affect the redevelopment and revitalization of the Hampton Beach area.

HWWC is currently replacing 2,000 feet of an old, 8-inch water main with a new, 16-inch water main along Highland Avenue. Additional redevelopment of the water lines along the beach will likely occur at a similar cost to the water system. This project is part of the company's long-term management program and the Town's project to improve the tidal floodwaters and roadway along Highland Avenue.

New water infrastructure may "piggyback" and be timed with other projects that require digging up the streets, such as new gas and sewer lines, or storm drains and tidal gates. Any development should be coordinated with other streetscape improvements.

Water Supply

The peak demand for water generally occurs when water sources are at the lowest, usually during the months of July and August. To ensure adequate water supplies for the Hampton Beach area, HWWC initiated a water-supply management program that aims to improve the recharge and sustainability of its groundwater sources. HWWC also has plans for water conservation measures such as retrofits for low-flow water fixtures in area buildings and a public education program to promote irrigation reduction.

As part of this Plan, we highly recommend that the Town institute a program that provides incentives for replacing old water fixtures with new low-flow fixtures. Although the Town's building codes specify that low-flow fixtures replace old ones whenever a homeowner purchases a new one, old ones may remain in use for many years. To speed up the replacement of old fixtures and reduce the demand for water, a new incentive program could set target dates to install all the old fixtures in the Hampton Beach area. This program would benefit both the water system by reducing demand and the sewer system by reducing flows.

The water supply comes from groundwater sources located in the towns of Hampton, North Hampton, Rye, and Stratham. A line for emergency uses is connected from Salisbury, Massachusetts through Seabrook, NH. To improve supply from these and other towns, regionalization of the supply is recommended. This would involve connections to other public water supply systems in towns such as Rye, Portsmouth, Exeter, or Durham. It would also require these local governments to establish cooperative agreements with HWWC. NH DES also supports this concept.

Utilities

Telephone and Communications

Telephone service to the area is adequate and will be upgraded on an as needed basis. However, cell phone reception to this area is inadequate according to residents and other

business officials in the area. The Rockingham Regional Planning Commission also identified this deficiency. The Town should work with the local cell phone providers to rectify this problem.

Electric Services

Electric service is provided by the Exeter and Hampton Electric Company (Unitil). There is sufficient capacity to support additional loads over the next several years based on current trends. The lighting along the boulevard and adjacent area should be upgraded. Depending on the location of the lights, either the Town or the State would pay for the costs of specialized lights.

Gas Service

Baystate Gas and Northern Utilities Company provide gas service to the Hampton Beach area. As part of a long-term strategy, additional capacity would be needed if there were more incremental developments such as seasonal to year-round housing conversions.

Stormwater and Flooding

The Hampton Beach area will continue to be subject to flooding from sea-level rise, heavy rains, tidal events, and severe storms. Almost all of the study area is within the flood hazard area as defined by Federal Emergency Management Agency (FEMA).

In the past, the state and the Town looked to structural solutions to alleviate this problem. The town has recently prepared a *Flood Mitigation Plan* that has a number of specific recommendations to ameliorate the impact of flooding in the Town and the Hampton Beach area. At present, the Town with the assistance of FEMA and the state OEM (Office of Emergency Management) is pursuing a number of actions recommended in the plan—structural, regulatory and non-regulatory—to better manage and mitigate flood hazards.

NH DES is currently assessing the impacts of sea level rise on the coast, which is expected to rise approximately 1 foot every 100 years. The resultant storm surge and waves, and inundation into low-lying areas are cause for long-term protection and planning. Hazard mitigation planning will have to incorporate regulations and polices that reduce these impacts and hazards.

The following recommendations will help manage floods and storms, and reduce impacts from them.

Flood hazard mitigation

- Adopt a stronger Floodplain Management Ordinance based on the 1986 FIRM map prepared by FEMA and the recommendations in the Town of Hampton's Flood Mitigation Plan. Such actions include the following:

- Review the allowed uses in the Flood Hazard area to incorporate uses that are compatible with flooding conditions, including recreational parklands, open space buffer areas, wildlife habitat and nature areas, agriculture, movable living or storage facilities and parking fields.
 - Include a Statement of Purpose in the Flood Hazard Ordinance which states that the ordinance is designed to promote the free flow of flood waters in the floodway and adjacent areas by limiting or even prohibiting development in the flood hazard area.
 - Include a provision that new or expanded existing infrastructure shall not be allowed in the FEMA designated A or V zones unless there is an exceptional public benefit and that such infrastructure will not promote or encourage new growth or development in these areas.
 - Reduce the lot coverage requirement in the special flood hazard area from 85 percent to 35 percent.
 - Limit the height of any building so as not to exceed 50 feet above the mean sea level in height.
 - Establish a zero rise in flood elevation as a threshold for any development.
- Adopt the most current version of the BOCA building code as it relates to structures built or substantially improved in the floodplain area.
 - Modify the definition of substantial improvement in the floodplain overlay district by reducing the percentage of the market value from 50 to 25 percent or by defining a specific amount of improvement that triggers floodplain review.
 - Implement the recommendations of the Town’s Flood Mitigation Plan, adopted in June of 2000. These include the following:
 - Improve the drainage system of the Meadow Pond; Gill Street/Redman Lane area.
 - Re-design Kings Highway and associated tide gates and coordinate with Meadow Pond drainage system.
 - Replace/reconstruct police and fire stations to FEMA standards.
 - Improve drainage and consider flood proofing and structure elevation for properties at lower end of High Street; from Mill Pond Lane to Kings Highway.
 - Re-design and raise Island Path/Glade Path roadways.
 - Elevate structures and flood proof structures on Great Boar’s Head.
 - Undertake a variety of flood mitigation measures for the “Island Area” along the Ocean Boulevard area north of harbor to the Seashell, including flood proofing and re-vegetation.
 - Undertake a variety of flood mitigation measures, including flood proofing, elevation of structures, re-vegetation, and purchase of development rights

for the area from Hampton Harbor and north of the Route 1A bridge to the Casino east of Ocean Boulevard.

- Continue to work with landowners with repetitive property loss from flooding and storms as identified in the Flood Mitigation Plan to determine what actions might be taken to mitigate future flood damage. Such actions might include elevation of structures, grants or loans for flood proofing, relocation or acquisition.
- Based on the findings of the Town's Flood Mitigation Plan, pursue and implement a comprehensive, action specific, flood and storm management strategy that includes the following measures:
 - Structural actions including the existing seawall maintenance and enhancement.
 - Open space protection through the acquisition of land within the flood prone portions of the Town as well as continued protection of the tidal marsh. See also similar recommendations in the Natural and Marine Environment Section.
 - Dune and beach maintenance through programs of beach nourishment particularly from the dredging of Seabrook and Hampton Harbors. See also the dune management recommendation in the Environmental section.
 - Educational programs that provide appropriate information to citizens and landholders in flood prone zones about the issue of flooding and the measures that can be taken to mitigate such a hazard.
 - Property protection using seawalls, flood proofing, and elevation of structures.
 - Emergency measures for individuals and the community to ensure a coordinated reaction to any serious flood situation.
- Investigate the potential for a Transfer of Development Rights program for properties in the Floodplain Overlay District.

Stormwater Management

- Establish a program for routine cleaning and maintenance (such as twice annually) of stormwater structures (e.g., catch basins), parking lots and street infrastructure (e.g., culverts) to minimize sedimentation to the marsh and estuary.
- Implement the stormwater improvement project as proposed by the NH Coastal Program and NH DES for the Town parking lot at Brown and Ashworth Avenues.
- Undertake a stormwater infrastructure study in the beach area to determine the feasibility of upgrading the stormwater system and/or enhancing it to provide a greater level of sediment and pollutant removal.

Sea-level Rise Management

- Inform the community of Hampton about the impacts of sea-level rise including costs, post-disaster plans, development alternatives, shoreline changes, changes in property values, and risks. This should be conducted before policies are formulated in order for property owners to understand how they may be affected. For example, property owners may base their decision to purchase, build, or rebuild a property on whether the government was going to stabilize the shoreline.
- Continue involvement with NH DES sea-level rise study to identify and prioritize storm, wave, and flood impact areas due to increasing sea levels.
- The State should monitor beach and shoreline profiles to identify areas of increased change, risk, and loss of property. The Town should work with property owners to review riparian rights along the shoreline, and identify options for property retention and minimizing risk.
- Work with FEMA, Hampton Building Department, Hampton Planning Board, and the Hampton Conservation Commission to establish more stringent flood and storm control methods and requirements. For example, the Cape Cod Regional Policy Plan sets performance standards for buildings and restricts enlargement of buildings in the FEMA V flood zones (areas of high wave potential).

V. IMPLEMENTATION

A. Implementation Strategies

This section sets forth strategies for phasing and implementation of proposed recommendations. The discussion provides first a summary of recommendations and then a summary of resources to implement the recommendations. The Summary of Proposed Actions section describes phasing and implementation according to a number of variables, including agreement on priorities, availability of public funding and private financing, receptivity of the marketplace, coordination of existing organizations and groups, and establishment of a new entity to guide and manage the projects described in this Plan. In general, we recommend that the project occur in three phases, with most of the public input and organization in the early phases and with increasing private investment toward the later phases over a ten to 50-year period.

Strategy 1. Establish an implementation entity to ensure the Master Plan is initiated and the recommendations are coordinated through a central and focused group that represents all the interests of the Hampton Beach area.

The most important step to making this Plan work is the establishment of a coordinating entity. The responsible entity needs to be enabled to carry out actions and programs simultaneously on multiple fronts. It must provide a central clearinghouse for seeking and funding resources necessary to implement the plan at multiple levels of the local, state, and federal agencies, and the private sector. The entity may have to be a partnership of the Town of Hampton, State of New Hampshire, and local agencies that can collaborate and focus on implementing this Plan.

The new management entity can take the form of **Business Improvement District (BID)**, **a tax increment finance (TIF) district**, or it could be managed with a local “downtown” manager such as with New Hampshire’s Main Street Program. A TIF allow businesses with a designated district to be exempt from a specified percent of taxes over a specified period. The tax rate generally increases during that period until it reaches 100 percent. The City of Concord has had very good results with TIFs. The BID typically has funding and bonding authorizations over a designated district. Main Street Programs provide technical assistance and are usually structured as a non-profit corporation guided by an active board.

One possible way to jumpstart the formation of the new management entity is to reorganize the existing Hampton Beach Master Plan Advisory Committee. Although they represent many of the different topic areas and user groups, the new entity would require people who support this plan and have specific experience with implementation such as grant-writing, marketing, and consensus-building.

This Committee or other community representatives could define and assign leadership roles for the Hampton Beach area revitalization, and designate an entity to execute and implement the master plan. This effort must have continuity and authority to lead and coordinate the implementation of the Hampton Beach Master Plan over the next ten years and beyond. Furthermore, there should be separate subcommittees that can focus on specific areas, such as signs and marketing plans. Each subcommittee would report to the larger entity that would coordinate all the activities.

All parties would have essential roles to play with the implementation of the plans and programs:

Town, regional, state, and federal agencies must collaborate to provide funding and leadership.

Private sector business owners and property owners must seek new opportunities for investment in the Hampton Beach area that will reinforce its value. They should also continue to support the organizations and institutions devoted to its success, including the Hampton Beach Village Precinct District or a BID and the local neighborhoods.

The **citizens of Hampton** should also stay involved and committed to ensure that they help direct the initiatives, improving the quality of life for all the residents of the area, and making Hampton Beach a desirable place to live and visit.

The involvement of key organizations and individuals in an advisory role should be maintained throughout the implementation process. Their participation and support is fundamental to the success of the master plan initiative.

Specific responsibilities for the new management entity would include the following:

Management

- Act as principal liaison with federal, state, and local agencies in implementation of the Plan's recommendations.
- Prepare and manage an organized strategy for all projects requiring permits and approvals.
- Ensure conformance with all state and local regulations and ordinances.
- Implement actions and coordinate programs simultaneously on multiple fronts.

Funding

- Identify and acquire public and private funding and resources at multiple levels, including the Town, State, the Federal government, regional agencies, and the private sector.

- Identify and solicit partnership agreements with businesses, non-profit corporations, academic institutions, federal, state, and local agencies, and citizen groups.
- Approve projects for funding through various funding agencies.
- Create and adopt a prioritized list of expenditures that are consistent with the Master Plan to ensure that they are for appropriate purposes and are properly sequenced.

Support

- Monitor progress, compile data narratives, and generate annual progress reports.
- Speak to various community groups on the progress of the Master Plan.
- Update the Plan every four years as a means to ensure recommendations will meet the needs of the program goals, strategies, and recommendations.
- Hold regular meetings to coordinate all elements and activities.
- Provide recommendations concerning updates and revisions to the Master Plan.

Strategy 2. Implement the project over a series of phases that have targeted measurable goals and actions over the 50-year planning period.

This Plan envisions three stages of growth over the next 50 years. Each of the stages provides a series of steps to be implemented at the most appropriate time. To achieve the Vision, the project will need to meet the following requirements:

- Reposition Hampton Beach by changing the image of the core area
- Build on existing resources.
- Identify opportunities for access and circulation.
- Businesses need support and coordination for development and marketing.
- Recreational opportunities need public support.

A managed and coordinated program of steps and actions will also be needed to revitalize the area. Specific needs to address include:

- Identify and prioritize actions that will have immediate and visible benefits.
- Match funding, staff, and other resources with program goals and plans.
- Determine gaps in funding and support to help acquire additional resources.
- Coordinate actions and needs with other agencies and support groups.

Strategy 3. Establish early success and ensure these projects are visible with positive reactions.

Early successes are important to the viability of the project. They demonstrate positive changes can happen by providing continuity and direct results after the planning process,

as well as establish a foundation and support for future changes and actions. Examples of these successes include painting crosswalks, new planters, new parking signs, and posting public notices of new beach happenings and planning efforts.

Other Existing Departments and Entities

Division of Parks and Recreation, NH DRED

The role of this state office would remain the same; however, it would have a representative to the new management entity, such as a BID. The management of the State Park would be conducted by this office as it has done in the past. However, new programs and park rules may be established in concert with the new management entity.

Hampton Beach Village Precinct

The role of the Hampton Beach Village Precinct would change substantially over the long term. It would either have to become a manager for a Business Improvement District (BID) or would have to support the actions of a BID. Initially, it would have a representative within the new management entity to ensure the Precinct was represented and could work directly with the entity. Over the long term, the Precinct could take on the role and responsibility of implementing a business improvement district for the core mixed-use area of the Beach.

Town of Hampton

To conform to the intent of the Plan, the Town of Hampton would adopt the Hampton Beach Area Master Plan and make the necessary changes to town regulations, such as the zoning ordinance. Furthermore, other town departments, such as the building and planning departments, would have to support the recommendations of the Plan. The Town would also have a representative on the new management entity.

B. Summary of Recommendations

The following table presents a summary of the recommendations for each section of the Plan. They are organized according these four elements.

1	Recommendation	Lists the actions necessary to achieve the objectives of the Plan
2	Initiation Responsibility	Assigns the elected or appointed body, agency, group, individuals or volunteers principally responsible to initiate the implementation action if needed beyond the coordinating entity
3	Time Frame	Time in years at which the recommendation should be implemented after the plan is approved
4	Funding Sources	Lists the potential town, state, or federal agencies, and community resources necessary to achieve the implementation action

Table 25. Summary of Recommendations

Recommendation	Initiation Responsibility Primary responsibility in bold	Time Frame (years)			Funding Sources
		Phase I (0 – 2)	Phase II (3 –9)	Phase III (10-50)	
Planning, Coordination, and Programming					
Establish a management entity	DRED and Town , HBMPAC	+			DRED, Town
Establish a Business Improvement District (BID)	Management , Village Precinct		+		DRED, NH OSP
Coordinate short and long-term actions	Management	+	+		DRED, REDC
Develop Marketing Plan	Management , BID		+		REDC
Maintain liaison with appropriate funding agencies	Management	+	+		REDC
Acquire permitting as needed for all public projects	Management	+	+	+	
<i>State Park Management</i>					
Coordinate future plans and actions with Town activities	NH DPR , BID, Chamber	+			NH DRED
Improve state park revenues	NH DRED , BID	+			
Allow off-season uses of the facilities	BID , NH DPR	+			
Continue to establish new events and coordinate with other areas	NH DPR , BID, Chamber	+			(Ongoing)
<i>Hampton Harbor Coordination</i>					
Establish a Harbor Advisory Group	PDA , NH DPR,	+			
Prepare and implement a harbor management plan for the Hampton/Seabrook Harbor	PDA , NH DPR, Harbor Advisory Group, Seabrook		+		NH OSP, PDA
Support the presence of the NH Marine Patrol vessel and personnel	NH DOS , PDA	+			NH DOS
Coordinate Route 1A bridge openings with the NH DOT	PDA , NH DOT	+			
Zoning (Zoning changes must be approved by Town vote.)					
Rewrite sign ordinance	Plan Board , HPlan, BID	+			
Create site plan review and design guidelines	Plan Board , BID	+			
Implement design controls and set minimum façade requirements	Plan Board , BID	+			
Change setback requirements for multi-family units	Plan Board , BID				
Reduce percent of lot coverage (impervious surfaces)	Plan Board , BID		+		
<i>Parking</i>					
Allow shared parking for commercial uses in the BS district	Plan Board				
Change the zoning ordinance to accommodate the preferred parking options	Plan Board , HPD, HPlan, BID		+		

BID – Business Improvement District, Chamber – Hampton Chamber of Commerce, HBMPAC – Hampton Beach Master Plan Advisory Committee, HPlan-Hampton Planning Department, Management-Management Entity, NH DOS-NH Department of Safety, NH DRED-NH Department of Resources and Economic Development, NH DOS – NH Department of Safety, NH DOT – NH Department of Transportation, NH DPR-NH Division of Parks and Recreation, NH OSP-NH Office of State Planning, PDA – Pease Development Authority, Division of Ports and Harbors, Plan Board – Hampton Planning Board, REDC – Rockingham Economic Development Corporation, Seabrook – Town of Seabrook, Town-Town of Hampton, VP-Village Precinct

<i>Zoning Map</i>					
Add business improvement district or similar management area	Plan Board, BID		+		
Change the RB district to accommodate non-conforming uses	Plan Board	+			
<i>Zoning Incentives</i>					
Encourage lots to be grouped (amalgamated)	Plan Board, BID, Town	+			
Provide open space areas within mixed-use districts	BID, HPlan		+		
Establish and preserve view corridors	BID, HPlan		+		
<i>Signage</i>					
Rewrite the sign ordinance to minimize clutter and reduce distractions	HPlan, Plan Board	+			
Define specific traffic routes, and provide clearly marked, large, directive signs	Town, NH DOT, BID	+	+		
Provide interpretive signage	Town, BID	+			NH DES/Coastal Program/ NH Estuaries Project
Land Use					
<i>Housing</i>					
Enforce the building code requirements	Town	+			
Support policies that encourage year-round residents	Town, HPlan	+	+		
Encourage separate areas for year-round and seasonal housing	BID, HPlan	+	+		
<i>Visual Character</i>					
Establish design guidelines; ensure they are consistent and enforced	BID, HPlan		+		
Establish view corridors and green spaces	Management		+		
Ensure the beach is clean	NH DPR, NH Coastal Cleanup	+	+	+	NHCP
Build viewing platforms near the estuary	NH DPR		+		NH DES, NHCP
Improve the appearance of the area	NH DRED, Town		+		
<i>Historic Resources</i>					
Recognize and identify historic resources and landmarks	Hist. Comm., NH DPR	+			
Promote utilization of historic resources	Hist. Comm., Chamber, BID	+			
Provide a minimum of building standards	NH DPR		+		

BID – Business Improvement District, Chamber – Hampton Chamber of Commerce, Hist. Comm. – Hampton Historic Commission, HPlan-Hampton Planning Department, Management-Management Entity, NHCP – NH Coastal Program, NH DES – NH Department of Environmental Services, NH DRED-NH Department of Resources and Economic Development, NH DOT – NH Department of Transportation, NH DPR-NH Division of Parks and Recreation, Plan Board – Hampton Planning Board, Town -Town of Hampton

Transportation					
<i>Roads</i>					
Close off portions of Ocean Boulevard	NH DOT, NH DPR, RPC, MPO		+	+	
Provide geometric and safety improvements	NH DOT, NH DPR, RPC, HPW	+			NH DOT
Reconstruct Ashworth Avenue	NHDOT, HPW, NH DPR		+	+	NH DOT, TEA-21
Improve/standardize signage	NH DPR, NH DOT	+			TEA-21, NH DOT
Replace Hampton River Bridge with a higher, 4-lane bridge	NH DOT, NH DPR, RPC, MPO		+		NH DOT
<i>Parking</i>					
Support parking needs with a structure at an appropriate location	NH DOT, NH DPR, Town			+	
Allow common driveways between homes	Plan Board	+			
Implement driveway ordinance to require natural fencing between driveways	Plan Board, Town Council	+			
Establish a trolley system between State Park lot and the Boulevard	NH DPR, BID, NHDOT				
Establish a remote parking lot and appropriate shuttle bus service	BID, NH DOT, Chamber		+		TEA-21
Encourage parking at the State Park parking lot	BID, NH DPR	+			
Use Brown Ave. to exit Town parking lot	HPD, Town	+			
Improve pedestrian connections to parking areas	BID, NH DPR	+	+		
<i>Alternative Transportation Modes</i>					
Install bicycles racks at strategic locations	NH DPR, Town				NH OSP
Improve accessibility for bicycles and pedestrians	NH DPR, BID		+		
Improve conditions of sidewalks	Town, HPW	+			NH DOT
Improve or expand transit service	NH DOT, NH DRED	+			
<i>Safety</i>					
Provide safer routes for pedestrian, bicycles, and skateboarders	HPD, BID	+			
The Economy and Tourism					
Extend events and attractions to the shoulder and off-seasons	BID, Chamber, NH DPR		+	+	
Create more opportunities to start or relocate professional businesses	BID, REDC, Plan Board		+		REDC
Encourage the development of different types of housing	BID		+		
Promote year-round residency	BID, Town		+		
Encourage construction and/or reinvestment of lodging properties	BID	+			
Establish an off-season business plan	BID		+		REDC
Identify attractive themes and building designs	BID, NH DPR	+			
Establish agreements for year-round state and town services	BID, NH DPR	+			
Add variety to existing events and promote off-season events	NH DRED		+		

BID – Business Improvement District, Chamber – Hampton Chamber of Commerce, HPD – Hampton Police Department, HPW – Hampton Public Works, MPO – Metropolitan Planning Organization, NH DRED-NH Department of Resources and Economic Development, NH DPR-NH Division of Parks and Recreation, NH DOT – NH Department of Transportation, NH OSP-NH Office of State Planning, Plan Board – Hampton Planning Board, REDC – Rockingham Economic Development Corporation, TEA-21 – US DOT Transportation Enhancement Act, Town-Town of Hampton.

Environment and Open Space					
<i>Regulatory</i>					
Update land use reg's to reduce environmental impacts of development	Plan Board	+			
Adopt <i>Model Stormwater Management and Erosion Control Regulation</i>	Plan Board	+			
Amend Subdivision and Site Plan Review Regulations to include reference to the <i>Stormwater Management and Erosion and Sediment Control Handbook for Urban and Developing Areas of New Hampshire</i>	Plan Board	+			
Enhance monitoring of development activity	CEO, NH DES	+	+	+	NH DES, NH OSP
Continue to require conservation easements on development projects	ConCom	+	+	+	
Enforce ordinance that requires developers to provide specific structural and maintenance measures	Plan Board		+		
<i>Non-Regulatory</i>					
Seek local, state and federal funding for open space acquisition. Acquire upland properties that have high natural value through easement or purchase	HPlan, ConCom	+	+	+	Current use penalty, LCHIP, SPNHF, TNC, WCF, NH CP
Establish program to minimize jet ski damage to the estuary	NH DOS		+		
Continue with the State's shellfish restoration project	NH DES, NH FG	+	+	+	NH DES
Control invasive species in the marsh by improving tidal flow	NH DRED, NH DES	+			NH CP
Provide educational programs and activities	NH Audubon, Tuck Museum, Seacoast Science Center, Seabrook Aquaculture Museum		+		NH EP
Develop Dune Management Plan to protect and stabilize dunes	NH DES, NH DRED	+	+		NH CP, NH EP
<i>Stormwater, Flood, and Drainage</i>					
Implement the recommendations of the Town's <i>Hazard Mitigation Plan</i>	Selectmen, Plan Board, HPW	+	+		Private, local, NH EMA (FEMA)
Adopt a stronger Floodplain Management Ordinance	Plan Board, Selectmen	+			
Help landowners with repetitive property losses	Plan Board, Selectmen	+	+	+	NH EMA
Address stormwater and flooding at the State Park parking lot	NH DPR, NH DES	+			
Clean and maintain stormwater, parking lot, and street infrastructure	HPW, private property owners	+	+	+	
Implement stormwater improvement project at the town parking facility on Ashworth Avenue	Town, HPW	+			Town, NH EMA, NHCP, NHDES
Inform the community about impacts of sea-level rise	HPlan	+			FEMA, NH DES
Seek state support to monitor shoreline changes	HPlan, NH DPR	+			NH DES
Identify more stringent flood and storm protection methods and alternatives to protect from sea-level rise impacts	HPlan, FEMA, Plan Board, ConCom	+			FEMA, NH DES

ConCom – Hampton Conservation Commission, CEO-Hampton Code Enforcement Officer, FEMA – Federal Emergency Management Agency, HPlan – Hampton Planning Department, HPW – Hampton Public Works, NH CP – NH Coastal Program, NH DES – NH Department of Environmental Services, NH DOS – NH Department of Safety, NH DRED-NH Department of Resources and Economic Development, NH DPR-NH Division of Parks and Recreation, NH DOT – NH Department of Transportation, NH EMA – NH Emergency Management Agency, NH EP – NH Estuaries Project, NH FG – NH Fish and Game, Plan Board – Hampton Planning Board, Selectmen – Hampton Board of Selectmen, Town-Town of Hampton.

<i>Amenities</i>					
Provide interpretive and directive signage	NH DPR	+			
Link the State Park and the State Marina with a walking and bicycle path	NH DPR, Town		+		TEA-21, NH DOT
Infrastructure					
<i>State Park</i>					
Redesign the boulevard to make Seashell Stage areas the “center piece” of the beach and add several pavilions along the boulevard	NH DRED, BID		+		NH DRED
Establish non-vehicle, pedestrian areas on parts of Ocean Boulevard during the high season	NH DPR, VP, NH DOT		+		
Provide additional restrooms and trash receptacles in North Beach and Hampton Beach	NH DPR	+	+		
Provide more sitting and viewing areas along the boardwalk	NH DPR		+		NH DRED, NH Scenic Byways
Reconfigure State park parking lot to accommodate more RVs and cars	NH DRED, NH DPR		+		
Provide a gateway information center at the State Park parking lot	NH DRED		+		
<i>Hampton Harbor and the Hampton State Marina</i>					
Establish a capital investment strategy for the fixed assets of the state marina	NH DRED	+	+		State capital plan, NH DRED
Maintain the 6’ depth of the channel and mooring field	PDA		+	+	NH DOT
Support development of more vessel storage capacity for summer users	Private marinas, PDA		+		Private, PDA
<i>Water System</i>					
Begin water-efficiency program for targeted areas of Hampton Beach	HWWC, Town	+			NH DES
Improve water supply on Ocean Boulevard	HWWC, BID		+		
Continue implementation of a water supply management program	Town, HWWC		+		
Establish a program that helps property owners install new low-flow water fixtures to reduce demand	HWWC, Town		+		
Address potential of connections with other municipal systems	HWWC, RPC	+			
<i>Wastewater System</i>					
Implement a wastewater management program	HPW		+		
Improve mapping of existing system	HPW, HPlan	+			
<i>Utilities</i>					
Arrange for improved telecommunications service for cell phones	Town, RPC		+		
Install underground electric service along the main beach entrances	HPW, NH DOT, NH DRED			+	
Ensure gas capacity needs are met and linked with development, and gas lines are properly mapped	Town, Baystate Gas			+	

BID – Business Improvement District, HPlan – Hampton Planning Department, HPW – Hampton Public Works, HWWC – Hampton Waterworks Company, NH DES – NH Department of Environmental Services, NH DRED-NH Department of Resources and Economic Development, NH DPR-NH Division of Parks and Recreation, NH DOT – NH Department of Transportation, PDA – Pease Development Authority: Division of Ports and Harbors, RPC – Rockingham Planning Commission, TEA-21 – US DOT Transportation Enhancement Act, Town-Town of Hampton, VP – Village Precinct.

<i>Police</i>					
Continue with proposed new police station at Town parking lot	HPD	+			
Improve signage for police services and public awareness	HPD, Sign Com, NH DOS	+			
Provide safer methods for pedestrian crossings	HPD, HPW, NH DOT	+			
Ensure continuation of adequate police protection	HPD	+	+	+	
<i>Fire</i>					
Support funds for a new fire station	Town, BID		+		
Ensure adequate fire vehicle access	BID	+			
Upgrade building code requirements for fire safety	BID, HCEO		+		FEMA
Ensure that there is adequate fire and medical protection	BID	+	+	+	
Ensure all plumbing fixtures use water-efficient technologies	HPW, HWWC		+		

BID – Business Improvement District, HCEO-Hampton Code Enforcement Officer, HPD – Hampton Police Department, HPW – Hampton Public Works, HWWC – Hampton Waterworks Company, NH DPR-NH Division of Parks and Recreation, NH DOS – NH Department of Safety, NH DOT – NH Department of Transportation, Town-Town of Hampton.

C. Estimates of Proposed Costs

The following estimate of costs refers to public costs associated with many of the recommendations contained in this Plan. The figures represent total project costs in 2001 dollars. Most costs were estimated based on given unit cost assumptions, to a concept level of detail. The costs may vary considerably depending on final design directions and technical issues encountered during design and construction. A detailed cost estimate is in Appendix IV.

Table 26. Proposed Cost Estimates for Major Improvement Projects at Hampton Beach

Recommendation	Costs
<i>Phase I (0-2 years)</i>	
Streetscape/Sidewalk Improvements	\$500,000
State Marina	\$184,000
Total Phase I Costs	\$684,000
<i>Phase II (3-9 years)</i>	
New Hampton River Bridge	\$9,625,000
State Park Area	\$2,100,000
Ocean Boulevard Pavilions and Pedestrian Improvements	\$847,000
New Performance Center	\$1,500,000
Streetscape/Sidewalk Improvements	\$7,407,000
Church/Highland Intersections	\$2,062,000
Ashworth Avenue Reconstruction	\$8,775,000
Open Space Improvements	\$25,000
Sewer Improvements	\$8,412,000
Flood Mitigation Projects	\$3,000,000
Total Phase II Costs	\$43,232,000
<i>Phase III (10-50 years)</i>	
Ocean Boulevard Reconstruction	\$4,200,000
Parking Structure	\$4,000,000
Total Phase III Costs	\$8,200,000
Total Projects Costs	\$52,116,000

The Plan envisions an implementation period of 50 years. However, most of the projects within this plan are scheduled for the first ten years since they are needed to substantially improve the outdated transportation and facilities infrastructure such as intersections and parking as well as improve the image of Hampton Beach with projects such as sidewalk improvements.

D. Summary of Resources

A variety of both debt and equity (grants) sources may be appropriate to the implementation of the Hampton Beach Area Master Plan. A range of local, state, and federal sources, and planning and technical assistance programs were explored as part of the implementation strategy. The following list of funding sources represents a first step in this process, but is not intended to foreclose other options that may arise as the Hampton Beach Master Plan Advisory Committee or another coordinating entity implements the Plan. There is also potential for private interest in projects recommended in the Plan. Many of the public and private funds also require matching amounts, usually 50 percent.

The Town would be eligible for funds generally authorized for improvements to coastal facilities and recreational areas, business districts, and neighborhoods. Boating access to Hampton Harbor, improved recreational areas, transportation improvements, and increased open space generally command some type of state or federal financial support. Funds, such as those from the NH Coastal Program, may be available for construction, expansion, and improvement of public facilities, piers, boardwalks, bulkheads, and other coastal and waterfront facilities. Funds and technical assistance may also become available for research, planning, and public infrastructure investments.

The likelihood of acquiring funding under any of these or other sources depends on a variety of factors, including timing, eligibility and competing applications. At the same time, the inclusion in a Master Plan of a project seeking funding would undoubtedly strengthen its position in any competitive review process.

A central source of funds and assistance for certain economic development projects may be retained through the Rockingham Economic Development Corporation (REDC). REDC recently completed the Comprehensive Economic Development Strategy (CEDS) for Rockingham County, and many of their sources are listed in the following table. The intent of this federally funded project was to foster inter-municipal partnerships in projects that improve the region. The Hampton Beach Area Master Plan was one of several targeted projects on the action list because of its impacts to the region. Furthermore, the region will be available for additional funding when the area becomes an approved Economic Development District (EDD) by the Economic Development Administration (EDA) under the US Department of Commerce. NH DRED also helps build community capacity for economic and community development. In fact, the Office of Business and Industrial Development recently published the *Community Development Directory*, which identifies many necessary actions and steps for capacity building as well as state and regional sources of funding and assistance.

A brief description of public funding and assistance programs of potential relevance to the implementation of the Plan follows. Although many program administrators provided

detailed information about their programs and guidelines, amounts and availability of information vary according to the specific need and request for funds or assistance.

Table 27. Sources of local, regional, state, and federal funds and assistance.

Town Sources

Many funding sources from the Town of Hampton are provided through the regional, state, and federal agencies. Locally administered funding and assistance programs for grants and loans include the following:

Program	Agency
National Flood Insurance Program (NFIP)	Federal Emergency Management Agency (FEMA)
Community Development Block Grants (CDBG)	NH Office of State Planning (administers HUD funds)
Sustainable Development Challenge Grants	US Environmental Protection Agency (EPA)

State Sources

Source:	New Hampshire Business Finance Authority (NHBFA)
Amounts:	
Uses:	Provides indirect financing for businesses with the Small Business Loan Guarantees (SBA/BFA) and assistance to Local Development Organizations
Timing:	
Notes:	

Source:	New Hampshire Department of Cultural Resources (DCR)
Amounts:	
Uses:	Provides funding for tourism, historic preservation, and the arts
Timing:	
Notes:	

Source:	Department of Environmental Services (DES)
Amounts:	Grants: up to \$225,000 for towns and organizations. Loans: state revolving loan fund
Uses:	Provides grants for program assistance for watershed management, wetlands, shore land protection, water quality planning, and air pollution Offers loans for wastewater and water supply projects
Timing:	Yearly
Notes:	DES offers a variety of grants and loans

Source:	New Hampshire Coastal Program, Office of State Planning (OSP)
Amounts:	Maximum of \$50,000. Requires 50% matching funds
Uses:	Provides technical assistance grants to the Rockingham Planning Commission and competitive grants for coastal resource planning/management projects and for construction projects
Timing:	Available yearly by January
Notes:	Also provides education resources about the coast and volunteer beach cleaning programs. This program conducts the Federal Coastal Consistency review process.

Source:	2002 Local Grants Program, New Hampshire Estuaries Project
Amounts:	\$50,000 available, \$10,000 maximum per request
Uses:	Project must have a direct environmental benefit and be linked to actions in the NHEP <i>Management Plan</i>
Timing:	Deadline of November 16, 2001. Projects start January 2001 and end by December 2001
Notes:	Eligible applicants include municipalities, community groups, nonprofit organizations, schools, and regional planning commissions in the New Hampshire Coastal Watershed. All grants require a match of at least 50% of the total project cost.

Source:	Shellfish Enhancement and Restoration Grant, New Hampshire Estuaries Project
Amounts:	\$125,000 available, can be for one or more projects
Uses:	Project must support implementation of the NHEP Management Plan, and must address topics related to softshell clam or oyster habitat improvement, improved oyster brood stocks, impacts of siltation on oysters, and oyster reproduction.
Timing:	Deadline of November 30, 2001. Projects start February 2001 and end by December 2001
Notes:	All grants require a match of at least 50% of the total project cost.

Source:	Community Development Block Grants (Administered by the Office of State Planning)
Amounts:	
Uses:	Provides non-entitlement community (Hampton) with funds to address community based needs in the areas of housing, economic development, public facilities and services, property acquisition, equipment, working capital, and infrastructure.
Timing:	Awards at beginning of each calendar year
Notes:	Hampton is not an entitlement community, which means they must compete for funds. Streetscape and Main Street improvements are eligible if area is shown to meet criteria of 'slum and blight.' Funds can be matched dollars obtained from other funding sources.

Source:	Pease Development Authority, Division of Ports and Harbors
Amounts:	
Uses:	Works with state and federal agencies to support planning and maintenance of the State's harbors and navigable rivers, in particular with mooring fields and dredge areas.
Timing:	
Notes:	

Source:	Office of Business and Industrial Development (OBID)
Amounts:	
Uses:	Provides support to existing businesses
Timing:	
Notes:	OBID is under Department of Resources and Economic Development (DRED)

Source:	Joint Promotional Program, NH Travel and Tourism Development
Amounts:	Requires 50% matching funds
Uses:	Provides grants for tourism advertising that uses web pages and pamphlets to promote tourism in the State of New Hampshire
Timing:	Approximately three times a year
Notes:	

Source:	NH Department of Transportation (NHDOT)
<hr/>	
Amounts:	
Uses:	Implements transportation improvements with USDOT TEA-21 Transportation Enhancement Program and Congestion Mitigation funds that are matched with state and local funds.
Timing:	
Notes:	Local, regional, and statewide projects are prioritized through the use of the Ten Year Plan and Transportation Improvement Program (TIP)

Source:	Community Development Finance Authority (CDFA)
<hr/>	
Amounts:	\$5,000 for grants, \$150,000 for loans
Uses:	Provides grants to non-profit and community development corporations for projects that create economic opportunities for low and moderate-income residents. Programs include NH Main Street Program and the Community Development Investment Program
Timing:	
Notes:	

Source:	NH Housing Finance Authority
<hr/>	
Amounts:	
Uses:	Provides tax credits for housing for low to moderate-income families and multi-family homes. Issues bonds and grants loans to mortgagers and non-profit housing organizations.
Timing:	
Notes:	Program has targeted incomes but is flexible. Works with elderly requiring special assistance; provides community assistance.

Source:	Land and Water Conservation Funding, NH Division of Parks and Recreation
<hr/>	
Amounts:	\$1,000,000 (\$600,000 state, \$400,000 local)
Uses:	Used for land acquisition, park improvements, playgrounds, and playing fields.
Timing:	
Notes:	

Source:	NH Recreational Trails Program (RTP) Grant, NH Division of Parks and Recreation
<hr/>	
Amounts:	Up to \$500,000 in 1991
Uses:	Used to establish new and improve existing recreational trails, purchase of trail equipment, development and rehabilitation of trailside and trailhead facilities (e.g. interpretive displays and kiosks), trail linkages, and acquisition of easements or property for trails.
Timing:	Submittal by mid January, Awarded end February.
Notes:	Supported by Federal TEA-21 program. Administered by the NH DRED, DPR. Organizations are required to provide a competitive match: RTP will match 80%.

Source:	Scenic and Cultural Byways Program, NH OSP
<hr/>	
Amounts:	\$25 million is available nationwide, requires 20% matching funds
Uses:	Used to enhance non-motorized use of the Coastal Byway including pedestrian enhancements, interpretation of byways or history, bicycle improvements, and purchase of properties due to loss of character
Timing:	The funds reauthorized nationwide every year
Notes:	Designation of roads makes the byway eligible for Federal TE-21 funds. Programs can be combined with other agencies or non-profits that have similar interests such as Historic Commissions

Regional and Private Sources

Source:	Rockingham Economic Development Corporation (REDC)
Amounts:	
Uses:	Provides support to communities and businesses located in Rockingham County Secures federal and state funds to support economic development activities Administers the Regional Revolving Loan Fund
Timing:	
Notes:	
Source:	Seacoast Business Alliance Corporation (SBAC)
Amounts:	
Uses:	Provides local business and other services to Seacoast towns
Timing:	
Notes:	SBAC is a subsidiary of REDC
Source:	Rockingham Planning Commission (RPC)
Amounts:	
Uses:	Provides advisory services regarding planning, growth, land uses, and environmental protection to the communities in Rockingham County
Timing:	
Notes:	
Source:	Granite State Economic Development Corporation
Amounts:	
Uses:	Provides capital investment through long-term, fixed-rate second mortgage loans under the SBA 504 loan program, the 7(a) Program, and the Mezzanine Loan Program
Timing:	
Notes:	

Federal Sources

Source:	US DOT - Transportation Equity Act for the 21st Century (TEA - 21)
Amounts:	\$217 billion authorized for highway and transit programs
Uses:	Sponsors a variety of programs including CMAQ, STP and infrastructure safety programs
Timing:	FY 1998 – 2003
Notes:	TEA-21 continues and expands many of the provisions and programs initiated under ISTEA. Funds are generally funneled through the NHDOT, and may require matching grants.
Source:	US DOT - TEA-21: Congestion Mitigation and Air Quality (CMAQ) Program
Amounts:	\$8.1 billion authorized.
Uses:	Reduces congestion and improves air quality in non-attainment areas
Timing:	FY 1998 – 2003
Notes:	Rockingham County was designated as a non-attainment area by the EPA. Funds are generally funneled through the NHDOT, and may require matching grants.

Source:	US DOT - TEA-21: Surface Transportation Program (STP)
Amounts:	\$33.3 billion authorized
Uses:	Supports safety improvements, sidewalk modifications to meet ADA requirements, and transportation enhancements
Timing:	FY 1998 – 2003
Notes:	STP is the broadest and most flexible component of TEA-21. Funds are generally funneled through the NHDOT, and may require matching grants.

Source:	Economic Development Department (EDA) (US DOC)
Amounts:	
Uses:	Provides public works grants, research and technical assistance grants, planning grants for economic development districts, short-term planning grants, feasibility study grants
Timing:	
Notes:	Works with the Rockingham Economic Development Corporation. Provides assistance to areas that designated as an Economic Development District (EDD)

Source:	Sustainable Development Challenge Grants (US EPA)
Amounts:	\$28,000 to \$200,000 (20 % match required)
Uses:	Initiates community-based projects that promote environmentally and economically sustainable development
Timing:	Fall
Notes:	Stresses cooperative and flexible locally-administered arrangements

Source:	U.S. Department of Agriculture Rural Development
Amounts:	
Uses:	Provides home improvement and repair loans and grants, community facilities, rural housing program, and sponsors water and waste programs
Timing:	Awards at beginning of each calendar year
Notes:	Communities with populations of up to 50,000 are eligible

Source:	Federal Emergency Management Agency
Amounts:	\$100,000 with 25% town matching funds
Uses:	Offers flood mitigation and disaster assistance and grants
Timing:	Some yearly and some one-time awards
Notes:	Also provides public outreach and other flood and emergency-related assistance.

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VI. PLANNING PARTICIPATION

A. Overview of the Community Involvement Effort

Since part of the Plan's overall vision is to provide an improved area for those who live, work, and visit the Hampton Beach area, the meaningful and effective involvement of Hampton's citizens was integral and critical to the plan development process.

The planning participation plan for the Hampton Beach Area Master Plan was aimed to accomplish the following:

1. Inform the public of the Master Planning process
2. Solicit relevant and timely reactions and input from the community
3. Utilize the resources of the Hampton Beach Master Plan Advisory Committee
4. Utilize various forms of media to present and inform the public about the Plan.

The public was involved in each step of the process through public meetings and workshops, displays, presentations, cable TV, and the local and regional newspapers. The public addressed specific concerns about their recreational, housing, business, cultural, educational, and historic needs. The Committee and other public officials were also involved with monthly meetings and various types of correspondence.

In an effort to improve the overall quality of the area, the Plan reflects the community's concerns about the types of uses, access, safety, and sensitivity to the environment. For example, improved parking arrangements and reduced congestion will help improve traffic flow for people who live in the area, reduced flooding of homes and businesses will increase both the quality of the area and property values, and increased streetscape improvements will make the place more user-friendly and attractive, especially to Hampton residents who typically avoid Hampton Beach during the summer.

B. Public Outreach

The public outreach component focused on informing the public of the basic issues at appropriate points during the planning process. Specifically, public workshops and meetings were advertised in the local newspaper, information was posted on the local town website, and the public was invited to attend the public workshops as part of the cable TV broadcast. Although the number of viewers was not determined, there are almost 6,000 subscribers to the local cable network in Hampton.

Reporters from The Union Leader wrote several articles and attended many of the Committee and public meetings. To promote participation in these events, meeting notices were also distributed in this newspaper before each public meeting.

A presentation of boards and information was displayed at the Town Library early in the planning process and during the Town Meeting at the Hampton Town Hall. This presentation provided attendees to the Meeting with an overview of the existing conditions and issues at Hampton Beach. Copies of the draft reports were made available for public review at the Hampton Town Hall.

C. Public Input

Residents, business and property owners, and key stakeholders provided a collective source of information that helped to form the recommendations and options as well as reinforce some of the proposed uses.

Group or Method	Type of Involvement
Meetings and Workshop	Provided the community’s views on the Hampton Beach area’s existing and potential uses
Hampton Beach Master Plan Advisory Committee (HBMPAC)	Helped direct the planning process
Cable Television	Broadcast public meetings that were held at the Hampton Town Hall to residents of Hampton
Interviews with key agencies and users	Provided direct input into specific issues, goals, and needs of the area

Meetings and Workshops

A series of six public meetings were held during the development of the Hampton Beach Area Master Plan. The results of the public input at these meetings are summarized below. This section will be updated during the final planning stages of this project.

Planning Board Meeting (January 17, 2001)

The consultant team made a slide presentation of the existing conditions and issues to the planning board at one of the board’s regularly scheduled meetings; a discussion followed the presentation. This meeting was broadcast on the local cable television station.

Hampton Chamber of Commerce Meeting (January 24, 2001)

The consultant team made a presentation of the issues and opportunities at the Hampton Chamber of Commerce’s monthly Business-after-Hours social; a question and answer period followed the presentation.

Existing Conditions and Vision (February 13, 2001)

The first of these meetings served as a forum both to present an assessment of the existing conditions and solicit feedback on key issues to help determine the future vision of the area. The meeting began with a slide presentation and discussion by the consultant team. Following this, the attendees divided into separate groups to discuss key issues, and the goals and vision of the area. This meeting was broadcast on the local cable station. Common ideas revolved around the following elements:

Issues and Needs

Management	Need for state and local agencies to provide improved service, coordinate actions, and accommodate needs of the visitors.
Economy and business	Need to increase investments and longer visits.
Transportation	Improve signage, access and egress; provide transit options; and improve pedestrian safety.
Land Uses	Provide places to walk; improve appearance of beach and adjacent area; and enhance residential areas.
Zoning	Need better building code and enforcement, both on and off-season.
Year-round Issues	Provide more services and events, especially for residents and at the State Park.
Environment	Reduce litter; many environmental constraints restrict building improvements.
Infrastructure and Public Facilities	Need facilities that can support fire, police, and medical needs.

Goals

Land Uses	Make the area more affordable for families and retain existing mix and separation of uses.
Management	Ensure funds and management authority are adequate to serve the needs of users.
Pedestrian	Provide pedestrian controls and a walking pier.
Business	Establish a healthy investment climate and consolidate parcels.
Year Round Uses	Promote and enhance year-round uses and activities for residents and visitors.
Transportation	Establish a coordinated transportation system; improve public transit; reduce vehicle dependency; improve signage, access, and mobility.
Parking	Reduce beach area parking issues by providing satellite parking or a parking garage with mixed use at top level.
Economy / Business	Enhance established businesses and provide a balance of tourism.
Infrastructure	Support growth with appropriate facilities; and rebuild and modernize the Seashell Stage area.
Design / Character	Establish and preserve nostalgic look; and establish uniform standards and aesthetics for building appearance.
Open Space	Provide more green and shaded areas, walking paths, and retain charm.
Environment	Improve cleanliness of the Beaches; and preserve and enhance the long-term stewardship of environmental resources.
Education	Establish education programs focused on dune/beach system and marsh and estuary system.

Needs Assessment and Recommendations (April 17, 2001)

A public meeting was held at the Hampton Town Hall on April 17, 2001 at which the consultant team presented an assessment of the needs and recommendations, and identified a future vision for the Hampton Beach area. This meeting began with a slide presentation of the needs and recommendations, then, separate groups discussed their 50-year vision of the Hampton Beach area. This meeting was broadcast on the local cable station. The following paragraphs summarize the general concerns of the participants.

Management	Recognize the importance of the various state and local jurisdictions, reduce public annoyances such as trash and cruising, and promote more community involvement and outreach.
Economy	Recognize key parcels for development, utilize the Town's lease buyout money, change the image by establishing long-term and year-round businesses, and provide development incentives.
Environment	Protect and enhance water and air quality, minimize sewer disposal impact on the marsh, build infrastructure to meet impacts of storms, and provide low-impact uses at natural resource areas.
Transportation	Promote alternative modes of transportation, properly manage parking lots, and establish designated areas for bicycles, roller-blades, and skateboards.

Summary of Draft Plan (June 7, 2001)

The consultant team made a presentation about the overall planning effort and general conclusions and recommendations of the Draft Plan during the Hampton Chamber of Commerce's Annual Summer Cookout. After the brief presentation, there was a long question and answer period.

A diverse group of business owners and seasonal and year-round residents attended this event at a local beachfront restaurant. Most of the comments and questions focused on the pedestrian boulevard, cruising impacts, parking, and the establishment of new and year-round businesses such as hotels and retail shops.

Summary of Draft Plan (September 15, 2001)

The consultant team made a presentation about the overall planning effort and general conclusions and recommendations of the Draft Plan at a public meeting held at the Hampton Fire Station at Hampton Beach. Many concerns, issues, and suggestions were made after the consultant's presentation, and are summarized below.

Implementation	Important to maintain consensus; new Hampton River bridge should be in first phase of the project; there are many out of town property owners and residents that will not be informed about the Plan and meetings; and question of who has final vote of Plan.
Land Use	Will building heights increase; utilization of parking garages due to lack of developable land.
Economy	Possibility of gambling at Hampton Beach; impacts of casino in Salisbury; economic impacts/benefits of tourists; regional economic impacts.
Environment	Water retention in State Park parking lots need to be reduced and managed; increased pollution from jet skis and runoff into Hampton River; impacts from increased development on geologic land feature (barrier island).
Transportation	Address two-way traffic on Church Street; need direct access to Brown Avenue from Town parking lot; need bike lanes on new bridge; contact NHDOT and Hampton Public Works about transportation improvements; address regional transportation issues such as lights on Routes 286 and 101 that create backups, only a few boats cause bridge open.

Update of Plan (September 24, 2001)

The consultant presented a brief summary and update of the Master Plan to the Hampton Board of Selectmen at Hampton Town Hall on September 24, 2001.

Interviews

Interviews, both by phone and in person, were held with the key stakeholders, representatives, and agencies directly involved with using or planning for the Hampton Beach area as well as with those groups who could support its revitalization. Their valuable input helped determine the most appropriate and compatible uses for this important area. Interviews were conducted with the following groups and individuals:

Citizen-At-Large Representative	Hampton Town Planner
Commercial Fisheries Industry Representative	Hampton Water Works
Conservation Commission, Town of Hampton	NH Coastal Program
Hampton Chamber of Commerce	NH Dept. of Environmental Services, Wetlands Bureau
Hampton Beach Precinct	NH DRED, Division of Parks & Recreation, Seacoast Regional Office
Hampton Beach Casino	NH State Representative
Hampton Fire Department	NH State Senator
Hampton Marina	Preston Real Estate
Hampton Planning Board	Rockingham Planning Commission
Hampton Planning Department	Salisbury Planning Department
Hampton Police Department	The Ashworth By The Sea
Hampton Recreation Department	Zoning Board Representatives
Hampton Selectmen Representative	

The wide range of organizations and individuals actively participating in the planning process underscores the fundamental importance that Hampton Beach has in the Town, region, and the State. Perhaps the greatest success of this effort has been to bring together so many ideas on how to best revitalize Hampton Beach.

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APPENDICES

Appendix I: Natural Heritage Inventory

The table documents known occurrences of rare species and exemplary natural communities within the Hampton Beach Master Plan project area based on historical (pre-1980's) as well as recent reports. Also included are non-ranked communities, indicating rare and/or good examples, that have not yet been designated a state rank.

Table A1. New Hampshire Natural Heritage Inventory

Name – Occurrence #	Listing Status		Conservation Rank	
	Federal	State	Global	State
Natural Community				
SNE Coastal Dune Community	-	-	Rare or uncommon (G3)	Critically imperiled (S1)
Brackish marsh <ul style="list-style-type: none"> • Low graminoid brackish marshes • Robust forb brackish marshes 	-	-	-	Critically imperiled (S1)
Coastal shoreline/strand/swale	-	-	-	Imperiled (S2)
Dry Appalachian oak-hickory forest	-	-	Secure (G5)	Critically Imperiled (S1S3) Rare or uncommon
Low salt marsh	-	-	-	Rare or uncommon (S3)
High salt marsh <ul style="list-style-type: none"> • Triglochin (forb) panes • Salt marsh mosquito panes • Ruppia/marsh minnow deepwater panes/ pools/ ditches 	-	-	-	Rare or uncommon (S3)
Saline/brackish subtidal channel/bay bottom communities	-	-	-	Rare or uncommon (S3)
Undifferentiated saline/brackish subtidal channel/bay bottoms	-	-	-	
Tidal creek bottoms	-	-	-	
Saline/brackish intertidal flat	-	-	-	Rare or uncommon (S3)

Table A1 (continued)

Name – Occurrence #	Listing Status		Conservation Rank	
	Federal	State	Global	State
Plant Species				
Beach Grass (<i>Ammophila breviligulata</i>)	-	-	Secure (G5)	Rare or uncommon (S8)
Cinna-Like Reed Bent-Grass (<i>Calamagrostis cinnooides</i>)	-	-	Secure (G5)	Critically imperiled (S1)
Dwart Glasswort (<i>Salicornia bigelovii</i>)	-	Threatened	Secure (G5)	Imperiled (S2)
Gray's Umbrella-sedge (<i>Cyperus grayi</i>)	-	Endangered	Secure (G5)	Critically imperiled (S1)
Hairy Hudsonia (<i>Hudsonia tomentosa</i>)	-	Threatened	Secure (G5)	Critically imperiled (S1)
Perennial Glasswort (<i>Salicornia virginica</i>)	-	Threatened	Secure (G5)	Critically imperiled (S1)
Robust knotweed (<i>Polygonum robustius</i>)	-	Threatened	Apparently secure (G4)	Imperiled (S2)
Salt-Marsh Gerardia (<i>Agalinis maritime</i>)	-	Threatened	Secure (G5)	Imperiled (S2)
Sand Drop-Seed (<i>Sporobokis cryplandrus</i>)	-	Threatened	Secure (G5)	Imperiled (S2)
Sea-Beach Needlegrass (<i>Aristida tuberculosa</i>)	-	Endangered	Secure (G5)	Critically imperiled (S1)
Small Spike-Rush (<i>Eleocharis parvula</i>)	-	Threatened	Secure (G5)	Critically imperiled (S1)
Tall Wormwood (<i>Artemisia campestris</i> ssp <i>caudata</i>)	-	Threatened	Secure (T5)	Imperiled (S2)
Vertebrates Species				
Arctic Tern (<i>Sterna paradisaea</i>)	-	Threatened	Secure (G5)	No specific locations known (SZ)
Coomon Tern (<i>Sterna hirundo</i>)	-	Endangered	Secure (G5)	Critically imperiled (S1)
Horned Lark (<i>Eremophila alpestris</i>)	-	-	Secure (G5)	Rare or uncommon (S3)
Piping Plover (<i>Charadrius melodus</i>)	L	Endangered	Rare or uncommon(G3)	Critically imperiled (S1)

Source: *Ecological Assessment of Selected Towns in New Hampshire's Coastal Zone*, Nichols 2000.

Appendix II. Consolidated Budget for Hampton Beach

This table provides a consolidated state budget for Hampton Beach. A summary on the operations and budget is discussed in Section III.F State Park System.

Table A2: State Park Budget for Hampton Beach

Income and Expenses for the Hampton Area Parks			
	Income	Expenses	Balance
State Park Patrol (1,2)	\$ 808,699	\$ 506,061	\$ 302,639
Hampton Beach State Park	\$ 346,911	\$ 104,568	\$ 242,343
Hampton Marina	\$ 50,933	\$ 32,633	\$ 18,300
Hampton Beach Seashell State Park	\$ 5,388	\$ 173,840	\$ (168,452)
Hampton Beach Lifeguards	\$ -	\$ 146,756	\$ (146,756)
Hampton Beach Cleaning (4)	\$ -	\$ 56,127	\$ (56,127)
Total	\$ 1,211,931	\$ 1,019,985	\$ 191,947

Notes:

1. These figures do not include administrative costs associated with the East Region Headquarters of State Parks.
2. These figures do not include seacoast maintenance and security costs
3. Maintenance costs associated with the cleaning of Hampton Beach, including salary, benefits, and equipment.

Detail of Expenses - Hampton Area Beaches			
	Salary and Benefits	Other Expenses (4)	Total Expense
State Park Patrol	\$ 143,132	\$ 362,929	\$ 506,061
Hampton Beach State Park	\$ 57,400	\$ 47,168	\$ 104,568
Hampton Marina	\$ 9,493	\$ 23,140	\$ 32,633
Hampton Beach Seashell State Park (4)	\$ 116,610	\$ 57,230	\$ 173,840
Hampton Beach Lifeguards	\$ 141,798	\$ 4,958	\$ 146,756
Hampton Beach Cleaning	\$ 21,907	\$ 34,220	\$ 56,127
Total	\$ 490,340	\$ 529,645	\$ 1,019,985

Note:

4. Expenses include supplies, debt service, heating fuel and electricity, equipment and maintenance, printing, telephone, repairs, trash removal, and other misc. items.

Detail of State Park Patrol - Income and Expenses (5)			
	Income	Expenses	Gain/Loss
Hampton Beach Operating Income			
Meters	\$ 601,927		0
Leased Parking Spaces	\$ 68,873		
Fines	\$ 137,911		0
Canadian Exchange	\$ (12)		
Expenses			
Salary and Benefits		\$ 143,132	
Current Expense		\$ 14,433	
Heating Fuel and Electricity		\$ 4,306	
Debt Service		\$ 297,358	
Contracted Maintenance, Building and Grounds		\$ 36,541	
Equipment		\$ 10,291	
Subtotal	\$ 808,699	\$ 506,061	\$ 302,639

Note:

5. These figures include other State Parks in the Seacoast; however the majority of costs are associated with Hampton Area Parks.

Appendix III. Fiscal Impact Analysis

Introduction

Economic Research Associates (ERA) has provided two responses to the fiscal impact issues in the Town of Hampton relating to Hampton Beach. They also reflect concerns about the fiscal impacts of new housing development and other proposed changes in Hampton Beach.

1. The first is a sensitivity model of the net fiscal impact of housing in the Town of Hampton. This model first examines the Town budget and the characteristics of residents and employees in order to understand the relationships between revenues and expenditures. It then concludes with illustrations of the net fiscal impact of different types of housing units.
2. The second is a brief review of how the conversion of seasonal resort areas into year-round communities affects property values and tax collection.

Sensitivity Analysis of Fiscal Impact

The sensitivity analysis was conducted to determine the relative impact of new housing development on the budget of the Town of Hampton. Many of the inputs for this analysis originated from the Town's 2000 Annual Report. Others are based on assumptions made by ERA based on our national experience with fiscal impact and growth issues. ERA's overall approach to this analysis was to model the effects on the Town budget of three different types of housing: single-family, multi-family, and retirement. The key variable among these housing types is the average number of school-age children per housing unit. This issue is discussed in more detail below.

The first step in this analysis was to review the Town budget and financial statements from its Annual Report. From this review, ERA determined the total amount of revenues collected and funds expended annually by the Town of Hampton, as well as applicable property tax rates and spending per student in Town public schools. In order to provide the most accurate calculation of the impact of new development, revenues and expenditures were each split into two separate categories. For both sides of the balance sheet, a category represents a directly measurable line item, and the remainder represents revenues and expenditures that cannot be accurately measured without more detailed information.

The two categories of directly attributable factors are real property taxes (revenue side) and school expenditures (cost side). Real property taxes can be easily measured by applying the Town's property tax rate to the input values of homes. School spending can be measured by applying the per student spending figure of \$6,778.62 for Hampton (as reported by the New Hampshire Department of Education) to the number of new students generated by new housing units. In fiscal year 2000, all non-property tax revenues (including state education aid) totaled \$14.3 million, and all non-school expenditures totaled \$17.0 million.

For all other revenue and expenditure data, ERA used the per capita multiplier method, which establishes how much the Town receives and spends per person. In this case, “per person” not only includes the Town’s permanent residents; it also encompasses seasonal residents and those who work in Hampton, as these people also produce revenues and expenditures for the Town. As a result, it was necessary to calculate the number of “resident equivalents” in the Town of Hampton; i.e., the effective number of people who produce non-property tax revenues and generate demand for non-school public expenditures.

Calculating resident equivalent factors necessitated examining the behavior of four different types of users in order to determine what percentage of the 8,736 hours in a year each type spends as “residents” of the Town. To do this, each day during the year was divided into three eight-hour occupancy units, resulting in a total of 1,092 occupancy units per year, and a series of calculations were done to measure how many of these occupancy units are consumed by each user type. The four types of users and their occupancy characteristics are described below.

1. *Residents in Labor Force* – This group lives in Hampton, and its members are therefore considered Town residents for two of three occupancy units per workday, and all three per weekend day, or 832 of the 1,092 annual occupancy units. These people may also be employed in the Town, but if they are, they are counted in the *Persons Employed in Town* category.
2. *Residents not in Labor Force* – This group lives in Hampton and, since its members do not work, is assumed to spend all 1,092 annual occupancy units as residents of the Town.
3. *Seasonal Residents* – This group’s members behave just like the *Residents not in Labor Force* group, but they are only part-year residents. It is assumed that, on average, these residents spend about 30 percent of the year in Hampton, or 328 of the annual occupancy units.
4. *Persons Employed in Town* – Persons employed in Hampton spend one annual occupancy unit per workday in the Town, which translates to 260 for the whole year.

The resident population of the Town of Hampton was estimated in 1999 at 13,496. From the 1990 Census, it is known that about 55 percent of Hampton’s residents were in the local labor force, so applying this figure to the total population produces an estimate that 7,423 residents are in the labor force and the remaining 6,073 are not. For seasonal residents, no accurate count is available, but an estimate was made by applying the 1990 Census figure of seasonal housing units as a percent of total units to the Town’s total population. This results in an estimated seasonal population figure of 5,398. For employees, the State of New Hampshire reported a monthly average of 7,120 employees in Hampton in its most recent year-end data.

Adjusting all of these populations by the resident equivalency factors from above, the total resident equivalent population of the Town of Hampton is estimated at 19,744. This figure was then applied to the non-specific budget line item totals from above to determine the amount of non-property tax revenue and non-school expenditures generated by each resident equivalent. These totals came to \$724.45 in non-property tax revenue and \$861.46 in non-school expenditures per resident equivalent.

Next, a measure of resident equivalents per housing units needed to be determined, as the fiscal impact analysis approach was to assess the impact of each new unit. Dividing the resident

equivalent figure of 19,744 by the Town's total housing inventory of 9,258 units, the average number of resident equivalents per housing unit in the Town of Hampton is 2.13.

The only remaining inputs not defined are home value, which determines property tax revenue, and school-age children per housing unit, which determines school expenditures. Home value is addressed in the actual calculation of impacts; as the model is set up to show the net fiscal impact per housing units based on a range of values. School-age children are addressed by making assumptions about the average number of children per single-family, multi-family, and retirement home. ERA made the following assumptions:

- Single-family homes: 0.75 students per housing unit
- Multi-family homes: 0.40 students per housing unit
- Retirement homes: 0 students

With all of the inputs set, the final step was to calculate the “breakeven” price for each type of housing unit. This signifies the home value at which the revenues produced equal the expenditures. These breakeven prices are:

- Single-family homes: \$340,950
- Multi-family homes: \$183,850
- Retirement homes: \$4,260

Clearly, whether or not a new home contains any school-age children has a tremendous influence on its net fiscal impact. Single-family homes, which are likely to have the most children, demand relatively high property values to overcome their fiscal costs. In contrast, retirement homes, which are assumed to have no schoolchildren, can produce positive impacts with relatively low property values, as new Town spending from these units is minimal.

Fiscal Effects of Shifting from Seasonal to Permanent Populations

The Town of Hampton expressed concern over the fiscal effects of recommended initiatives throughout the Master planning process. One of the economic initiatives suggested for Hampton Beach by ERA was to focus efforts on increasing the year-round population of the beach area. It is our understanding that this proposed strategy, while generally well received, raised concerns about the fiscal implications of such a shift.

ERA's recognizes that these concerns are legitimate. Their analysis point out that a new house with just one school-age child would need to be worth over \$450,000 to pay for itself in tax revenues. However, such an analysis only focuses on the residential development aspects of the economy. If Hampton Beach were to increase its year-round resident base, the Town of Hampton would likely experience more than just new housing—new retail and service businesses are likely to open to cater to these new residents, thus increasing commercial property values in the Town.

Beyond just the residents themselves and services created for them, making Hampton Beach more of a year-round area makes it potentially more desirable for high-tech businesses and other office users. Hampton Beach is located within a reasonable distance of major airports in Boston and Manchester (as well as Pease International Tradeport in Portsmouth), and has direct access to Interstate 95 and a wonderful natural environment. However, its perception as a seasonal beach

getaway prevents it from capitalizing on many opportunities to build itself as a year-round business location.

Another aspect of increasing Hampton's year-round appeal has to do with the types of residents it would draw. In ERA's experience, the prime reason that seasonal resort areas evolve into year-round communities is retirement. Simply put, today's summer beachgoer from Boston may well become tomorrow's retiree who moves to Hampton Beach permanently. This phenomenon has begun to occur elsewhere in New England, notably on Cape Cod. Housing types also matter, as condominium or apartment developments are far more likely to draw empty nesters or retirees than families with children.

An interesting example of the above trends is Hull, Massachusetts. Hull, a historically seasonal beach town located on a narrow peninsula about 25 miles south of Boston, has experienced substantial year-round population growth over the past two decades due to suburban expansion from Boston to Hull. Transit improvements in the area, such as a commuter boat into Boston and plans for extension of a commuter rail line from Boston to neighboring Hingham, have aided Hull's transformation.

The Town of Hull decided in the 1980s to focus its development strategies first on condominium units, and this strategy paid off, as few of the families who bought these units have school-age children. As demand continued to increase, prices of single-family housing in Hull rose dramatically, with the Town's median sales price rising from \$89,000 in 1994 to \$200,000 in 2000. Hull's profile as a destination has improved as well, and, in response, a new hotel was built in Hull for the first time in many years. Though Hull's school system has grown substantially in recent years, the rise in property taxes has allowed the Town to build new schools and improve existing ones without raising its tax rates.

Hull provides a number of lessons that can be applied to Hampton Beach. In terms of transportation, the re-opening of the Amtrak line from Boston to Portland, while not a commuter line *per se*, will help improve transportation options along the New Hampshire Seacoast. Regarding housing, the type of housing developed will significantly shape the future character of beach area residents. Finally, in terms of education, the combination of rising home values and new commercial development allows school spending to increase without large tax increases.

Table A3. Net Fiscal Impact by Housing Type

	Low		Breakeven	High	
Single-Family Homes					
Value of Unit	\$ 300,000	\$ 325,000	\$ 340,950	\$ 350,000	\$ 375,000
School-age Children per Unit	0.75	0.75	0.75	0.75	0.75
Revenues Per Unit					
Municipal Taxes	\$ 2,760	\$ 2,990	\$ 3,137	\$ 3,220	\$ 3,450
School Taxes	\$ 1,770	\$ 1,918	\$ 2,012	\$ 2,065	\$ 2,213
Other Revenues	\$ 340	\$ 340	\$ 340	\$ 340	\$ 340
Total Revenues	\$ 4,870	\$ 5,247	\$ 5,488	\$ 5,625	\$ 6,002
Expenditures Per Unit					
Non-School Expenditures	\$ 404	\$ 404	\$ 404	\$ 404	\$ 404
School Expenditures	\$ 5,084	\$ 5,084	\$ 5,084	\$ 5,084	\$ 5,084
Total Expenditures	\$ 5,488				
Net Fiscal Impact Per Unit	\$ (618)	\$ (241)	\$ 0	\$ 137	\$ 514
Multi-Family Homes					
Value of Unit	\$ 150,000	\$ 175,000	\$ 183,850	\$ 200,000	\$ 225,000
School-age Children per Unit	0.40	0.40	0.40	0.40	0.40
Revenues Per Unit					
Municipal Taxes	\$ 1,380	\$ 1,610	\$ 1,691	\$ 1,840	\$ 2,070
School Taxes	\$ 885	\$ 1,033	\$ 1,085	\$ 1,180	\$ 1,328
Other Revenues	\$ 340	\$ 340	\$ 340	\$ 340	\$ 340
Total Revenues	\$ 2,605	\$ 2,982	\$ 3,116	\$ 3,360	\$ 3,737
Expenditures Per Unit					
Non-School Expenditures	\$ 404	\$ 404	\$ 404	\$ 404	\$ 404
School Expenditures	\$ 2,711	\$ 2,711	\$ 2,711	\$ 2,711	\$ 2,711
Total Expenditures	\$ 3,115				
Net Fiscal Impact Per Unit	\$ (511)	\$ (133)	\$ 0	\$ 244	\$ 622
Retirement Homes					
Value of Unit	\$ 1,000	\$ 4,000	\$ 4,260	\$ 10,000	\$ 100,000
School-age Children per Unit	-	-	-	-	-
Revenues Per Unit					
Municipal Taxes	\$ 9	\$ 37	\$ 39	\$ 92	\$ 920
School Taxes	\$ 6	\$ 24	\$ 25	\$ 59	\$ 590
Other Revenues	\$ 340	\$ 340	\$ 340	\$ 340	\$ 340
Total Revenues	\$ 355	\$ 400	\$ 404	\$ 491	\$ 1,850
Expenditures Per Unit					
Non-School Expenditures	\$ 404	\$ 404	\$ 404	\$ 404	\$ 404
School Expenditures	\$ -	\$ -	\$ -	\$ -	\$ -
Total Expenditures	\$ 404				
Net Fiscal Impact Per Unit	\$ (49)	\$ (4)	\$ 0	\$ 87	\$ 1,446

Source: Town of Hampton; New Hampshire Department of Education; Economics Research Associates.

Table A4. Town of Hampton Annual Budget and Revenues and Expenditures Per Resident Equivalent - Fiscal Year 2000

	Budget Amounts	Revenue/ Expenditures Per Resident Equivalent
Non-Property Tax		
Property Taxes	12,225,064	\$ 619.16
Other Taxes		
Land Use Change	3,500	\$ 0.18
Yield	-	\$ -
PILOT	15,000	\$ 0.76
Interest and Penalties	199,739	\$ 10.12
Total	218,239	\$ 11.05
Licenses and Permits	2,615,089	\$ 132.45
Intergovernmental	985,490	\$ 49.91
Charges for Services	680,859	\$ 34.48
Miscellaneous	577,935	\$ 29.27
Operating Transfers In	1,104,259	\$ 55.93
State Education Funding	8,122,015	\$ 411.36
Total Non-Property Tax Revenues	14,303,886	\$ 724.45
Non-School Expenditures		
General Government	3,190,964	\$ 161.61
Public Safety	5,885,654	\$ 298.09
Highways & Streets	1,402,679	\$ 71.04
Sanitation	3,262,124	\$ 165.22
Health	224,972	\$ 11.39
Welfare	75,059	\$ 3.80
Culture & Recreation	226,578	\$ 11.48
Debt Service	1,464,479	\$ 74.17
Capital Outlay	681,979	\$ 34.54
Operating Transfers Out	594,627	\$ 30.12
Total Non-School Expenditures	17,009,115	\$ 861.46

Source: Town of Hampton; Economics Research Associates

Table A5. Calculation of Resident Equivalents

	Population/ Employment	Per Capita Ann'l Eight Hour Occupancy Units	Total Ann'l 8-Hr Occup. Units	Resident Equivalents
Total Town Population:	13,496			
Residents in Labor Force: 1/	7,423	832	6,175,770	7,423
Residents not in Labor Force:	6,073	1,092	6,631,934	7,971
Seasonal Residents: 2/	5,398	328	1,768,516	2,126
People Employed in Town:	7,120	260	1,851,200	2,225
				19,744

1/ Estimate of labor force participation based on 1990 Census figures for Town of Hampton, which showed that about 55 percent of residents were in labor force.

2/ Estimate of seasonal population based on 1990 Census figures for Town of Hampton, which showed that about 40 percent of all housing units in the Town were vacant. Seasonal population is therefore estimated at 40 percent of total population.

Source: Town of Hampton; U.S. Bureau of the Census; Economics Research Associates.

Table A6. Inputs for Net Fiscal Impact by Housing Type

Tax Rates		
Municipal Tax Rate:	9.20	per \$1000 of valuation
School Tax Rate:	5.90	per \$1000 of valuation
Non-Property Tax Revenues/Expenditures Per Unit		
Total Resident Equivalents:	19,744	
Housing Inventory:	9,258	
Resident Equivalents per Housing Unit:	2.13	
Non-Property Tax Revenues:		
Per Res. Equivalent	\$ 724.45	
Per Housing Unit	\$ 339.69	
Non-School Expenditures		
Per Res. Equivalent	\$ 861.46	
Per Housing Unit	\$ 403.93	
School Expenditures		
Per Student	\$ 6,778.62	

Source: Town of Hampton; New Hampshire Department of Education; Economic Research Associates.

Appendix IV. Proposed Cost Estimates for Major Hampton Beach Projects

This table provides a detailed cost estimate for major projects at Hampton Beach. An explanation and summary of costs are presented in Section V. Implementation.

Table A7. Detailed Cost Estimates for Major Project in Hampton Beach

Building/Facility	Sq. Ft or Units	Cost/Sq. Ft or unit	Building/ Facility Cost
State Park Area			
New visitor center	4,150	\$200	\$ 830,000
New restaurant	4,150	\$120	\$ 498,000
Parking for 10 buses	7,500	\$5	\$ 37,500
Parking (Restaurant and Visitor Center)	12,000	\$5	\$ 60,000
New playground	4,000	\$25	\$ 100,000
Bike rental facility	1,675	\$50	\$ 83,750
Walking and bike path along the river	4,500	\$2	\$ 9,000
Landscaping	6,000	\$10	\$ 60,000
Sub-Total Costs			\$ 1,678,250
<i>Indirect (25%)</i>			\$ 419,563
Total Costs			\$ 2,097,813
Ocean Boulevard Pavilions and Pedestrian Improvements			
2 Pavilions	4,880	\$200	\$ 976,000
New Restroom Facility	800	\$80	\$ 64,000
Benches	10	\$750	\$ 7,500
Sun or shade awnings	2,300	\$20	\$ 46,000
Bike racks	4	\$500	\$ 2,000
Lighting	2	\$10,000	\$ 20,000
Picnic Tables	10	\$1,000	\$ 10,000
Landscaping	4,000	\$10	\$ 40,000
Sub-Total Costs			\$ 1,165,500
<i>Indirect (25%)</i>			\$ 291,375
Total Costs			\$ 1,456,875
New Performance Center (with bathrooms)			\$ 1,500,000
Streetscape/Sidewalk Improvements (1)			
Ocean Boulevard	12,000	\$225	\$ 2,700,000
Ashworth Avenue	9,600	\$225	\$ 2,160,000
Side streets (A - Q Streets)	14.872	\$150	\$ 2,230,800
Sub-Total Costs			\$ 7,090,800
<i>Indirect (25%)</i>			\$ 1,772,700
Total Costs			\$ 8,863,500
Church / Highland Intersections			
Route 1A Reconstruction (Highland Avenue to Church Street)	1,500	\$1,200	\$ 1,800,000
Pedestrian/crosswalk Improvements	300	\$200	\$ 60,000
Benches	4	\$750	\$ 3,000
Water feature	1	\$25,000	\$ 25,000
Landscaping		\$5,000	\$ 5,000
Sub-Total Costs			\$ 1,893,000
<i>Indirect (25%)</i>			\$ 473,250
Total Costs			\$ 2,366,250

Table A7. (continued)

Ocean Boulevard Reconstruction			
Road reconstruction	4,600	\$700	\$ 3,220,000
Signage		\$100,000	\$ 100,000
Pedestrian crosswalks and signals	6	\$10,000	\$ 60,000
Sub-Total Costs			\$ 3,380,000
<i>Indirect (25%)</i>			\$ 845,000
Total Costs			\$ 4,225,000
Ashworth Avenue Reconstruction (2)			
Road reconstruction	4,300	\$1,600	\$ 6,880,000
Signage		\$100,000	\$ 100,000
Pedestrian crosswalks and signals	4	\$10,000	\$ 40,000
Sub-Total Costs			\$ 7,020,000
<i>Indirect (25%)</i>			\$ 1,755,000
Total Costs			\$ 8,775,000
New Hampton River Bridge			
Bridge construction		\$7,000,000	\$ 7,000,000
Bridge demolition (existing bridge)		\$500,000	\$ 500,000
Signals	2	\$100,000	\$ 200,000
Sub-Total Costs			\$ 7,700,000
<i>Indirect (25%)</i>			\$ 1,925,000
Total Costs			\$ 9,625,000
Streetscape and Signage Improvements	20,000	\$25	\$ 500,000
Parking Structure	400	\$10,000	\$ 4,000,000
Open Space Improvements			
Viewing platform near the marsh	100	\$50	\$ 5,000
Bikeway along State Marina and State Park	1,500	\$10	\$ 15,000
Sub-Total Costs			\$ 20,000
<i>Indirect (25%)</i>			\$ 5,000
Total Costs			\$ 25,000
Sewer Improvements			
Ashworth Avenue North			\$ 264,160
Ashworth Avenue North Side Streets			\$ 401,900
Ashworth Avenue South			\$ 399,050
Ashworth Avenue South Side Streets			\$ 939,090
Replace Sewer Main on King's Highway			\$ 1,000,000
Sub-Total Costs			\$ 3,004,200
<i>Indirect (40%) (3)</i>			\$ 1,201,680
Total Costs			\$ 5,888,232
Flood Mitigation Projects			\$ 3,000,000
State Marina			
Piers, docks, floats, dockside hoist, and dredging in the dock area			\$ 130,000
Office/Toilet Improvements			\$ 17,300
Sub-Total Costs			\$ 147,300
<i>Indirect (25%)</i>			\$ 36,825
Total Costs			\$ 184,125
Grand Totals			\$ 52,506,795
Assumptions			
1. Includes benches, lighting, trees, and sidewalk improvements			
2. Does not include property takings			
3. Increased 40% over previous (1990) cost estimates			