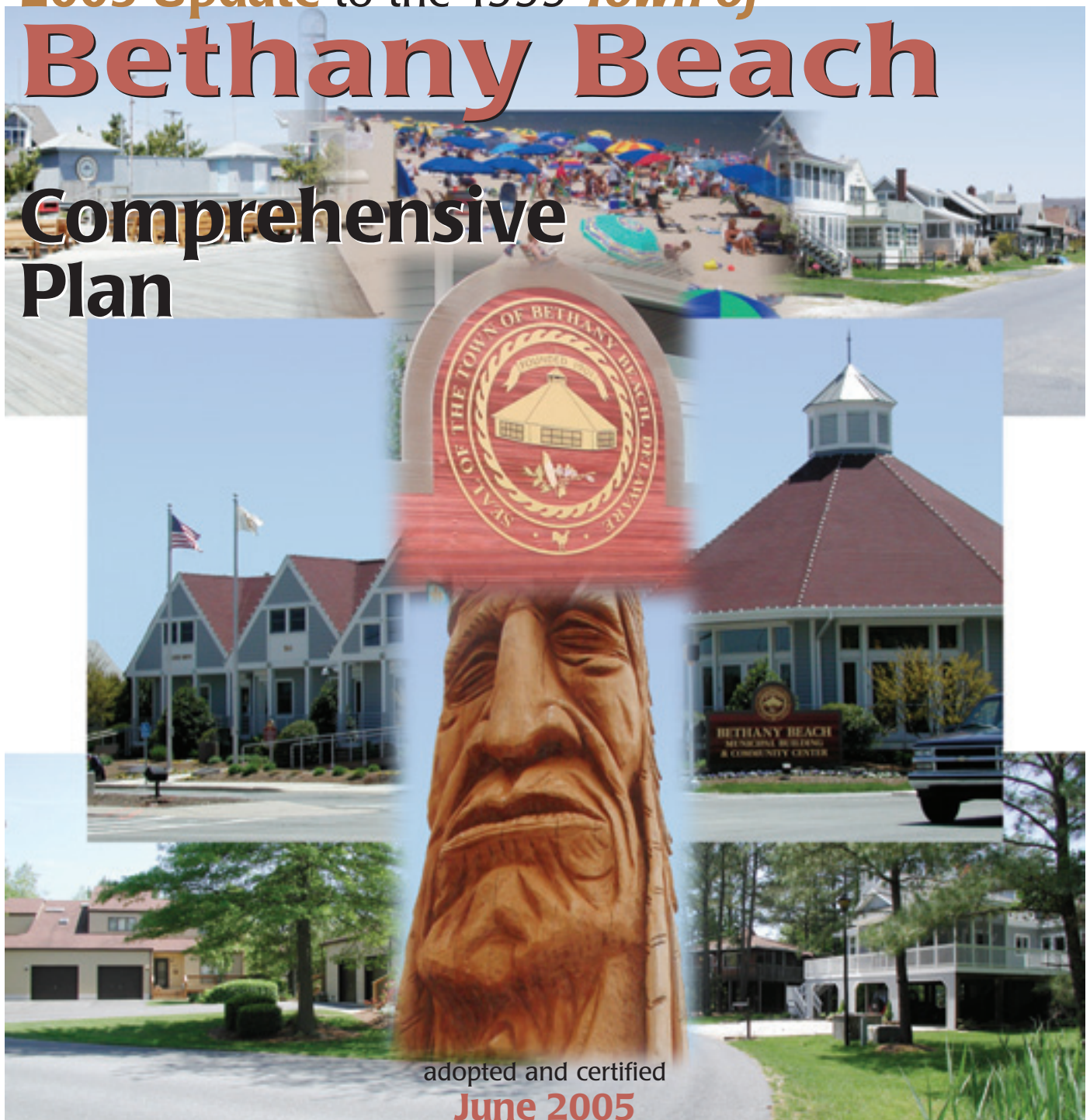


2005 Update to the 1999 *Town of* **Bethany Beach**

Comprehensive Plan



adopted and certified
June 2005

prepared by



Institute for Public Administration
College of Human Services, Education & Public Policy
University of Delaware

www.ipa.udel.edu

2005 Update to the 1999
Town of
Bethany Beach
Comprehensive Plan

adopted and certified
June 2005



STATE OF DELAWARE
EXECUTIVE DEPARTMENT
OFFICE OF
STATE PLANNING COORDINATION

July 11, 2005

Mr. Clifford M. Gravier
Town of Bethany Beach
P.O. Box 109
214 Garfield Parkway
Bethany Beach, DE 19930

RE: Certification of Comprehensive Plan

Dear Mr. Gravier:

I am pleased to inform you that as of June 17, 2005, per the recommendation of the Office of State Planning Coordination, the comprehensive plan for the Town of Bethany Beach is hereby certified provided no major changes to the plan are enacted. The certification signifies that the comprehensive plan is currently in compliance with State Strategies.

I would like to take this opportunity to thank the Town of Bethany Beach for working with the State to incorporate our recommendations into the plan before adoption. My staff and I look forward to working with the Town to accomplish the goals set forth in your plan.

Congratulations on your certification!

Sincerely,

A handwritten signature in cursive script, reading "Constance C. Holland".

Constance C. Holland, AICP
Director

Town of Bethany Beach, Delaware

A Resolution to Adopt the 2005 Update to the Town of Bethany Beach Comprehensive Plan

WHEREAS, Title 22 of the Delaware Code empowers municipalities to develop a comprehensive plan to guide the future of the town; and

WHEREAS, Delaware House Bill 255 requires that all municipalities in Delaware develop and adopt comprehensive plans that address issues established in this bill; and

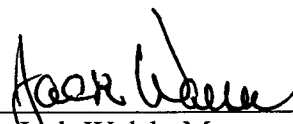
WHEREAS, the Town contracted with the Institute for Public Administration (IPA), College of Human Services, Education, and Public Policy, University of Delaware to assist in the development of this comprehensive plan; and

WHEREAS, the Town received comments from the Office of State Planning Coordination in a letter on April 21, 2005, which outlined the issues to be addressed in order for the plan to receive certification from the state; and

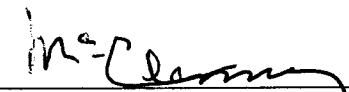
WHEREAS, the Bethany Beach Planning Commission has received this plan review, amended the plan to meet state certification requirements, and recommended that the Town Council adopt the comprehensive plan with the revisions outlined in the memo of June 1, 2005, from IPA to the Town.

NOW, THEREFORE, BE IT RESOLVED BY THE COUNCIL OF THE TOWN OF BETHANY BEACH, that the comprehensive plan is adopted as amended, a copy of the plan and revisions attached hereto and made part of this resolution.

RESOLVED BY THE COUNCIL OF THE TOWN OF BETHANY BEACH ON THIS 17th DAY OF JUNE 2005.



Jack Walsh, Mayor



Tony McClenny, Secretary

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FOREWORD

In the year 1887 Dr. F.D. Power conceived the idea of developing an eastern seaside resort for the Disciples of Christ Church. In 1905, Dr. Power expressed his sentiments as follows:

Bethany would be a haven of rest for quiet people. It claims to present a safe and rational way of spending the heated term. It offers wholesome recreation – the pleasures that come from bathing, boating, fishing, crabbing, picnicking; the comforts and tonic influences which the sea affords, without the dissipations found at more fashionable watering places.

Those words, written about one hundred years ago, reflect what many Bethany Beach residents find desirable about their town. Since the first Comprehensive Development Plan was published in 1968, the same words have been used to describe Bethany Beach: a small, growing, residential, resort community.

The major goals of the Comprehensive Development Plan are to retain the characteristics that make Bethany Beach unique and give highest priority to the care and protection of the oceanfront, flood control, land use and recreation. It will be difficult to achieve these goals in view of the tremendous growth that is taking place in the areas surrounding Bethany Beach. Overdevelopment that exceeds the capacity of the ecosystem or fails to respect a community's sense of place will result in resentment and the eventual destruction of the very attributes that attract people to Bethany Beach.



TOWN, COUNTY, AND STATE OFFICIALS

Town of Bethany Beach

Mayor and Council

John D. Walsh, Mayor
Carol Olmstead, Vice-Mayor
Tony McClenny, Treasurer
Jerry Dorfman, Council Member
Wayne A. Fuller, Council Member
Lew Killmer, Council Member
Harold A. Steele, Council Member

Planning Commission

Lew Killmer, Chair
Philip Boesch
Kathleen Mink
Steve Trodden
Steve Wode
Cal Baldwin (ret.)
Jerry Dorfman (ret.)
Charles Gravatte (ret.)
Tony McClenny (ret.)
John D. Walsh (ret.)

Town Staff

Clifford M. Gravier, Town Manager
Lisa A. Kail, Town Clerk
John M. Eckrich, Jr., Building Inspector

Sussex County

County Administrator

Robert L. Stickels

County Council

Dale R. Dukes, 1st District
Finley B. Jones, 2nd District
Lynn J. Rogers, 3rd District
George B. Cole, 4th District
Vance Phillips, 5th District

State of Delaware

Governor

Ruth Ann Minner

Senate

George H. Bunting, Senator, 20th District

House of Representatives

Gerald W. Hocker, Representative, 38th District

Office of State Planning

Constance S. Holland, AICP, Director

INSTITUTE FOR PUBLIC ADMINISTRATION

This document is an update and revision of the 1999 Comprehensive Development Plan. This update was prepared by the Town of Bethany Beach Planning Commission with assistance from the Institute for Public Administration (IPA), a unit within the College of Human Services, Education & Public Policy at the University of Delaware. IPA links the research and resources of the University of Delaware with the management and information needs of local, state, and regional governments in the Delaware Valley. IPA provides assistance to agencies and local governments through direct staff assistance and research projects as well as training programs and policy forums.

Institute Director

Jerome R. Lewis, Ph.D.

Bethany Beach Comprehensive Plan Update Team

Martin Wollaston, IPA Planning Services Manager

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David Levett, Research Assistant

William DeCoursey, Research Assistant

Mapping and GIS Development

Nicole Minni, GIS/Graphics Specialist, Water Resources Agency

Erin Cole, IPA Research Assistant

Staff Review Team

Plans developed by IPA are a total team effort, utilizing the individual skills of many of the staff and students working with the IPA Planning Services Group. In addition to the IPA staff and students listed above, thanks also go to Ed O'Donnell for his valuable comments as well as Mark Deshon for the cover design and editorial assistance. A special thank you also goes to Ann Marie Townshend, Sussex County Circuit Planner for the State Office of Planning and Coordination, for her guidance and insight in developing the Town of Bethany Beach Comprehensive Plan.

A Municipal Comprehensive Development Plan for Bethany Beach, Delaware June 2005

INTRODUCTION

This Comprehensive Development Plan is intended to serve as a guideline for the future development of Bethany Beach. It has been adopted by the town council and is given official recognition as a guide for future planning efforts as a considered reflection of the wishes of the community and its representatives. The legal means for the implementation of the goals and objectives of this plan are included in zoning codes and other municipal codes and ordinances. This plan is a flexible guideline, and the updating or revision of planning goals and objectives is essential to keep the planning program responsive to the changing needs of the community. The public's understanding of the role, and contribution to the efforts of the Planning Commission are needed to keep the community's best interests aligned with the town's growth and development plans for the future. Community interest and cooperative commitment to practical planning and the timely implementation of the goals and objectives of comprehensive development planning will contribute to a higher quality of life in Bethany Beach.

The plan is also an informational document for the public. Citizens, business people, and government officials can turn to the plan to learn more about Bethany Beach and its policies for future land use decisions. Potential new residents can use the documents as an informational resource about the town, including its characteristics and facilities, to help them make decisions about moving to Bethany Beach. This document contains the most current information on population, transportation, housing, employment, and the environment, which may be of interest to land developers, economic-development professionals, and financiers.

Finally, the Bethany Beach Comprehensive Plan is a legal document. The Delaware Code specifies that "... any incorporated municipality under this chapter shall prepare a comprehensive plan for the city or town or portions thereof as the commission deems appropriate." The code further specifies, "after a comprehensive plan or portion thereof has been adopted by the municipality in accordance with this chapter, the comprehensive plan shall have the force of law and no development shall be permitted except as consistent with the plan." (§ 702, Title 22, Delaware Code)

CHAPTER 1. BACKGROUND

1-1. Authority to Plan

Delaware law requires that municipalities engage in comprehensive planning activities for the purpose of encouraging “the most appropriate uses of the physical and fiscal resources of the municipality and the coordination of municipal growth, development, and infrastructure investment actions with those of other municipalities, counties and the State....” This plan was written to comply with the requirements of a municipal development strategy, as described in the Delaware Code (below), for towns with population of 2,000 or fewer.

The municipal comprehensive plan for small communities (such as Bethany Beach) with fewer than 2,000 people is to be a “document in text and maps, containing at a minimum, a municipal development strategy setting forth the jurisdiction’s position on population and housing growth within the jurisdiction, expansion of its boundaries, development of adjacent areas, redevelopment potential, community character, and the general uses of land within the community, and critical community development and infrastructure issues.” In addition, the town’s comprehensive-planning process must demonstrate coordination with other municipalities, the county, and the state during plan preparation. (22 Del. C. 1953, § 702; 49 Del. Laws, c. 415, § 1.)

State law requires that planning be an ongoing process and that municipalities identify future planning activities. This document is Bethany Beach’s Municipal Comprehensive Development Plan as required by state law. It is intended to cover a ten-year planning period and be reviewed at least every five years.

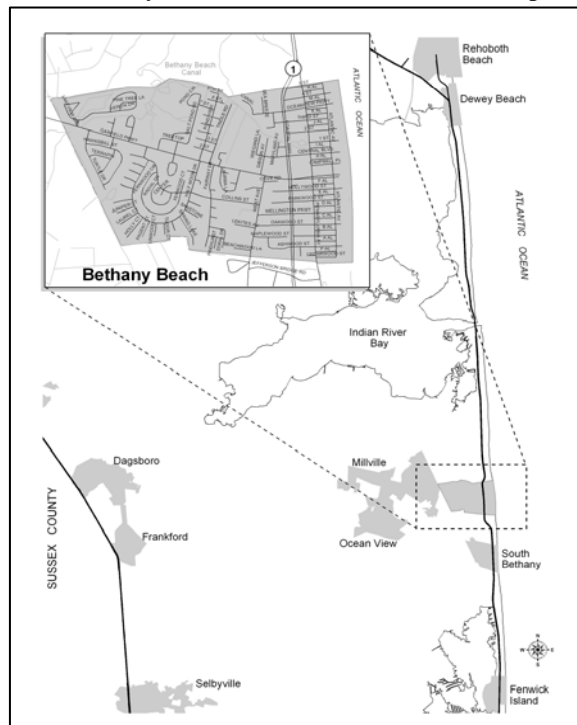
In July 2003 the Town of Bethany Beach contracted with IPA at the University of Delaware to complete an update of its comprehensive plan. IPA assembled a team of professional staff, consultants to IPA, and graduate research assistants that would work with the Bethany Beach Planning Commission and Town Council to cooperatively craft the town’s comprehensive plan.

1-2. A Brief Overview of the Community

Location

The Town of Bethany Beach is an incorporated town in Sussex County, Delaware, located on a headland that extends approximately one mile along the Delaware Bay barrier island complex. It is located approximately six miles north of the Maryland state line and approximately four miles south of the Indian River Inlet. The town is bounded on the east by the Atlantic Ocean and on the west by the Town of Ocean View. It encompasses an area of approximately one square-mile. The Town is bisected by S.R. 1 and S.R. 26 (Garfield Parkway).

Bethany Beach, Delaware – Location Map



History

The community of Bethany Beach was founded in 1901 through the joint efforts of the Christian Missionary Society of the Washington area and the Bethany Beach Improvement Company. The Missionary Society had founded the site in 1894 for the purpose of summer camp religious retreat meetings. The Improvement Company was disbanded in 1902 after the first town government, consisting of a mayor, a secretary, a treasurer and six commissioners, was formed. A second Improvement Company initiated substantial community development. New housing, a boardwalk and the Bethany Beach Loop Canal highlighted the new improvements. By 1909 the community was an incorporated municipality.

The development of Bethany Beach was typical of the trend followed by most coastal Delaware communities founded during the early 1900s. During the early years of development, special emphasis was placed on securing a comfortable existence and establishing humanistic values, resulting in a unique community character. Later years of development fostered a trend that emphasized additions to community facilities and improvements to quality of life, which have culminated in today's developmental characteristics.

Several observable historical trends have had a major impact on the community and continue to influence its development. The community characteristics spawned in 1901 continue to dominate the Bethany Beach area. The town is a family-oriented resort community. The religious foundations were symbolized for years by the Bethany Beach Tabernacle, which was irreversibly damaged in 1962 by

storms and termites. Religious recreational activities eventually co-existed with cultural and patriotic meetings and a moderate amount of tourism.

Since its founding, the community has been influenced by several nearby urban metropolitan areas. The very first visitors to the religious retreats had a two-day journey from Baltimore, Philadelphia, Pittsburgh and Washington, D.C., by rail, water, and wagon. Transportation improvements over the years have made the town much more accessible, and the summer population increases annually. The opening of the Chesapeake Bay Bridge in the 1950s created a high-speed route from the District of Columbia and Baltimore areas. Consequently, most of Bethany Beach's seasonal residents, visitors, and immigrating retirees come from urban backgrounds.

The Bethany Beach area has had continuous involvement with government installations. A U.S. Coast Guard station was manned in the community from 1907 to 1947. A naval radio-compass station operated for years from Bethany Beach. Coastal Defense troops were quartered in the town during World War II, and the existing Delaware National Guard training installation was used as a POW camp. It continues to be an active National Guard training camp.

The Town of Bethany Beach is waging a continual struggle with the natural forces of wind and water, which have threatened the town throughout its history. The town's boardwalk has been rebuilt six times since 1903, and many of its hotels have fallen victim to a storm's fury. The famous coastal storm of 1962 ravaged the town. Waves estimated to be 20-30 feet high hammered the boardwalk area, and a tidal storm surge destroyed over 30 homes. Despite these intermittent storms, the Town of Bethany Beach continues to make history as one of Delaware's finest coastal communities.

Natural Features

Topography

Bethany Beach is located in the Delaware coastal plain and is characterized by variations of elevation between one and twelve feet, with an average elevation of ten feet along the coastline and five feet inland. Slopes are generally less than one percent with the exception of the remnants of the dune line and the canal banks. The community's specific location is on the seaward side of a highland, which is surrounded by low-lying coastal wash-over barriers. Bethany Beach is a relatively narrow upland area protected against the sea.

Geology

The entire barrier-island complex, including the Bethany Beach area, is undergoing increased geological change, demonstrated by intense local erosion processes and prolonged landward movement. This movement is caused by persistent rise in sea level and catalyzed by annual storm activity, which accelerates natural erosion processes. Coastal erosion rates are high in the Bethany Beach area. The town's groin field consists of nine groins installed between 1934 and 1943, with additional groins installed in the 1980s, covering approximately 4,300 feet of beach. The structures have slowed erosion

but have not halted the process. Intense erosion during the winter storm seasons leaves a relatively narrow beach, and beachfront development has compromised the protective dune line. This community, like other coastal communities of similar development, is vulnerable to the destructive effects of storm surge, flooding and storm-wave damage, which occur during large coastal storms. A number of beach replenishment projects over the years have maintained the integrity and quality of our beach strand.

The land on which Bethany Beach rests predominantly comprises Pleistocene-age sands and gravel. The transport of these sediments by wave action and long-shore drift along the coastline of Bethany Beach has considerable impact on the erosion rate of the shoreline. Historically, Bethany Beach has been significantly influenced by several drift systems. Some of these drift systems have been influenced by erosion while others have been characterized by deposition. Presently, the community is adjacent to an area located between South Bethany and Fenwick Island that effectively interrupts the direction of long-shore drift currents. Sand sediment deposited by coastal-drift activities north of the nodal area moves in a northerly direction toward Cape Henlopen, Delaware. Sand movement south of the nodal area is to the south, crossing the state line into Maryland. The cumulative effect of littoral drift transport of sand from Bethany Beach, influenced by the nodal area, is that more sand is exiting the area than is entering the area. The littoral supply of sand sediment to Bethany Beach is extremely limited and will continue to be so for some time.

Weather and Climate

Bethany Beach is located in the mid-latitudes of the east coast and is primarily influenced by migratory weather systems from the west. This weather pattern is variable. Air masses that influence the Bethany Beach area are primarily maritime tropical during summer and continental polar in winter. Over 40% of the low-pressure areas in the U.S. pass directly northeastward, close enough to influence weather conditions locally. The general climate is mild. Summers are warm (typically, July is the hottest month with a maximum afternoon temperature average of 85°F) and humid with only a few brief hot, humid periods. Winters are cool to cold with small amounts of snow. The mean annual temperature has varied from 55 – 58 degrees F with no significant change measured during the last 75 years.

Precipitation averages about 42 inches for the year, which is well distributed, ranging from 1/2 inch to between 5 and 7 inches reported monthly. Severe thunderstorms usually occur between May and August. The ocean temperature is controlled primarily by air temperature. The temperature of the ocean off the coast of Bethany Beach varies from 33 – 38 degrees F in the winter to 70 – 75 degrees F in the summer. The depth of Bethany Beach's coastal waters varies from ten feet, near the shore, increasing gradually to 60 feet in the offshore shipping lanes.

1-3. Overall Community Vision and Goals

Public Participation Process

As an initial step in the planning process, the Bethany Beach Planning Commission wished to engage the members of the Bethany Beach community in order to objectively and democratically gauge the

opinions of residents and property owners regarding a range of planning-related issues. Working with IPA, the Commission developed a public-participation project that involved a mailed written questionnaire and a public workshop that would serve as the vehicle for public input and vision regarding the plan for the future of the town. This public-participation project was executed between December 2003 and March 2004, yielding a substantive collection of data and information to be used to guide the planning process. The following sections provide details regarding the components of the project, the actual process, and the results.

The Planning Commission developed a questionnaire that included a range of planning-related issues and was expected to provide vital information regarding the values and desires of the Bethany Beach community. During the fall of 2003, the Commission and IPA staff drafted and revised the questionnaire to maximize the utility of the data that would be provided by respondents. In November 2003 the Commission finalized the questionnaire to be used and made preparations for its distribution. The questionnaire document consisted of five demographic questions, eight issue-related questions, and a section for additional written comments. The demographic questions asked respondents to describe themselves based upon property ownership and type, residence location, employment, and length of residence in Bethany Beach. The eight issue-related questions included 47 individual components that asked for respondents' views regarding a wide variety of topics, including community character, residential and commercial development, transportation, seasonal visitors, public services and facilities, parking, and unique issues such as beach access and replenishment.

The Town of Bethany Beach staff coordinated and executed the distribution of the written questionnaire by mail in December 2003, mailing one form for each town property. In order to facilitate the return of completed questionnaires, the mailing included a pre-paid return envelope in which respondents could mail completed forms. In addition, the Town made available a printable electronic version of the questionnaire on the official town website (www.townofbethanybeach.com). The Town also mailed reminder postcards to all recipients in mid-December in order to maximize response. The questionnaire was printed with a return deadline of January 1, 2004; however, completed forms returned after the deadline were collected and included in the tabulation of data. A total of approximately 2,700 forms were mailed by the town's staff, and completed forms were forwarded to IPA. Between January 1, 2004, and February 13, 2004 (the last parcel delivery of completed forms received by IPA staff from the town), IPA staff tabulated a total of 1,812 returned questionnaires. Using the total number of forms mailed as a reference—and because the number of respondents who accessed the electronic questionnaire is unknown—the approximate calculated return rate was 67%. This was seen as a very successful return rate for the project, especially when compared to similar projects in other Delaware communities.

On March 13, 2004, the Town of Bethany Beach held a public workshop to discuss the results of the public participation project undertaken over the previous four months. While the February 2004 meeting of the Bethany Beach Planning Commission included this topic on the agenda, the Commission determined that the project would benefit from additional public input in the form of a workshop devoted exclusively to reviewing the public participation project. A member of the IPA staff was present at the public workshop to present the data in a multimedia format and record the comments of

the public to be incorporated into this report and the planning principles to be used as a guide for the update to the town's comprehensive plan. Following the meeting, the Planning Commission discussed final recommendations for the report at their March 20, 2004, meeting and forwarded these recommendations to IPA staff for incorporation into this plan. Based upon the results of the entire public participation project, IPA staff developed a list of core planning principles to guide planning work in the update of the town's comprehensive plan over the course of 2004.

Overall Plan Goals

Goal Statement 1

Create an attractive and healthy environment that preserves the quiet atmosphere that makes the town an attractive community for living, working, and family recreation.

- Objective – Maintain a residential land use pattern that will achieve a moderate density of population sufficient to support adequate community services without creating congestion or overloading community facilities.
- Objective – Preserve the present quality of housing in Bethany Beach and prevent the emergence of blighted areas.
- Objective – Maintain high standards of administration of the town's zoning code and subdivision ordinance to ensure the quality of present and future residential and commercial property.
- Objective – Encourage and support a commercial land use pattern that serves the needs of town residents and reflects the attitude of residents who envision Bethany Beach as a resort community, including the limitation of commercial areas to existing zones.
- Objective – Focus public investment in the development, redevelopment, and improvement of land within the existing town boundaries rather than investment in expansion or annexation.
- Objective – Encourage the development of a local, year-round medical facility supported by the major regional medical institution (Beebe Hospital).

Goal Statement 2

Protect natural resources and environmentally sensitive areas in and around the town and reduce the dangers posed to town residents and visitors by natural and manmade disasters.

- Objective – Provide a system that will reduce flooding in the community.

- Objective – Encourage the participation of federal, state and county agencies to assist in the town’s program to fight beach erosion and increase public access to all existing shoreline beach areas, including associated parking facilities, both locally and regionally.
- Objective – Encourage and support an effective program of planning in Bethany Beach and Sussex County that will achieve quality development and ensure protection of coastal natural resources and the environment in general.
- Objective – Firmly establish a commitment to provide and maintain an adequate supply of potable water.
- Objective – Design and develop a town-wide stormwater-management system. Address drainage problems by the continued maintenance of effective swales and ditches.
- Objective – Engage in a dialogue with state agencies and other local governments that recognize the local impact of regional development patterns in Sussex County and seek cooperative solutions to sustainable development and resource protection.

Goal Statement 3

Create a safely navigable community for all town residents and visitors.

- Objective – Develop and maintain an efficient, balanced, and safe street-and-highway system with adequate facilities for pedestrians, cyclists, and motorists.
- Objective – Construct and maintain adequate, safe bicycle and pedestrian ways along all major streets.
- Objective – Encourage the participation of county and state agencies to assist in promoting and funding a safe and efficient system of multi-modal transportation in Bethany Beach, including the possible expansion of the town shuttle service.
- Objective – Ensure the adequacy of regional transportation for town residents to access employment, recreational, and commercial opportunities in other areas of the state.
- Objective – Work to ensure the safety of pedestrians when crossing major and minor roadways, considering implementation of sidewalks in areas that present safety risks.
- Objective – Engage in a dialogue with state agencies and other local governments that recognize the local impact of regional development in Sussex County and seek cooperative solutions for efficient and equitable transportation services and infrastructure.

CHAPTER 2. MUNICIPAL DEVELOPMENT STRATEGY

The goal statements and recommendations established in this chapter are derived from the “Overall Plan Goals” listed in Section 1-3 of the plan.

2-1. Demographics and Population

This section of the plan provides details regarding the past, present, and future expected population of the Town of Bethany Beach. The data contained in this section may be useful in providing information regarding future service and facility needs, as well as information regarding anticipated changes in the social character of the Bethany Beach community. Information from this section will be noted extensively in other sections of the plan document to reinforce and justify many of the core recommendations. Demographic data used in this planning document was collected from the 1990 and 2000 U.S. Census, the 2003 Delaware Population Consortium report, and the 1999 Town of Bethany Beach Comprehensive Plan.

Important note: The data and statistics included in this section have been drawn primarily from the U.S. Census Bureau, among other sources. While the accuracy of the data is probably very good, the figures apply only to the permanent population of the Town of Bethany Beach. The vast majority of people who enjoy residence in the town are seasonal and occasional residents, weekly or weekend lessees, and daytime visitors. In fact, some of the town’s officials are not permanent residents themselves. Unfortunately, accurate statistics regarding this significant portion of the population are extremely difficult to generate, and estimates of these statistics are not recommended for communities the size of Bethany Beach. It is important that the absence of data regarding this segment of the town’s population be recognized; however, some basic data regarding the Bethany Beach community are necessary to provide a basic profile of the town and its people.

Total Population

In 2000, the population of the Town of Bethany Beach was 935, according to the 2000 U.S. Census. The year-round town population was estimated by the U.S. Census to have remained the same as of July 2002. From 1990-2000, Bethany Beach’s year-round population grew from 326 to 935, nearly a 187 percent increase. This impressive growth translates into an annual growth rate exceeding 11% per year, dwarfing the same statistic for both Sussex County (2.5%) and the state as a whole (1.5%). This ten-year growth explosion of 187 percent is unprecedented in the town’s history, more than doubling the second largest growth rate experienced by the municipality since at least 1940 (1970-1980, 75%).

The increase in year-round population numbers seems to demonstrate the desirability of living in Bethany Beach and the existence of an ample housing stock. The projections for growth illustrate the rapid increase in population due primarily to the increasing popularity of coastal Sussex County as both a retirement and tourist destination. As growth continues along the coast, environmental and financial issues will cause increasing pressure on the residential and rental markets within the town, as well as mounting pressure on Bethany’s parking infrastructure and public beach resources.

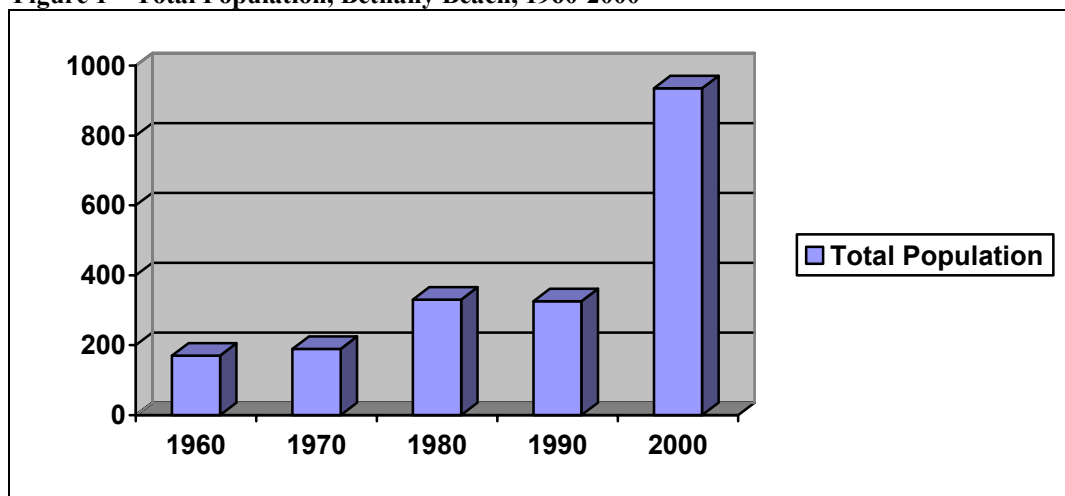
Table 1 and Figure 1 display population data for the Town of Bethany Beach, Sussex County, and the State of Delaware.

Table 1 – Total Population, 1960-2000

Place	1960	1970	1980	1990	2000
Bethany Beach	170	189 (+11.2%)	330 (+74.6%)	326 (-1.2%)	935 (+186.8%)
Sussex County	73,195	80,356 (+9.8%)	98,004 (+22.0%)	113,847 (+16.2%)	157,430 (+38.3%)
Delaware	446,292	548,104 (+22.8%)	594,338 (+8.4%)	669,069 (+12.6%)	786,448 (+17.5%)

Source: U.S. Census 2000

Figure 1 – Total Population, Bethany Beach, 1960-2000



Source: U.S. Census 1960-2000

Population Projection

Population projections are often difficult to accurately compose and are very unreliable for small geographic areas, because there is a large margin of error when manipulating relatively small numbers. Therefore, state sources do not typically calculate population projections for towns the size of Bethany Beach. One method of estimating future municipal population is to project it as a percentage of the growth projected in its larger surrounding area. Another is to project forward the existing trend line for growth within the municipality. Each estimate provides unique results, which have been summarized in an average population projection.

The first scenario uses the U.S. Census information for Bethany Beach from 1960 to 2000, included in Table 1. The population counts for these ten-year periods indicate that population has grown at an average rate of about 68 percent every ten years. Using this figure as the standard for projection, a more aggressive population projection can be derived. The second scenario calculates the town's portion of the official county population projection to 2030 based upon the percentage of the total county population residing in Bethany Beach in 2000. Reliable population projections for Sussex

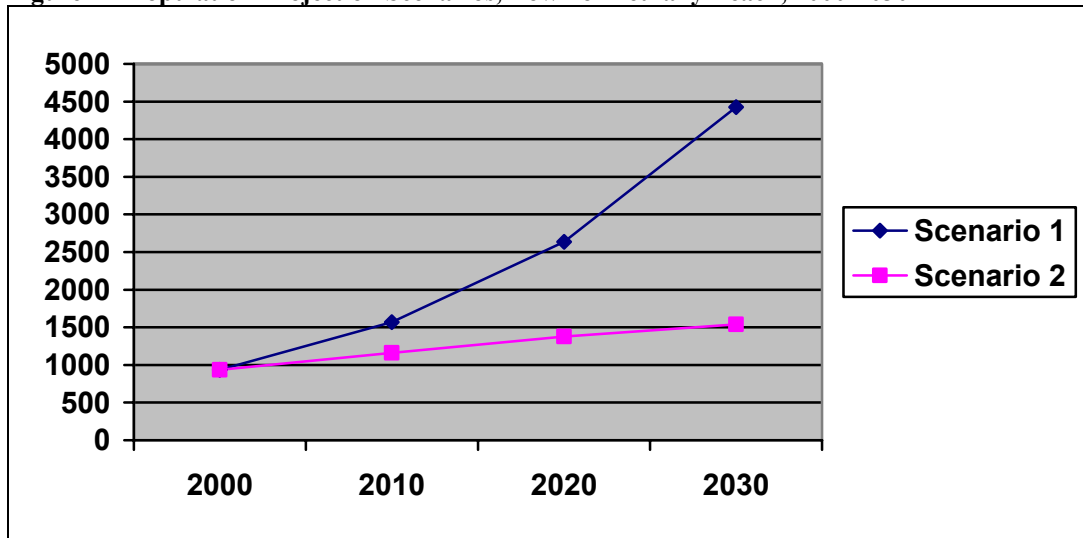
County are available and regularly updated by the Delaware Population Consortium. Using this method, a more conservative projection is derived. Figure 2 and Table 2 display the results of these two scenarios graphically, and it is proposed that the future population of Bethany Beach will lie within the range shown by these two projection methods. However, it is again important to note that these projections are not necessarily reliable and are provided only for some basic information regarding the anticipated future of the town and the content of its community.

Table 2 – Population Projection Scenarios, Town of Bethany Beach, 2000-2030

Growth Scenario	2000	2010	2020	2030
Scenario 1: Trend Projection of Decadal Growth	935	1,570 (+67.9%)	2,636 (+67.9%)	4,426 (+67.9%)
Scenario 2: Portion of Projected Sussex County Population	935	1,159 (+24.0%)	1,379 (+19.0%)	1,538 (+11.5%)

Source: IPA, U.S. Census 2000, Delaware Population Consortium

Figure 2 – Population Projection Scenarios, Town of Bethany Beach, 2000-2030



Source: IPA, U.S. Census 2000, Delaware Population Consortium

An important factor in the growth of the Bethany Beach community is the rate at which the town transforms from a summer resort community to an increasingly permanent, year-round community. A parcel survey completed in the spring of 2004 showed that the town is largely built-out. This seems to indicate that population growth in the future will be made up of existing seasonal residents or rental property owners relocating permanently to Bethany Beach or selling their existing property to year-round households. However, individual tastes and market forces, both of which are impossible to predict, will continue to determine future trends in population and development.

Racial Composition

Table 3 details the racial composition of the Town of Bethany Beach as compared to Sussex County and the State of Delaware as a whole.

As shown, Bethany Beach's population includes a greater proportion of non-minority persons than Sussex County or the State of Delaware. Diversity in the town has grown statistically over the last decade, but the composition of the town remains almost entirely white. While this data does not directly imply the need for policy changes or specific needs, the relative diversity of the town's population in comparison to the surrounding area is an important part of a comprehensive profile of the community.

Table 3 – Racial Composition (%) by Place, 2000

Race	Bethany Beach	Sussex County	Delaware
White	98.1%	80.3%	74.6%
Black	0.0%	15.0%	19.0%
Other	1.9%	4.7%	6.4%

Source: U.S. Census 2000

Age

Table 4 provides some basic information regarding the age of persons living in Bethany Beach, Sussex County, and the state of Delaware.

Table 4 – Age Groups (%) by Place, 2000

Age Range	Bethany Beach	Sussex County	Delaware
0-17 years	10.2%	22.5%	24.8%
18-64 years	50.5%	59.0%	62.3%
65+ years	39.3%	18.5%	12.9%

Source: U.S. Census 2000

The town's population is significantly older than the population of either Sussex County or the state. The proportion of people under 18 in the town is nearly half that of the county and the state. This suggests a reduced need for educational facilities, daycare services, and other child-related institutions. The proportion of adults 18-64 years of age in Bethany Beach is also lower than that of Sussex County and the state as a whole. Persons of prime working age represent a lower portion of the people in Bethany Beach as compared to the surrounding region, indicating a relatively smaller labor pool for necessary services in and around the town. Regarding seniors, Bethany Beach hosts a proportion of persons over 65 years of age or over that is nearly double the proportion in Sussex County and well over twice the proportion in the state. This trend is further illustrated by more thoroughly examining the makeup of the adult population in these three places. These data are presented in Table 5.

Table 5 – Age Profile (%) of Adult Population by Place, 2000

Age Range	Bethany Beach	Sussex County	Delaware
18-29 years	5.8%	12.4%	28.8%
30-39 years	6.1%	13.5%	15.1%
40-49 years	13.6%	14.4%	11.4%
50-59 years	15.6%	12.8%	8.0%
60-69 years	22.4%	11.7%	6.2%
70-79 years	20.0%	8.8%	2.7%
80+ years	6.3%	3.9%	3.0%

Source: U.S. Census 2000

In Sussex County and the State of Delaware, the data presented on the previous page suggest that older persons represent a steadily decreasing portion of the population as age increases. For example, persons over 70 years of age make up only about one-twentieth of the total population of Delaware, where as young adults between 18 and 29 years old make up more than a quarter of the population. In Bethany Beach, this regional trend is nearly reversed. Young adults make up little more than one-twentieth of the total population, and residents over the age of 70 make up more than a quarter of the population. In fact, nearly half (48.6%) of the population of Bethany Beach in 2000 was over the age of 60. Clearly, the town is increasingly displaying the characteristics of a relatively older community that can be expected to require services conducive to the needs of seniors.

Education

Table 6 presents data regarding the educational attainment of persons over the age of 25 living in Bethany Beach, Sussex County, and Delaware. As shown, the modal educational level for the Town of Bethany Beach is a bachelor's degree, while the modal category in both the State and the County is a high school diploma. In addition, the proportion of individuals in Bethany Beach with a college education or higher is nearly double that of the state as a whole, and over twice the rate of Sussex County. Nearly four-fifths of the working-age population of Bethany Beach has education beyond the high school level, compared to roughly half of the working-age populations of Delaware and Sussex County. However, this data must be qualified by the age composition of the town. Keeping in mind that a large portion of the population of Bethany Beach is no longer part of the workforce or close to retirement, the knowledge-skills shown here may not provide potential employers or general economic sectors with resources for location in or around Bethany Beach. However, these data do suggest a significant potential within the resident population for contributive public involvement in knowledge-intensive project design and implementation.

Table 6 – Educational Attainment (%) by Place, 2000

Highest Level Achieved	Bethany Beach	Sussex County	Delaware
No High School	0.0%	7.0%	5.0%
Some High School	3.5%	16.5%	12.4%
High School Diploma	18.0%	35.6%	31.5%
Some College	27.8%	18.2%	19.5%
Associate Degree	6.9%	6.1%	6.6%
Bachelor's Degree	28.1%	10.1%	15.6%
Master's Degree	11.3%	4.6%	6.2%
Professional Degree	3.6%	1.3%	1.7%
Doctoral Degree	0.8%	0.6%	1.5%

Source: U.S. Census 2000

Income and Poverty

Table 7 shows median-household-income data for Bethany Beach, Sussex County, and the State of Delaware. Personal income in Bethany Beach is significantly higher than that in Sussex County as a whole. In fact, median household income in Bethany Beach is a full third larger than that in Sussex County. In addition, the median household income in Bethany Beach is nearly ten percent higher than that in the state as a whole. While this does not necessarily translate into direct benefit to the town, the

higher income levels enjoyed by residents in Bethany Beach facilitates property maintenance and improvements that allow for the preservation and improvement of the town's community environment more easily than in other communities in the state.

Table 7 – Median Household Income, 2000

Bethany Beach	Sussex County	Delaware
\$51,875	\$39,208	\$47,381

Source: U.S. Census 2000

Table 8 displays data regarding poverty status among the populations of Bethany Beach, Sussex County, and the state of Delaware. Poverty status is determined by the U.S. Census by the use of specific poverty thresholds identified and refined each year by the federal government. Poverty thresholds are the statistical version of the poverty measure and are issued by the U.S. Census Bureau. They are used for calculating the number of persons in poverty in the United States or in states and regions. For example, the poverty threshold for a family of four in the 2000 Census was an annual income of \$17,050, not including public assistance or other unearned income.

Table 8 – Poverty Status by Age Group and Place, 2000

Age Group	Bethany Beach	Sussex County	Delaware
All Ages	4.7%	10.5%	9.2%
0-17 years	9.6%	15.3%	12.3%
18-64 years	5.6%	9.4%	8.3%
65+ years	1.6%	8.4%	7.9%

Source: U.S. Census 2000

As shown, the town hosts a much lower percentage of persons living in poverty as compared to the county and state as a whole. The poverty rate for Bethany Beach is less than half that of Sussex County and roughly half that of the state. Considering the large proportion of seniors living in the town, the fact that less than two percent were reported as living in poverty in 2000 seems significant. The interpretation of this data suggests that the town is not in need of the services and facilities necessary to provide public support to an impoverished population. However, this does not preclude the idea that these services and facilities should be identified and supported on a regional level by the town.

Table 9 provides some specific income-related data for the Town of Bethany Beach, Sussex County, and the State of Delaware. In nearly every income classification, residents of Bethany Beach had a higher mean income, especially notable in the self-employment and public assistance categories. While a smaller percentage of Bethany Beach's population received wage or salary income in 2000 compared to the state or county, a larger percentage of its residents were self-employed and received income from investments. In addition, a much larger portion of the Bethany Beach population received social security and retirement income in 2000 as compared to the county or state. Considering the age profile of the town, these data seem to make sense and reflect the observations detailed in previous sections.

Table 9 – Selected Income Data by Place, 2000

Income Type		Bethany Beach	Sussex County	Delaware
Wage or Salary	% of Households	57.9	70.8	79.4
	Mean Annual Income	\$52,226	\$45,299	\$57,407
Self-Employment	% of Households	14.0	11.9	9.5
	Mean Annual Income	\$97,828	\$26,620	\$26,269
Interest, Dividends, or Rent	% of Households	68.7	38.1	39.0
	Mean Annual Income	\$16,512	\$10,591	\$9,720
Social Security	% of Households	48.8	36.0	26.9
	Mean Annual Income	\$12,668	\$11,785	\$11,997
Public Assistance	% of Households	1.1	3.2	2.7
	Mean Annual Income	\$18,680	\$2,605	\$2,516
Retirement or Pension	% of Households	46.4	26.8	21.0
	Mean Annual Income	\$37,236	\$18,134	\$17,871

Source: U.S. Census 2000

Demographics and Population – Summary

The population of the Town of Bethany Beach has been growing at a very high rate over the past decade. The future appears to show continued growth, but only to the extent the town's housing stock can physically support it. At present, the town is largely built-out and has no plans to annex additional land for new development. Therefore, the majority of future population growth will be less the result of new-home construction and more the result of an increasing percentage of existing and new residents opting to live in Bethany Beach year-round. The residents of Bethany Beach have expressed concern over the town's rapid growth, and many fear that, in time, Bethany Beach may resemble highly developed resort communities in the region like Rehoboth Beach. The public has also raised questions regarding the ability of the town's streets and beach frontage to support such growth. Given the community's concerns and the population's observed ability to reinforce public community-preservation efforts, a managed-growth position must be supported with careful planning to ensure that infrastructure meets the growing demand and that new growth does not place an undue burden on existing populations or the community environment. Regardless of specific policy decisions, it is recommended that the town continue to periodically update its comprehensive plan with a major focus on the demographics of the residents who make up the community.

2-2. Housing

This section of the plan addresses the current and future housing needs of Bethany Beach, including a detailed analysis of the town's housing stock and a plan for future housing.

General Housing Issues

A few general issues regarding housing in Bethany Beach should be acknowledged before engaging in a detailed analysis of specific housing conditions or needs. First, some important issues arise when comparing general housing trends in the town with demographic trends over the same period of time. The town experienced a 15% increase (316 housing units) in total housing between 1990 and 2000. During the same period of time, the resident population of the town has nearly tripled, growing by more than 600 persons. Considering that the majority of housing in the town is dedicated to seasonal or recreational use, this apparent disparity in housing and population growth seems to demonstrate that increasing numbers of seasonal residents are becoming permanent town residents. Continued over time, this trend will create increased demands on the services provided by the town in terms of residential utilities, public safety, health care, and commercial needs. Second, while the most significant portion of housing growth in Bethany Beach has been in single-family detached homes, the number of multi-family dwellings in the town has nearly doubled over the past decade. These higher-density structures may provide efficiency for providing services, but they may also work against the overarching town goal to maintain its residential, medium-density environment. In the future, the town may wish to rethink its housing and development policies in order to facilitate the achievement of its long-range goals.

Table 10 – Housing Growth: Bethany Beach, 1990-2000

Housing Type	1990	%	2000	%	Change, 1990-2000	% Change, 1990-2000
Single Family, Detached	1,483	71.9	1,716	72.1	+233	+15.7
Single Family, Attached	467	22.6	442	18.6	-25	-5.4
Multi-Family	113	5.5	213	9.0	+100	+88.5
Total	2,063	100	2,371	100	+308	+14.9

Source: U.S. Census 1990 and 2000

Housing Stock

Table 11 displays data regarding housing types in Bethany Beach. Single-family housing is the predominant type of housing found in the town. In 2000, single-family homes accounted for 90.7% of the housing stock, significantly higher than both Sussex County (64.1%), and the State of Delaware (70%). These totals include both single-family detached and single-family attached housing units.

In 2000, multi-family housing units comprised only 9% of the housing stock in Bethany Beach, but the number has increased notably in recent years. Between 1990 and 2000, the number of multi-family units increased 88.5%, rising from 113 units in 1990 to 213 units in 2000. Bethany Beach's portion of multi-family dwellings is still slightly below that of Sussex County (9.7%) and well below the state as a whole (18.6%).

Table 11 – Housing Stock: Bethany Beach, Sussex County, and Delaware, 2000

Housing Type	Bethany Beach	%	Sussex County	%	Delaware	%
Single Family, Detached	1716	72.4	55171	59.3	191688	55.9
Single Family, Attached	442	18.6	4501	4.8	48340	14.1
Multi-Family	213	9.0	8986	9.7	64128	18.6
Mobile Homes	0	0.0	23817	25.6	38281	11.2
Other	0	0.0	595	0.6	635	0.2
Total	2371	100	93070	100	343072	100

Source: U.S. Census 2000, Town of Bethany Beach

The prevalence of single-family detached homes in Bethany Beach clearly denotes some important aspects of the community character of the town, which is mostly composed of residential areas. While the design and arrangement of housing vary within the area of Bethany Beach being discussed, the town generally exhibits a low-density, residential, non-urbanized community that is clearly distinctive among Delaware's coastal towns. Specifically, a few identifiable neighborhoods or areas of the town have been identified that host housing units that are connected by common elements such as structure design, lot layout, proximity, or other distinctive features. These areas are designated geographically on Map 3 in the Appendix, and some of the major neighborhoods and areas are described in more detail below.

Traditional Municipal Neighborhoods/Areas

- Downtown Bethany Beach** – Bounded by Oceanview Parkway on the north, Wellington Parkway on the south, the beach on the east, and S.R. 1 on the west, the central downtown area of Bethany Beach comprises the town's oldest and most traditionally developed structures and infrastructure. The area is marked by moderately dense residential development and a tight, grid-like street pattern. In addition, the residents in this area live in close proximity to the central commercial district, the beach, and the boardwalk, all of which are contained in this neighborhood. The area contains approximately 400 structures, including commercial buildings, multi-family complexes, and large single-family beach homes.
- Northeast Bethany Beach** – Bounded by the municipal boundary on the north, Oceanview Parkway on the south, the beach on the east, and S.R. 1 on the west, this area of the town lies just north of the downtown area. This area contains a pattern of development similar to the downtown area—moderate density, grid-like street pattern—but it contains neither commercial areas nor the same variety of housing types. The area contains approximately 100 structures, nearly all of which are large single-family beach homes.
- Southeast Bethany Beach** – Bounded by Wellington Parkway on the north, the municipal boundary on the south, the beach on the east, and S.R. 1 on the west, this area of Bethany Beach lies just south of the downtown area. Like the Northeast Bethany Beach area, this area is similar in character to the downtown area but contains no commercial or multi-family-residential land uses. The area is composed of approximately 200 structures, most of which are single-family homes.



Downtown Bethany Beach residential area (photo by IPA)

- **East Central Bethany Beach** – Lying just west of the downtown Bethany Beach area across S.R. 1 is the East Central Bethany Beach area, bounded on the east by S.R. 1, on the south by Wellington Parkway, on the north by Second Street, and on the west by Gibson and Kent Avenues. While this area is not located adjacent to the beach, it displays many of the same characteristics observed in the areas of town to the east of S.R. 1. The area contains a number of housing types but maintains the same grid-like street pattern and moderately dense residential land use that typify the central area of Bethany Beach. The area contains approximately 150 structures, nearly all of which are single-family homes.
- **Bethany West** – Comprising a considerable section of the southwest area of Bethany Beach, the Bethany West development is the largest residential subdivision in the town in both land area and number of structures. The neighborhood hosts a unique suburban design and layout, composed of several semi-circular main roads and multiple cul-de-sac sections. Bethany West is composed of single-family homes on suburban-style lots. The area contains more than 500 total structures and hosts its own community recreation area.
- **Villas of Bethany West** – This development is the largest medium-density residential area in Bethany Beach, comprising approximately 30 multi-family residential units over a large land area. The Villas of Bethany West development is located in the north-central portion of the town, just south of Salt Pond. Combining a garden-like natural environment, curvilinear streets, and a moderately dense residential pattern, this development is certainly unique in Bethany Beach.



Turtle Walk (photo by IPA)

- **Turtle Walk** – Located just west of the Bethany West development is Turtle Walk, a suburban subdivision neighborhood similar in character to Bethany West. The development consists entirely of single-family homes on suburban lots, and there is a noticeable consistency to both the style and design of the homes here. This development contains approximately 125 structures and hosts no commercial or recreational areas.



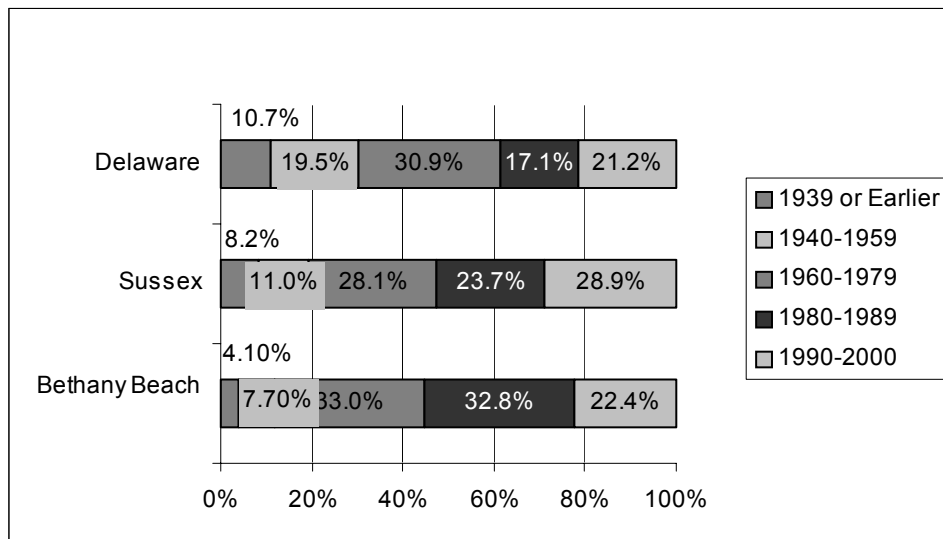
Lake Bethany (photo by IPA)

- **Lake Bethany** – The Lake Bethany development comprises approximately 100 structures located in a conventional suburban development pattern in the northwest corner of Bethany Beach. This subdivision consists solely of relatively large single-family beach homes in a very naturalistic setting. At the center of this development is a lake that offers both a scenic view and boat recreation for the approximately 25 properties that have direct access to it. The design of the homes here is much more in line with the coastal location as compared to Bethany West or Turtle Walk, as many of the homes are constructed with traditional coastal materials and are stilted.

Age of Housing Stock

Figure 3 compares the age of Bethany Beach's housing stock with Sussex County and the state. The figure shows that the town's housing stock is somewhat newer than that of the county or state. Only 11.8% of the housing in Bethany Beach was built before 1959, which is lower than that of both Sussex County (19.2%) and Delaware (30.2%). More than half (55.2%) of the houses in Bethany Beach were built after 1979, suggesting a much newer stock of housing in town relative to surrounding Sussex County and the State. However, a smaller proportion of homes were built during this decade in Bethany Beach than in Sussex County. This may mean that the town is slowly reaching a saturation point for residential development, especially considering the preferred density and housing types in the town. As a result of the town being built-out, there appears to be an economic incentive for developers to procure several adjacent home properties, replacing them with larger structures that may contribute to higher-density housing configurations. Builders of new homes may be looking increasingly at areas outside of the town in Sussex County, allowing Bethany Beach the opportunity to preserve and protect its community character by maintaining the residential density and style desired.

Figure 3 – Age of Housing Stock, 2000



Source: U.S. Census 2000

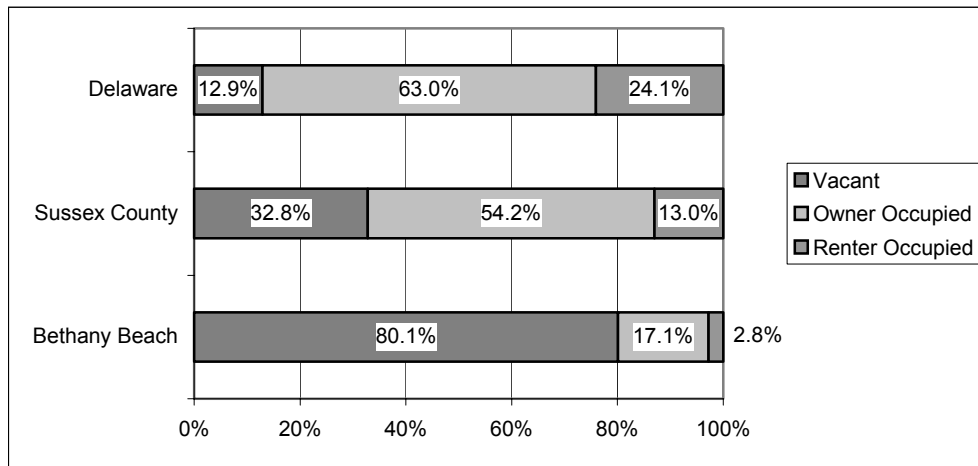
Housing Value

The median value of housing has grown quickly in both Sussex County and the state as a whole. The U.S. Census indicates that the region has seen housing values increase about 25% between 1990 and 2000. According to local officials, Bethany Beach's housing value has grown even more aggressively. Indeed, this indication seems very consistent with the aggressive growth seen in the housing market for coastal areas in the last few years.

Ownership and Vacancy

Figure 4 compares proportions of owner-occupied, renter-occupied, and vacant housing units in Bethany Beach with those of the Sussex County and the State of Delaware in 2000. As the graph illustrates, the overwhelming majority of Bethany Beach's housing is categorized as vacant. The town's vacancy rate (80.1%) is much higher than that of Sussex County (32.8%), and the State of Delaware (12.9%). The primary reason for the town's high-vacancy rate is that the U.S. Census includes seasonal, occasional, and summer rental properties under the vacant classification. The U.S. Census indicates that in Bethany Beach, seasonal, occasional, and summer rental housing accounts for about 94% of vacant housing.

Figure 4 – Ownership and Vacancy Rates, 2000



Source: U.S. Census 2000

Table 12 displays the change of occupancy and vacancy status for housing in Bethany Beach between 1990 and 2000. As shown, vacant housing in Bethany Beach—assumed to consist almost entirely of seasonal, occasional, and summer rental housing—increased by less than one percent (0.2%) between 1990 and 2000. During the same period, owner-occupied housing more than tripled, comprising nearly one-fifth of the total housing stock in the town in 2000. This seems in line with the dramatic increase in the town's residential population over the same period. Clearly, the town can expect the desire for public services to increase if this settlement trend continues.

Table 12 – Occupancy and Vacancy, Bethany Beach, 1990-2000

Status of Housing	1990	2000	Change, 1990-2000
Vacant (Seasonal or Occasional Use)	1899 (91.6%)	1903 (80.1%)	+4 (+0.2%)
Owner Occupied	122 (5.9%)	407 (17.1%)	+285 (+233.6%)
Renter Occupied	53 (2.5%)	66 (2.8%)	+13 (+25.5%)

Source: U.S. Census 1990 and 2000

Goal Statement – Housing

The Town of Bethany Beach wishes to provide appropriate housing for its residents and visitors while maintaining its traditional town atmosphere and preserving its existing open space. The town recognizes that the ambience and character of the Bethany Beach community is directly related to its physical structures, their style, density, and spatial arrangement. Any future development should be aimed at preserving the town's character and the quiet, resort atmosphere.

Recommendations – Housing

Recommendation 1: Establish an Architectural Review Board

It is recommended that the Town of Bethany Beach create and administer an architectural review board for the central purpose of maintaining the unique sense of community that is engendered in the aesthetic and design elements that make up the town's residential and commercial structures and land.

Recommendation 2: Affordable Housing Strategy

It is recommended that the town work with surrounding local governments in the region, as well as Sussex County and state agencies, to establish a regional solution to address the affordable-housing needs in the Delaware coastal region. The town recognizes the importance of having housing that is available and accessible to all economic groups; however, the trend of development and housing values in Bethany Beach seems to preclude a merely local solution. Indeed, seeking a regional solution to affordable housing will be both feasible and sustainable over the long term.

Recommendation 3: Building Standards in Flood Plains and Flood-Fringe Areas

It is recommended that the town work with the Federal Emergency Management Agency (FEMA) to develop and institute design standards for those residential structures within the identified flood areas and flood-fringe areas. A sustained dialogue between FEMA and Bethany Beach, as well as among Delaware's coastal communities, can serve to prevent flood-related disasters and preserve the integrity of the town's housing stock.

2-3. Land Use and Annexation

This section of the plan describes the existing land uses in Bethany Beach, prescribes the desired future land uses in the town, and addresses the town's plans for future growth.

Existing Land Use

The Town of Bethany Beach contains four primary land uses within its municipal boundaries: residential, commercial, institutional, and parks and open space. A map of existing land uses in the town can be found in the Appendix. As shown, the town is composed almost entirely of residential land uses, with a significantly smaller amount of commercial land. The sections below will provide some details regarding the type and intensity of these existing land uses in Bethany Beach.

Residential

Residential land comprises the large majority of the land use in the Town of Bethany Beach. With the exception of the portion of Garfield Parkway west of S.R. 1, residential land uses are found in every area of Bethany Beach. Residential land uses in town vary in their appearance and intensity, depending upon where a particular use is located. In fact, a number of aesthetically and environmentally distinct areas or neighborhoods in Bethany Beach have been identified and are shown on Map 3 in the Appendix. These areas are described in more detail in the housing section of this plan. The majority of residential structures in Bethany Beach are single-family homes on individual lots, but medium-density residential land uses also exist in several parts of town. The downtown area of Bethany Beach north of Garfield Parkway and east of Atlantic Avenue hosts a few multi-family complexes. In addition, a few subdivision developments west of S.R. 1—including the larger Villas of Bethany West and Bethany Proper Townhomes developments—host medium-density residential structures. However, the predominant character of the residential areas of Bethany Beach is found primarily in a less-dense, suburban-style residential environment.

Commercial

The Town of Bethany Beach has two small but identifiable commercial districts within its municipal boundaries. The larger and more prominent of the two commercial areas lies along Garfield Parkway east of S.R. 1. This area features a wide variety of commercial land use types and intensities, and the area also hosts a significant amount of the public parking in Bethany Beach used by visitors to access shopping and recreational activities in the town. The second commercial area in the town is located in the central portion of the town, along S.R. 26, just north of the Bethany West development. While smaller in area, this commercial district also hosts a variety of commercial land uses that serve both residents and visitors. A comprehensive analysis of the commercial areas of Bethany Beach can be found in the community and economic development section of this plan.

Institutional

A number of land uses exist in Bethany Beach that serve the public and are categorized under institutional land uses. Institutional land uses include civic buildings and structures, churches, libraries, service centers, public healthcare facilities, and other such uses. In the downtown area of Bethany Beach, institutional uses include the town hall and police department, fire department, U.S. Post Office, the bandstand and public-comfort facility, and one church. Institutional land uses outside of the downtown area include other churches, the public library, and the community water tower.

Parks and Open Space

Parks and open space in Bethany Beach can be categorized into several distinct types. First, the town provides one public park—Loop Canal Park—a public playground area at the northwest corner of Garfield Parkway and Pennsylvania Avenue (land leased from the Disciples of Christ Church), and a public beach and boardwalk along the town's eastern border. At the center of the town's boardwalk is a public bandstand and plaza area, which is currently slated for major improvements. Another municipal recreational area is currently under development as a linear park along Maryland Avenue. Second, several private recreation areas exist, the largest of which are in the Bethany West development and the Bethany Proper Townhomes development. Third, the town hosts some significant areas of privately-owned, undeveloped open space, including forested land at the northwest corner of Garfield Parkway and S.R. 1, and two sizable areas of wetlands in the north-central portion of the town. One of these wetlands areas, the Natter Property is currently being developed by the town as a nature center and park. While these areas do not comprise a large percentage of the total parcels in Bethany Beach, all of these areas—particularly the beach—contribute significantly to the character of the town and its economy.



Municipal Children's Playground

Future Land Use

Over the past two decades, development pressure in the coastal area of Sussex County has had a measurable effect on the character and environment that defines the Town of Bethany Beach. Over this period of time, nearly all of the land that was available for development has been subdivided and developed according to the town's existing regulations, codes, and development plan. In keeping with the long-term vision of the town, established by the town's 1968 comprehensive plan document, Bethany Beach has been relatively successful in maintaining its quiet, residential atmosphere. Moving into the future, it seems most appropriate to respect the integrity of this long-term vision that was set forth nearly a half-century ago and remains just as valid today. Therefore, the future land use plan for the town will reflect the desire to maintain land use patterns and development characteristics rather than to initiate any significant changes. In light of the high and increasing development pressure in the region, the maintenance of the content and character of the town will probably be as challenging to the community and officials of Bethany Beach as would be any major overhaul of municipal land use or community design. Because no major land use changes are anticipated in the future, the existing land use and zoning maps, both included in the Appendix, provide the long-range plan for land use in Bethany Beach. The existing areas of residential use should be maintained, limiting future higher-density development to the areas already zoned for this type of use. Institutional uses and their existing intensities should be maintained within the current zones in which they are permitted. The two existing commercial areas in the town should be maintained as such, and dramatic intensification of these commercial uses should be discouraged in order to maintain consistency with the low-density, community-centered character of the town. The existing institutional land uses will be maintained, and the areas now devoted to parks and open space will also remain intact; however, the town does plan to create additional recreational and park areas on the Natter property in the northwest area of the town. These areas are depicted on Map 8 in the Appendix.

Annexation

The basic shape and extent of the municipal boundaries of Bethany Beach have not changed significantly since the town's founding in 1901. The last notable adjustment to the town's boundary took place in the 1980s, when the town redrew the municipal border north of the Bethany Canal and west of S.R. 1. During the public-participation project described in the first chapter of this plan, some serious debate took place regarding the future potential expansion of the town's municipal borders. While a number of residents expressed interest in annexation, the majority of participants in the project rejected the concept of expansion and expressed concern over the limited information available regarding the costs and benefits of annexation to the town, to its existing community and residents, and to potential new community members. Therefore, the Town of Bethany Beach has no plans to annex additional land into the town's municipal boundaries in the foreseeable future. Public investment into this issue in the future will focus on establishing clear data and information regarding the costs and benefits of expansion and transmitting this information to the Bethany Beach community.

Goal Statement – Land Use and Annexation

The Town of Bethany Beach wishes to preserve the size and content of the town in order to maintain the quality of the quiet, community-oriented, and family-friendly beach experience that has marked its existence since its founding.

Recommendations – Land Use and Annexation

Recommendation 1: Review and Revise Existing Codes

In order to preserve the character and content of the housing and commercial development that exists in the town, it may be necessary to closely scrutinize the existing zoning and building codes in order to assure that future property improvements mesh appropriately with the existing community. Toward this end, the town council recently adopted changes in the code that increased the land area required to build planned residential developments (PRDs). Such innovative and appropriate revisions are recommended in the future if the town is to maintain its residential atmosphere and quality of life.

Recommendation 2: Maintain Land Uses and Promote Appropriate Redevelopment

The fact that the town has recently been built-out with new development, coupled with the anticipation of no future annexation, increases the need for public planning and development efforts to focus upon the maintenance of the Bethany Beach community and the promotion of appropriate redevelopment. These objectives may be achieved in a number of ways, including the use of architectural and aesthetic design guidelines for redevelopment and lot improvement, suggested previously in this plan. The town should maintain an ongoing public dialogue regarding appropriate redevelopment.

2-4. Community Services and Facilities

This section of the plan provides data and information regarding the facilities and services that are available to the residents of Bethany Beach. This chapter is meant to identify existing or potential gaps in levels of service, community needs met, and content and quality of facilities and services.

Utilities and Facilities

Town Government

The Town of Bethany Beach operates as an incorporated municipal government, chartered by the State of Delaware. Its governmental structure includes a mayor and town council, who share equal legislative and executive powers. The town council meets on the third Friday of every month, and annual elections are held on the first Saturday after Labor Day. Interestingly, three of the seven town council members are permitted to be non-residents, a unique trait of the Bethany Beach government that reflects its character. The town's planning commission is appointed by the mayor, exclusive of the chairman. Members of the planning commission are also permitted to be non-residents. Public management of the town is headed by a town manager, who employs a town clerk, chief of police, finance manager, building inspector, public works director, and a number of other key town employees. The town employs a year-round staff of approximately 30 persons, including full-time police officers and staff. The town also operates an alderman court with two aldermen, located in town hall, and a summertime beach patrol that employs a captain and seasonal staff. Information regarding all town services and departments is available via the internet on the town's official government website (www.townofbethanybeach.com). The town's website also provides local entertainment schedules, a business directory, public announcements, local weather information, and an online payment option for payment of taxes, fees, and fines.

Bethany Beach Public Works

The town owns and operates a comprehensive public works facility located approximately one-quarter-mile north of its northern border on the western side of S.R. 1. The facility is fully staffed and provides a number of key operational services, including facilities maintenance, water-system maintenance and repair, refuse collection and removal, drainage-system maintenance and repair, town-vehicle maintenance, and other miscellaneous services.

Water and Wastewater

The Town of Bethany Beach operates a municipal water-supply system, which includes five wells that can provide a combined water supply of 1,975 gallons per minute. In addition, the town maintains a municipal water tower with a capacity of approximately 1,000,000 gallons. Agreements with the Sussex Shores Water Company to the north and Tidewater to the south have been made to provide additional water supply in times of emergency. Wastewater services for the town are provided by Sussex County.

The details of water and wastewater services can be found in the “Water, Wastewater, and Stormwater Management” section of this plan.

Community Services

Police

The Town of Bethany Beach Police Department operates out of town hall and employs nearly a dozen full-time officers and a number of professional staff members. The department is run by a full-time police chief and maintains a fleet of police vehicles. The police department provides round-the-clock police services to the residents of Bethany Beach.

Fire and Rescue

Fire-protection services for the Town of Bethany Beach are provided by the Bethany Beach Volunteer Fire Company, Station 70, which is not directly affiliated with the town. The station is operated by a 60-member volunteer staff, and it also hosts a ladies auxiliary organization with approximately 20 members. The service area of this station includes the greater Bethany Beach area, comprising approximately 11 square miles. The company is heavily equipped and is able to provide extensive fire and rescue services, including firefighting, hazardous-material response, emergency medical response, vehicle extrication, and search and rescue.

Beach Patrol

The town provides beach patrol services between Memorial Day and Labor Day for the approximately one-mile strand of beach managed by the town. The beach patrol is headed by a captain and employs a number of seasonal beach-patrol staff members who operate ten lifeguard stands along the beach.

Educational Services and Library

The Town of Bethany Beach hosts no public or private educational institutions. Lord Baltimore Elementary in Ocean View and Selbyville Middle School in Selbyville provide primary public-education services. Indian River High School in Frankford provides secondary public-education services. Delaware Technical and Community College operates a campus in Georgetown for post-secondary-education and professional-training services.

Library

The Sussex County South Coastal Library is located in the Town of Bethany Beach on Kent Avenue. The facility is operated by the Sussex County Library system and provides library services to the greater Bethany Beach area. The library houses over 30,000 books, 1,200 audio materials, 1,400 video materials, and nearly 200 serial subscriptions.

Health Care

The closest major hospital facility to Bethany Beach is Beebe Medical Center, located approximately 20 miles away in Lewes. Beebe Medical Center also operates a seasonal emergency center located approximately three miles away in Millville. A helicopter-landing area is located on church property on the north side of Garfield Parkway across from the town hall, allowing for quick transport to regional medical facilities in the case of emergency medical or rescue situations.

State Services Center

The State of Delaware operates the Edward W. Pyle State Services Center in Frankford, which provides a number of public services to residents in the region that includes Bethany Beach. The Division of State Service Centers provides services at this facility that include DART bus-ticket sales, emergency-shelter services, and utility assistance. The Division of Social Services provides services at this facility that include food stamps and Medicaid. The Division of Public Health also offers services at this location, including child immunizations and the Women, Infants, and Children (WIC) nutrition program.

Goal Statement – Community Services and Facilities

The Town of Bethany Beach wishes to effectively and efficiently provide for the highest quality of life possible for its residents and visitors by planning and delivering high-quality public services.

Recommendations – Community Services and Facilities

Recommendation 1: Maintain Optimal Intergovernmental Relations

A number of public services provided to the residents and visitors in Bethany Beach are provided through agreements with Sussex County and the State of Delaware. In addition, contingency plans for emergency water provision and evacuation procedures are dependent upon healthy relations with other local governments in the region. It is recommended that the town work to maintain and foster the health and productivity of these intergovernmental relations through regular formal and informal dialogue with governmental officials and agency heads. Active and regular participation in intergovernmental organizations, such as the Association of Coastal Towns (ACT), the Delaware League of Local Governments (DLLG), and the Sussex County Association of Towns (SCAT), is strongly recommended for this purpose. Also, it may be important for town officials to regularly receive briefings regarding anticipated or pending state and county legislation that may impact the town and its provision of public services.

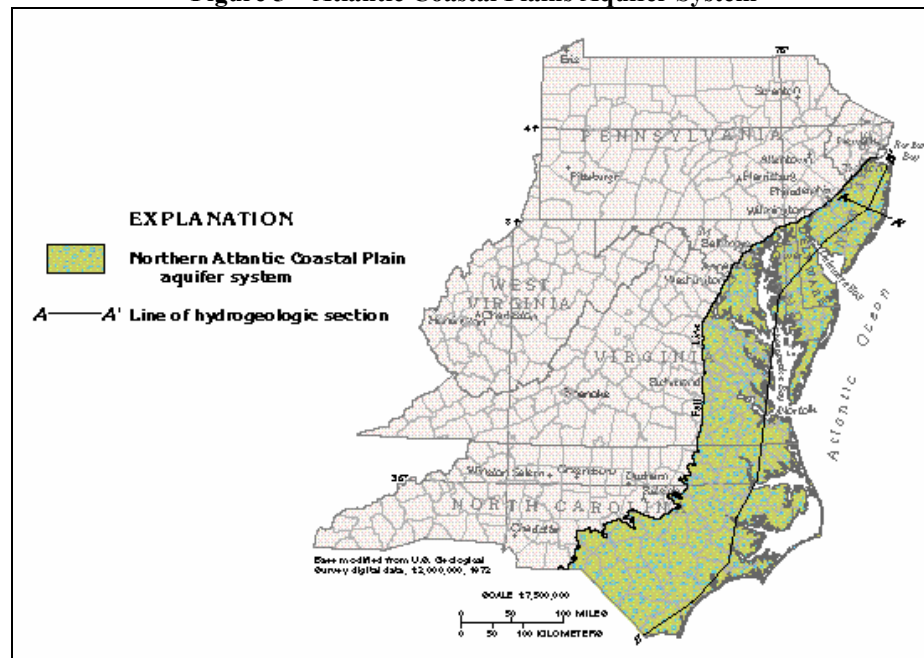
2-5. Water, Wastewater, and Stormwater Management

Water

Hydrology

The water-table aquifer servicing the Bethany Beach area is composed of sediments of the Pleistocene age and sub-cropping of the deeper Manokin and Pocomoke aquifers of the Miocene Age. The depth to fresh water below land surface in the water-table aquifer is approximately 5-8 feet in the Bethany Beach area. The depths and dimensions of the three aquifers vary considerably.

Figure 5 – Atlantic Coastal Plains Aquifer System



Source: US Geological Survey (USGS)

The Pleistocene sand aquifer is an unconfirmed aquifer that is considered shallow, located at depths of less than 100 feet, which covers an area comprising most of Sussex County. The Pleistocene aquifer is approximately 130-feet-thick and receives extensive amounts of recharge from precipitation. The Manokin aquifer, located at depths of at least 175 feet, is a large aquifer of approximately 200 square miles. The Manokin ranges in thickness from 90 to 200 feet, with a yield potential estimated at 20-30 million gallons per day. The Pocomoke aquifer, located at depths of at least 125 feet is also a large aquifer. Approximately 90 square miles of the Pocomoke aquifer interface with the overlapping Pleistocene aquifer, and the Pocomoke holds an estimated 65 billion gallons of water. These aquifers are defined by a layer of earth material of lower permeability (such as clay) that confines the water in the aquifer under pressure greater than that of the atmosphere. The artesian head also protects against external contamination. Salt-water contamination of the shallow Pleistocene aquifer could happen in periods of excessive drawdown (pumping) or sea-water flooding accompanying storm surges. It has been noted that there are high iron concentrations in the aquifers within Bethany Beach. This is caused by iron dissolved from practically all rocks and soils. Iron is also derived from pipes, pumps and other

water-system equipment. Water treatment to remove dissolved iron is supplied by the town water-treatment system.

Public Water Supply

The Bethany Beach water system provides public water service to the entire town and to the outlying subdivisions of Salt Pond and Savannah's Landing. Ocean Way Estates also receives limited water service from the town. The existing water plant on Collins Street was completed in 1991 and is operating well under the maximum daily capacity. The Town of Bethany Beach is currently operating five production wells. Production wells 1A and 5 are located in the Manokin aquifer, while the other three wells are located in the Pocomoke/Ocean City aquifer system. The town has completed major distribution-system upgrades, which have nearly eliminated all dead-end water mains and greatly improved the water quality and hydrant flow throughout the system.

Table 13 – Water Well Data, Bethany Beach

Well #	Year Constructed	Well Capacity	Aquifer
1A	2003	350 gpm	Manokin
2	1967	500 gpm	Pocomoke
3	1959	300 gpm	Pocomoke
4	1980	500 gpm	Pocomoke
5	1990	325 gpm	Manokin

Source: DNREC, Town of Bethany Beach

Table 14 – Water Use Data, 2004

Month	Total Usage (Gallons)	Average Usage (Gallons Per Day)
January	5,394,000*	174,000*
February	5,041,000*	173,828*
March	5,565,000	179,516
April	7,641,000	254,700
May	12,810,000	413,226
June	19,754,000	658,467
July	26,892,000	867,484
August	24,031,000	775,194
September	14,481,000	482,700
October	9,694,000	312,710
November	6,661,000	222,033
December	6,100,000	196,774
May-Sept.	97,968,000	640,314
Oct.-Apr.	46,096,000	216,413
TOTAL	144,064,000	393,618

*Estimates

Source: Town of Bethany Beach

Tables 13 and 14 provide details regarding the service capacity of Bethany Beach's public wells and the most recent water-use data. As shown, the maximum capacity of the existing wells in the town is approximately 1,975 gallons per minute, which is equal to approximately 2.84 million gallons per day (mgd). The town's capacity to serve residents with water exceeds the average use rates for both the entire year and the summer season. The town's water-treatment plant has a daily production capacity of

1.75 mgd, with some capacity earmarked for the Salt Pond development to the north of the town, the Savannah's Landing development to the west of the town within the boundaries of the Town of Ocean View, and Ocean Way Estates to the west of the town just across the Little Assawoman Canal. Agreements between the town and the operators of the water-supply systems for Sussex Shores and Tidewater Utilities provide for additional water supply in times of emergency. The Bethany Beach water treatment plant continues to operate with a process train of aeration, flocculation, sedimentation, pH adjustment, filtration, and disinfection.

The existing Bethany Beach distribution system is composed of a raw-water system and a treated-water system. The raw-water system connects wells 1A, 2, 3, 4, and 5 with the treatment plant. The distribution system is connected to the adjacent systems for Sussex Shores to the north and Tidewater Utilities to the south. Each connection is equipped with a metering device that records water exchanges from one system into the other. The current available volume in elevated and ground-level storage is 1.10 million gallons. The elevated-storage facilities are centrally located and provide an even pressure distribution throughout the town. In recent years, the town has experienced an increased interest in its water service. Various entities, including developers, commercial ventures, and the Delaware National Guard, have expressed a desire to connect to the town's water system. Two such requests were granted in the case of the Salt Pond and the Savannah's Landing developments. The town can continue to evaluate granting such requests as long as the available treatment capacity for in-town growth is not threatened; however, some of the areas that currently receive water service from the town are either within the municipal boundary of the neighboring Town of Ocean View or slated for annexation by the Town of Ocean View. A memorandum of agreement between the Town of Bethany Beach and the Town of Ocean View may be necessary to ensure that water services for area residents can continue uninterrupted.

Wastewater

Wastewater collection and treatment services are performed by Sussex County through an agreement with the Town of Bethany Beach. The town is in the Bethany Beach Sanitary Sewer district, which feeds into the Sussex County Regional Wastewater Facility near Ocean View. The town has an agreement with Sussex County for the treatment of up to 3 mgd. Considering that the town's current maximum water-delivery capacity is 2.84 mgd, this arrangement fits well with the current and future needs of the town.

Stormwater Management

Overview

The issue of stormwater management looms large in capital affairs and expenditures of the Town of Bethany Beach. In terms of long-range priorities, it is equal to beach preservation. The town is extremely vulnerable to flooding because of lower elevation and sustained high tides, and an examination of official wetlands maps and flood-plain maps indicates that flood plains extend as far as the south side of S.R. 26. Stormwater flooding, most often caused by heavy precipitation and extreme high tides, frequently (more than once a year) floods roadways in the vicinity of Atlantic and North

Pennsylvania Avenues, Bethany Canal, and Lake Bethany. Heavy rain events cause home sites in the Garfield Station, Bethany Pines and Bethany West subdivisions to flood. Stormwater management is not confined locally, as evidenced by actions at county and state levels and in other jurisdictions. The Sussex County Council and the Sussex Conservation Service activated a stormwater-management review and permit program. Also, the town has enacted additions to the subdivision regulations that give control of stormwater-management review and approval to the Sussex Conservation Service.

Areas of Concern

For years there have been significant flooding and drainage problems within the borders of Bethany Beach and surrounding areas. Some studies have attempted to identify the causes and correct the problems, but they have been unsuccessful. After a review of the situation, key causes have been identified and potential solutions have been developed.

North Pennsylvania Avenue

This area floods with every heavy rain event because of topography, “nor’easter” storms, and the resulting impact on the Bethany Loop Canal. Pennsylvania Avenue has a lower elevation than do Coastal Highway (S.R. 1) and Atlantic Avenue. Therefore, rainwater drains toward Pennsylvania Avenue. Because the catch basins and pipes are at the same level as the Bethany Loop Canal, into which North Pennsylvania Avenue empties, it becomes flooded quickly. Nor’easter storms, with heavy rain, drive waters into the Atlantic Ocean, Indian River Bay, Cove Bay through Fresh Ponds Park, into Salt Pond, into the Assawoman Canal, and then into the Bethany Loop Canal. This creates higher tides than normal and results in salt water coming up through the catch basins along North Pennsylvania Avenue. This in turn prevents rain water on North Pennsylvania Avenue from draining. The resulting flood, predominantly comprising damaging salt water, can remain for several tides and days.

Bethany Canal Area

This includes the areas north of S.R. 26 and the properties adjacent to and in proximity of the Bethany Canal. Because of the low elevation of this area and the direct connection of the pipes to the Bethany Canal, this area has problems similar to North Pennsylvania Avenue. The rain water has no place to go and spreads out over the streets and lots. During severe nor’easters, the Bethany Canal overflows its banks and floods almost to Rt. 26.

Lake Bethany

When the Bethany Canal overflows, this area is flooded. These higher tides and other heavy rains result in lingering flood periods. The Lake Bethany area and the two areas identified above are usually flooded at the same time during Nor’easters. Flooding includes an area from the Assawoman Canal one mile east to North Pennsylvania Avenue, close to S.R. 26 on the south, and north to Route 360.

Bethany West

This area is not affected by wind-driven tides. The heavy rain that occurs either through thunder storms

or nor'easters causes flooding problems, particularly where Collins intersects both Half Moon Drive and Fairway, extending back to the side streets and toward Rt. 26. Because of the flat topography, swales were created to allow this area to drain toward Rt. 26 drainage ditches. Some residents have created problems by either allowing vegetation to grow into the swales or by landscaping and/or filling in their lots and blocking the swales which thereby blocks or restricts drainage.

System Maintenance and Improvement

Drainage systems throughout the town are classified as follows:

- State-maintained, closed-conduit, or open-ditch systems along S.R. 1 and on the north side of S.R. 26. The Town maintains closed-conduit or open-ditch systems along town streets or easements.
- The main northeast drainage way is an intermittent stream running in a northerly direction parallel to and west of Kent Avenue. This drainage system is blocked at several locations and not well maintained. If and when the town can obtain easements along the entire stretch and appropriate funding, a comprehensive clean-out of the system is warranted.

Policies and Activities

Subdivision Drainage Plans

The town now requires detailed drainage plans and stormwater-management systems approved by the Sussex Conservation Service prior to recording residential subdivision and commercial site-plan approvals.

State Highway Drainage

DelDOT, in cooperation with the town, has completed major improvements to S.R. 26. The project has improved drainage on both sides of S.R. 26. The town is actively investigating improving the ditch system connecting the S.R. 26 right-of-way with the Bethany Canal drainage system.

2002 Town-Wide Drainage Study

The Town of Bethany Beach is making a substantial effort to improve stormwater management in its newly developed areas and existing communities. It has further updated its subdivision ordinance to reflect current state requirements. In December 2002, the town's private engineers completed a town-wide drainage study, which completed an inventory and performance evaluation of the drainage infrastructure throughout the town. The study made recommendations regarding improvements to physical infrastructure. The study established a list of "Priority 1" infrastructural improvements to the town drainage system. To date, most of these recommended projects have been completed. However, policy-related activities and some physical improvements have not yet been implemented. This may be an identifiable area of opportunity for future town investment, as community participation and support in the maintenance of the town's drainage network will lengthen the useful life of the infrastructure and lessen the maintenance and repair burden on town staff and budgets. By controlling the flooding in

various areas of Bethany Beach, the benefit to the community could be substantial: lower flood-insurance premiums, reduced damage to infrastructure (roads and sidewalks), fire and rescue would not have to drive through flooded streets, and reduced damage to personal property (automobiles and yards).

Goal Statement – Water, Wastewater, and Stormwater Management

The Town of Bethany Beach wishes to provide the highest quality water services possible while promoting a community environment that is safe, healthy, and navigable for its residents and visitors.

Recommendations – Water, Wastewater, and Stormwater Management

Recommendation 1: Determine Future Water Needs

It is recommended that the town assess future requests for water supply principally in terms of supply and treatment capacity and include this data and information in future water and comprehensive plans. Consideration should be given to the growth and development plans of neighboring municipalities such as the Town of Ocean View. In addition, it is recommended that the town determine the requirements for water storage as it relates to additional town water needs and reserves for maintenance or emergencies. The requirements should include data regarding capacity, location, design, and construction costs that establish budgets for infrastructure construction.

Recommendation 2: System Mapping and Planning

To facilitate planning, it is recommended that the town or town engineers assemble current as-built maps of the water-distribution system, showing the entire system with intersection blow-ups, and drainage infrastructure. The use of technology such as a Geographic Information System (GIS) is recommended for this purpose.

Recommendation 3: System Improvements and Policy

A number of water and drainage system improvements have been identified by the town and the town engineer as being either necessary or helpful. While a great many of these recommended improvements have begun or are completed, it is recommended that the town develop an improvement plan for the implementation of all remaining water and drainage-system projects. Furthermore, it is recommended that the town periodically review its local administrative and logistical policies regarding system maintenance, improvement, and observation, making changes as necessary to be consistent with the current state of the systems and the identified needs of the Bethany Beach community.

Recommendation 4: Drainage and Stormwater Management

The town has already designated stormwater management as a specific project. It is recommended that the town work to ensure long-term support by line-item identification in the budget and the preparation of subdivision-wide drainage plans and other appropriate plans and studies as the town deems necessary.

2-6. Transportation

This section of the plan details transportation-related data and develops a comprehensive understanding of the modes of travel and travel infrastructure in the Town of Bethany Beach. Because transportation involves linking both areas within the town and areas outside of the town, this section of the plan includes extensive use of a regional context and an intergovernmental approach to research and planning. The Town of Bethany Beach recognizes that successful regional-transportation systems require the collaboration and cooperation of local, county, and state governments, and has developed its transportation plan with this basic concept in mind.

Overview

The future of the Town of Bethany Beach will be shaped by the quality of its transportation facilities and the successful integration of land use and transportation decisions. The recent and ongoing surge in growth and development in Sussex County, particularly in and around its coastal areas, will continue to challenge the town's transportation infrastructure. An extremely popular destination in its own right, the Town of Bethany Beach sits squarely along the route to larger resort towns to the north and south, most notably, Rehoboth Beach to the north and Ocean City, Maryland, to the south. S.R. 1, the state's major regional transportation corridor, bisects the town north-to-south, while S.R. 26 (Garfield Parkway) is the major east-to-west arterial route. The seasonal nature of Delaware's coastal area and its recreational population creates unique challenges to transportation planning and management. During most of the year, use of the existing infrastructure is limited to the small, but growing, year-round population. During the summer months, this infrastructure is highly utilized and stressed due to local and regional recreational traffic. Considering the growing permanent population and the sheer size of the growing recreational summer population, it makes sense to plan for the needs of the summer population. This approach will allow for the provision of necessary capacity and facilities during peak months and provide for the increasing number of year-round residents into the foreseeable future. The capacity to preserve and/or enhance these routes to insure adequate and convenient mobility for the town's year-round populace and seasonal residents is critical to maintaining the town's charm and the quality of life of its inhabitants. This concept is applied in the sections below, which include research and discussion regarding the town's major roads, municipal streets, public transportation services, pedestrians and bicycle infrastructure, and other issues.

A number of unique issues exist regarding both S.R. 1 and S.R. 26, including access, regional traffic, local traffic, and vehicle speed. In addition, a significant level of need exists regarding pedestrian access in town, pedestrian and bicycle safety, and local vehicle speed. The following sections discuss each of these issues in detail, providing specific data where needed to allow a comprehensive analysis of all transportation-related issues.

Roadway Facilities

Overview

Map 2 in the Appendix details the existing transportation network within the Town of Bethany Beach. The primary regional transportation corridor for the town is the S.R. 1 north-south corridor that connects Bethany Beach with Dover and points north and extends south into Maryland. S.R. 26 is the primary east-west access way, linking Bethany Beach with Millsboro and U.S. Route 113. The map illustrates that a grid network of municipal streets exists in the eastern, historic core of Bethany Beach, transitioning quite rapidly to a more recent stem-and-leaf pattern west of S.R. 1 with increasingly limited interconnectivity and access to the major roads. Not listed on this map are the local streets for some private developments, including the Villas of Bethany West, Sandy Pines, and others. Typically, these developments have only one access point to the larger street network, although several of the larger developments are better connected. The Delaware Department of Transportation (DelDOT) manages access to state-maintained roads, including Routes 1 and 26, through policies contained in the Standards and Regulations for Access to State Highways. DelDOT informs other governmental organizations and property owners about the standards for access and conditions for granting such access. The sections below detail some important data and discussion regarding the specific roadway facilities in Bethany Beach.

State Route 1

S.R. 1 is a four-lane, divided highway that extends almost the entire length of the state of Delaware, providing regional access from the northern section of the state to the coastal communities of Sussex County. Approximately one mile of S.R. 1 runs through Bethany Beach. Table 14 displays data regarding recent traffic estimates for two sections of S.R. 1 in Bethany Beach.

Table 15 – Traffic Counts (estimated): S.R. 1, Bethany Beach (Avg. Vehicles/Day)

Section	2001	2002	2003	Change, 2001-2003
South Limits to S.R. 26	20,746	22,446	21,941	+1,195 (+5.8%)
S.R. 26 to North Limits	16,932	18,319	17,907	+975 (+5.8%)
Total	37,678	40,765	39,848	+2,170 (+5.8%)

Source: DelDOT 1997

The estimates provided by the Delaware Department of Transportation (DelDOT) show a 5.8% increase in traffic volume for the sections of S.R. 1 in Bethany Beach over the two-year period between 2001 and 2003. It is important to note that a traffic-count survey has not been completed in this area since 1997, and the data displayed in Table 15 shows only estimates of traffic based upon the 1997 data collected. Considering the age of the data and the rate of growth in the region, there may be some significant inaccuracies in the traffic estimates for the Bethany Beach area. However, based on the data presented above, some important growth expectations can be assumed. The amount of traffic along S.R. 1 in Bethany Beach can be expected to double within the next 25 years, assuming a rate of increase that stays around 2.9% per year. Even this conservative estimate of growth may create major challenges to pedestrian safety, local mobility, and community character. Residents have cited speed enforcement along this road and others as an area of concern, which can be expected to create a larger challenge in

the future. In addition, the provision of infrastructure for ensuring the safety of pedestrians and bicyclists in the community will be increasingly challenging. Currently, no traffic-calming infrastructure exists along S.R. 1 in Bethany Beach to delineate municipal boundaries or induce drivers to reduce speed and be more aware of pedestrians. This type of infrastructure can be found along S.R. 1 in other coastal towns, including Dewey Beach. Working with DelDOT to develop accurate forecasts and long-range improvement plans for this section of S.R. 1 may be essential in planning for the transportation needs of the Bethany Beach community in the future.

State Route 26

S.R. 26 is the primary regional east-west access to and from the town. S.R. 26 currently constitutes a road that includes approximately one mile of three-lane roadway within Bethany Beach. DelDOT has existing plans for improving this route:

This [S.R. 26 Atlantic Avenue Clarksville to Assawoman Canal] project will make improvements to SR 26 Atlantic Avenue. The existing roadway will be widened to provide one eleven (11) foot lane in each direction with five (5) foot shoulders. Left turn lanes will be added at intersections. The Central Avenue intersection will be realigned and separate right turn and left turn lanes will be added. A traffic signal will be installed at West Avenue. Sidewalks and closed drainage will be provided for much of the roadway segments through Ocean View and Millville. The work will make improvements that accommodate the area's multi-modal transportation needs. DelDOT and its project team will work with neighborhood and community officials, schools, local government leaders, concerned citizens, federal and state environmental and cultural resource agencies, and others to develop plans that meet the diverse needs of the community. (<http://deldot.net/static/projects/sr26/overview.html>)

Based upon the results of a May 2005 public workshop, DelDOT will make final decisions and approvals regarding this project in the summer of 2005, and construction on this transportation improvement project is slated to begin in 2008. This project may not meet the needs of the town for normal resident and vacationer access to residential, commercial, and state agencies west of the town for emergency evacuation in the event of a natural catastrophe. In addition, the town's ambulance and Beebe medical services are currently located in Millville. The town feels that the project design should incorporate, at a minimum, a three-lane roadway to provide a turn-lane like that located in Bethany Beach. Table 16 displays some traffic estimates for S.R. 26 in Bethany Beach. As shown, DelDOT's traffic estimates illustrate a dramatic increase in traffic volume over only two years. More significantly, the sections of S.R. 26 from S.R. 1 to the beach are not sections of a regional route, but include local access to the central business district and boardwalk area of the town. Based on the rate of growth described in Table 15, traffic volume on these sections of road can be expected to double within seven years. This presents a major challenge for the town in ensuring pedestrian safety and the integrity of the roadway infrastructure. It is in the best interest of the town to aggressively pursue a regular dialogue with DelDOT and municipalities to the west, including Millville and Ocean View, regarding the current DelDOT S.R. 26 project and future DelDOT improvement projects.

Table 16 – Traffic Counts (estimated): S.R. 26, Bethany Beach (Avg. Vehicles/Day)

Section	2001	2002	2003	Change, 2001-2003
West Limits to S.R. 1	13,860	16,635	16,260	+2,400 (+17.3%)
S.R. 1 to Penn. Ave.	7,155	10,854	10,610	+3,455 (+48.3%)
Penn. Ave. to Beach	7,283	7,880	7,703	+420 (+5.8%)
Total	28,298	35,369	34,573	+6,275 (+22.2%)

Source: DelDOT 1997

Municipal Streets

In addition to major regional roadways, the town also contains a number of local streets designed for local access to mostly residential areas. While the regular maintenance of this infrastructure was not cited as a major issue by residents, two issues were addressed that directly apply to these local streets. First, drainage and flooding along a few local streets has been indicated as an area of major concern for many residents. The periodic flooding of these streets prevents local mobility and creates safety hazards for drivers, pedestrians, and bicyclists. The issue of drainage and flooding is addressed in more detail in section 2-5 of this plan, and includes discussion of specific street areas in need of attention and improvement. Second, the issue of speed enforcement along some local streets has been cited as an issue. Particularly, residents cited Pennsylvania and Atlantic Avenues as the most critical areas in need of better speed enforcement. Vehicle speeds have a significant impact on the number and severity of vehicle-pedestrian accidents that occur, and reduced vehicle speeds have been connected to increases in community health and welfare, especially for the elderly and children. The town may wish to assess its ability to provide sufficient speed enforcement along these local streets and the major arterial roads, making necessary changes where possible.

Public Transportation

Year-round public transportation is largely unavailable in Bethany Beach. While several taxi companies operate from neighboring resort towns to provide some transportation service, residents are largely limited to private automobiles, bicycles or walking. There is no standard bus or rail service provided to the residents of Bethany Beach. During the summer season, the town operates a shuttle service that provides local transportation to residents and visitors. The town's shuttle service route and schedule can be viewed on the town's website. A recent public survey indicated that the vast majority of residents were satisfied with the shuttle service; however, the shuttle has experienced a marked increase in popularity and usage throughout the entire community as a whole during the 2004 summer season. As a result, the town may wish to consider expansion of the existing successful service to accommodate growing demand in the coming years. DelDOT provides DART bus service to and through Bethany Beach during the summer/early fall months, and bus stops in and around Bethany Beach include: York Beach Mall, Sea Colony, Pennsylvania Ave. at Central Ave., and Ocean View Plaza at Pennsylvania Ave. However, this service is extremely limited, with regular service typically ceasing by 2:30 p.m. and in all cases by 8 p.m. While the DART and Bethany Beach services provide an alternative to driving and walking, they also facilitate a significant influx of beach-goers to the town's already overcrowded beachfront. Limited regional public transportation is available to Washington, D.C., by way of a Carolina Trailways bus that stops once per day in Bethany Beach.

Bicycles and Pedestrians

Automotive congestion is only one of the problems facing Bethany Beach. The town has also experienced an increasing population of pedestrians and bicyclists in recent years. Of particular concern is the way in which these modes interact and compete with automobiles. Although the town has some sidewalk infrastructure along some major roads, the system is not complete throughout the town. The result has been pedestrian and bicycle traffic being forced into the roadways, especially on local streets.

In March 2004, DelDOT released a preliminary report stemming from its Pedestrian and Bicycle Study in Bethany Beach. It identified the following problems:

- Missing pedestrian walkway links
- Missing pedestrian signage for crosswalks
- Missing bike-route connections
- Cut-through traffic

The study proposed numerous solutions aimed at mitigating these problems. Regarding pedestrian traffic, they include:

- Innovative walk/stop signals
- Crosswalk upgrades (re-striping)
- Warning lights
- Completing the pedestrian network

Bicycle-related solutions proposed include:

- Improved signage along SR 1
- Trail completions along Pennsylvania and Atlantic Avenues
- Bike racks

Motorist-related solutions proposed by DelDOT generally centered on traffic-calming infrastructure, including:

- Median landscaping along SR 1
- Speed bumps
- Improved lighting

As a direct result of this study, DelDOT has initiated a project to engineer a more effective pedestrian crosswalk across SR 1 in the town, and the agency has also discussed beginning a pilot program in the town regarding innovative crosswalk lighting. In order to ensure the sufficiency of infrastructure and safety for pedestrians and bicyclists, the town will need to work with DelDOT to develop an improvement plan for major roadways. The town may also wish to develop an inventory of the bicycle and pedestrian networks within the town in an effort to identify specific areas of need.

Goal Statement – Transportation

The Town of Bethany Beach wishes to provide for safe and effective circulation in and around the town that respects the character of the local community and fulfills the needs of year-round residents, seasonal residents, and visitors.

Recommendations – Transportation

Recommendation 1: Intergovernmental Coordination (Especially S.R. 26 Project)

Issues surrounding transportation and mobility often demand analysis and discussion at a regional level, including multiple government entities. In Bethany Beach, the existence of two state-maintained regional roadways that traverse multiple municipalities in the area demands that many government actors be involved in the planning and improvement processes for these facilities. In addition, the town's dependence upon the state for major funding and permission for transportation improvements demands that multiple government stakeholders be involved in the planning process. Intergovernmental coordination, both formal and informal, can provide transparency and a forum for reciprocal understanding and resource sharing. It is recommended that the town aggressively pursue a regular and formal dialogue with DelDOT, Sussex County, and adjacent municipalities regarding issues related to transportation, especially the current S.R. 26 project. Furthermore, it is recommended that the town become more actively engaged in intergovernmental organizations such as the Sussex County Association of Towns and the Delaware League of Local Governments.

Recommendation 2: Data Collection

It is recommended that the town continue to work with DelDOT and other organizations to develop an up-to-date pool of data regarding traffic volumes, pedestrian infrastructure, and bicycle infrastructure. This data can be analyzed by the town's officials and experts in a public forum to develop plans for the future that accurately reflect existing needs and conditions.

Recommendation 3: Local Public Transportation

Residents surveyed in Bethany Beach found that the current status and service level provided by the town's shuttle bus is adequate. It is recommended that the town continue to provide this service. The town should work with the state to develop the shuttle system further, considering a link with DART services and the possibility of obtaining state financial assistance.

Recommendation 4: Regional Public Transportation

The existing regional public-transportation service provided to the residents of Bethany Beach was cited as an area of concern by those surveyed. Currently, DART provides only limited services, which seem inadequate considering the increasing residency rates in the town and the needs of those living here. It is recommended that the town work with DelDOT to develop a plan to provide adequate regional public-transportation services to the members of the Bethany Beach community. The provision of these

services can be expected to allow residents access to important employment and commercial centers in the region, increasing regional economic development and providing residents with more opportunities and choices.

Recommendation 5: Pedestrian Safety

The safety of pedestrians, especially those crossing S.R. 1, was cited as a top concern among the residents surveyed. The increasing number of visitors and year-round residents living farther away from the town's commercial center illustrates the importance of providing for the safety of these pedestrians. In addition, the age profile of town residents indicates that there is a steadily increasing need for pedestrian infrastructure. It is recommended that the town develop a set of specific plans regarding desired pedestrian-related improvements for specific areas of the town. Working with DelDOT, the town should pursue these plans in an effort to ensure the safety of all pedestrians in Bethany Beach. Planned improvements could include, but are not limited to, the construction of sidewalks in identified key-risk areas, traffic-calming devices, and improved lighting.

Recommendation 6: Bicycle Paths

Dedicated infrastructure for bicyclists provides for their safety and transportation needs. In addition, Bethany Beach acts as a recreational location for many visitors and residents, and a complete and adequate system of bike paths fulfills the recreational needs of these community members. It is recommended that the town develop a plan for the installation of additional bike paths throughout the town. This plan should identify specific areas of need and detail the year-to-year improvement schedule for identified projects. The results of this activity should yield a richer and more fulfilling experience for residents and visitors in Bethany Beach.

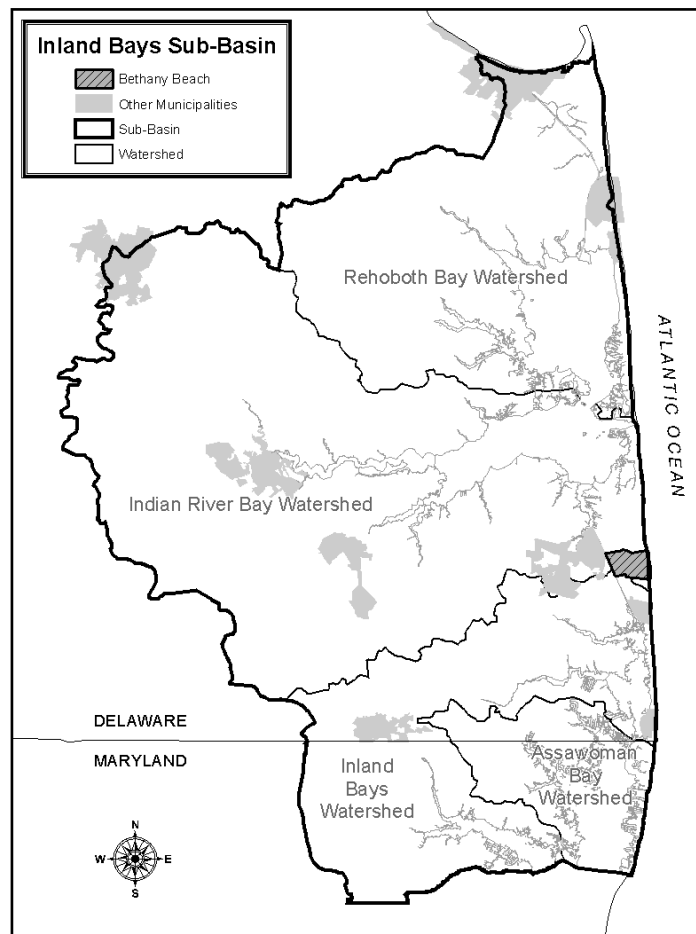
2-7. Environmental Protection

This section of the plan addresses environmental concerns in the Town of Bethany Beach, including water supply and quality, soil typology and quality, the condition and maintenance of the beach strand, critical natural-areas identification and protection, and special projects being undertaken by the town.

Water

Bethany Beach is a part of the Inland Bays Sub-Basin. The basin is divided into four watersheds; Bethany Beach is located in both the Indian River Bay watershed and the Inland Bays watershed. Figure 6 shows the Town of Bethany Beach and the surrounding watershed areas. The inland bays currently contain excessive levels of nutrients, which cause algal blooms. The algal blooms can have many negative consequences, such as a decrease in the level of dissolved oxygen. A 1999 Department of Natural Resources and Environmental Control (DNREC) study confirmed a decline in water quality in the bays, marked by excessive nutrient levels, declining trends of some water-quality indicators, and frequent violations of water-quality standards.

Figure 6 – Inland Bays Sub-Basin and Watersheds



Source: USGS (map by IPA)

Total Maximum Daily Load (TMDL)

Activity in Bethany Beach can affect water quality in the bays because of connected underground water systems. Pollutants come from both point sources, such as a sewage-treatment plant, and non-point sources, such as urban and agricultural runoff. Total Maximum Daily Load (TMDL) standards have been established for the Inland Bays, and strategies are being established in Sussex County to reduce pollution in critical areas. A TMDL is the maximum level of pollution allowed for a given pollutant, below which a target water body can assimilate and still meet water-quality standards necessary to support activities such as swimming, fishing, providing drinking water, and shellfish harvesting. Although TMDL standards are authorized under federal code, states are charged with developing and implementing standards to support those desired activities. With the adoption of TMDL standards as a nutrient-runoff-mitigation-strategy, reduction of nitrogen and phosphorous loading from all land use activities within the Town of Bethany Beach will be mandatory. Nutrient reductions prescribed under TMDL regulations are assigned to those watersheds or subwatersheds on the basis of recognized water-quality impairments. In the Inland Bays, the primary source of water-quality impairment is associated with nutrient runoff from agricultural and residential development. In order to mitigate the identified impairments, a TMDL reduction level of 40 percent will be required for non-point-source nitrogen and phosphorous loads. Any proposed development within the Inland Bays subwatershed will have to demonstrate—using scientific nutrient-budget calculations—that the development will reduce nutrients to the level specified by the TMDL standard. The town will work with DNREC as well as other local and county governments in the region to meet the requirements of the established TMDL standards based upon an established “Pollution Control Strategy.”

Source Water Assessment and Protection Program

The Safe Drinking Water Act Amendments of 1996 mandated that each state develop a Source Water Assessment and Protection (SWAP) Program to better protect public-drinking-water sources. There are three basic components of all SWAP Programs:

- Delineate the boundaries of the land area most important to public water sources;
- Identify the potential sources of contamination within those boundaries;
- Assess the susceptibility of the public water source to these contaminants.

In Delaware, the SWAP Program was coordinated mainly by the State Department of Natural Resources & Environmental Control (DNREC), which developed the majority of the assessments for all public water systems in Delaware. The assessment for the Town of Bethany Beach was completed in 2004 and can be viewed at: <http://www.wr.udel.edu/swaphome/phase2/finalassessments2.html>.

In 2001, the Delaware General Assembly passed Senate Bill 119, which requires all jurisdictions with a population greater than 2,000 to implement measures to protect sources of public drinking water within its boundaries by the year 2007. Local governments with less than 2,000 population are not required to implement source-water-protection measures, but are strongly encouraged to do so to better protect its drinking-water supplies. There are a variety of tools available to assist jurisdictions in their efforts to

better protect sources of public drinking water, including ordinances, best management practices, and public education. These measures are provided in a Source Water Protection Guidance Manual for the Local Governments in Delaware developed for DNREC by the Water Resources Agency, a unit of the Institute for Public Administration at the University of Delaware.

The two most important areas to be protected in Bethany Beach to protect its water-supply sources are the Wellhead Areas, which is the land surrounding the town's wells, and the Excellent Recharge Areas within the town's boundaries. The recharge areas, shown on Map 4, are areas in which water can most rapidly infiltrate into the soils. Since Bethany Beach's population is currently under 2,000, the town is not required by state law to adopt measures to protect its water-supply sources. However, it would be prudent for the town to review the measures recommended in the guidance manual and consider adopting those measures that would be most appropriate for the town.

Issues surrounding water quality in the Sussex County coastal region focus primarily on the health of the region's Inland Bays. The protection of these sensitive natural resources, and the surrounding waterways and water bodies, is dependent upon the efforts of public, private, and corporate stakeholders alike. While the Town of Bethany Beach is a member of this group of necessary participants in the protection of the regional environment, it is only one of many stakeholders whose actions have a direct impact on regional water quality. The most significant negative impact upon the inland-bays region and its air and water quality is the Indian River Power Plant, which generates more pollutant discharges into the air and water than any other entity in the state. The ability of local governments in the Inland-Bays region, including Bethany Beach, to meet environmental-quality standards will depend heavily on the future of the Indian River Power Plant and other such major polluters. While the town is willing to do its part to explore and implement strategies to improve water quality, significant collective effort will be required at the regional and state levels to truly improve air and water quality in the region.

Soils

There are a variety of soil types found in Bethany Beach. The area east of S.R. 1 consists of predominantly coastal beach and dune land, running the entire length of the community parallel to Atlantic Avenue. Coastal beach and dune land are areas of non-coherent, loose sand that have been continually worked and reworked by waves, tides, and wind action. Fill land extends from the northeast boundary of the community south to Garfield Parkway. Fill land consists of at least two feet or more of soil or other geological material that has been imported and deposited into the area. Fill-land quality fluctuates, and suitability and limitations vary by area. In addition, a peat bog exists under the town and coastal area.

To the south of Garfield Parkway, extending to the southwest boundary the soils are deep, moderately well-drained to somewhat poorly drained soils on uplands. These soils are formed in loamy sediments that contain a considerable amount of sand. The seasonal wetness of this soil severely limits its use. The area to the west of S.R. 1 consists of a conglomeration of soils dominated by deep, very poorly drained soils on upland flats. These soils are formed in sandy sediments mantled by loamy material that contains a considerable amount of sand. The water table is seasonally at or near the surface and remains

there unless drained. There are some salty tidal marshes in the northwest section of the community. Tidal marsh is predominantly low land saturated with water that is totally unsuitable for community use.

The presence of hardpan has been noted in various locations throughout the community. Hardpan is a hardened or cemented-soil layer. The soil material is sand or clay and is cemented by iron oxide, silica, calcium carbonate, or some other substance. Conditions relating to hardpan presence, concentration and density are variable and hardpan location is not easily predictable.

Beach Strand

On its eastern edge, the municipal area of Bethany Beach includes approximately one mile of Atlantic beach coastline. This area constitutes one of the most significant natural resources and public areas managed by the town and is a major focus of public attention in the town. The maintenance of the width of the beach in the town has become an increasing concern for town residents and officials, especially considering the increases in beach use that the town has experienced recently due to significant growth in development and recreation along Delaware's Atlantic coast. In response, major efforts have been devoted in the past to preserving the integrity and health of the beach strand. In addition to a series of groins installed perpendicular to the coastline along the Bethany Beach strand to prevent erosion, the town has received assistance from the U.S. Army Corps of Engineers through a beach-replenishment program. These beach-replenishment activities essentially reinforce and widen the beach by physically relocating sand from just offshore onto the existing beach. A replenished beach strand not only provides additional recreational capacity to this public area, but it also protects local structures from coastal-storm and flooding hazards by providing a physical buffer against storm and tidal surges. A number of structures in Bethany Beach have been identified as being at risk for this type of damage. Table 17 details the number of housing units at risk in Bethany Beach according to their distance from the shoreline.

Table 17 – Housing Units in Coastal Zones, Bethany Beach, 1997

Coastal Zone	Housing Units
Oceanfront	89
Zone 1 (<500 feet)	224
Zone 2 (500-1500 feet)	521
Zone 3 (1500-2500 feet)	342
Zone 4 (2500-3500 feet)	231
Total (All Zones)	1,407

Source: Parsons & Noailly 2003

In response to the identified coastal hazards and in the interest of protecting a beneficial public resource, a number of specific beach-replenishment projects have been completed in Bethany Beach. Table 18 displays information on some of the more recent replenishment projects completed in Bethany Beach. As shown, Bethany Beach has replenished nearly one-million cubic yards of sand to its beach strand over the past 15 years, at a cost of less than five million dollars. The cost of these projects has been partially subsidized by both the federal and state governments, allowing the community to receive the benefit of additional shore width without having to face the full financial burden. However, federal policy regarding the financing of these nourishment programs is undergoing major changes, and the

portion of local financial responsibility for future projects is expected to increase from 35%, the past local burden, to 50%, 65%, or 100%.

While the U.S. Army Corps of Engineers has designated Bethany Beach as part of its “50-year-commitment” area targeted for long-term beach-nourishment activities, the execution of future projects may depend heavily on local capacity to fund them. In response to this issue, the Town passed a “yes to beaches” resolution, which was drafted as part of a national beach protection campaign by the American Shore and Beach Preservation Association. On March 19, 2004, the Town of Bethany Beach became one of 36 American municipalities to sign such a resolution, and it was forwarded to state and federal elected officials following its adoption. However, the future of beach replenishment in the town as a way to protect the integrity and usability of the shoreline remains in question, and continued public activity will be necessary to keep this program in the forefront of state and federal legislators’ agendas.

Table 18 – Beach Replenishment Projects, Bethany Beach

Year	Volume of Sand	Cost
1989	284,500 cu/yd	\$1.6 million
1992	219,735 cu/yd	\$1.0 million
1994	184,452 cu/yd	\$0.8 million
1998	321,700 cu/yd	\$1.3 million
Total	1,010,387 cu/yd	\$4.7 million

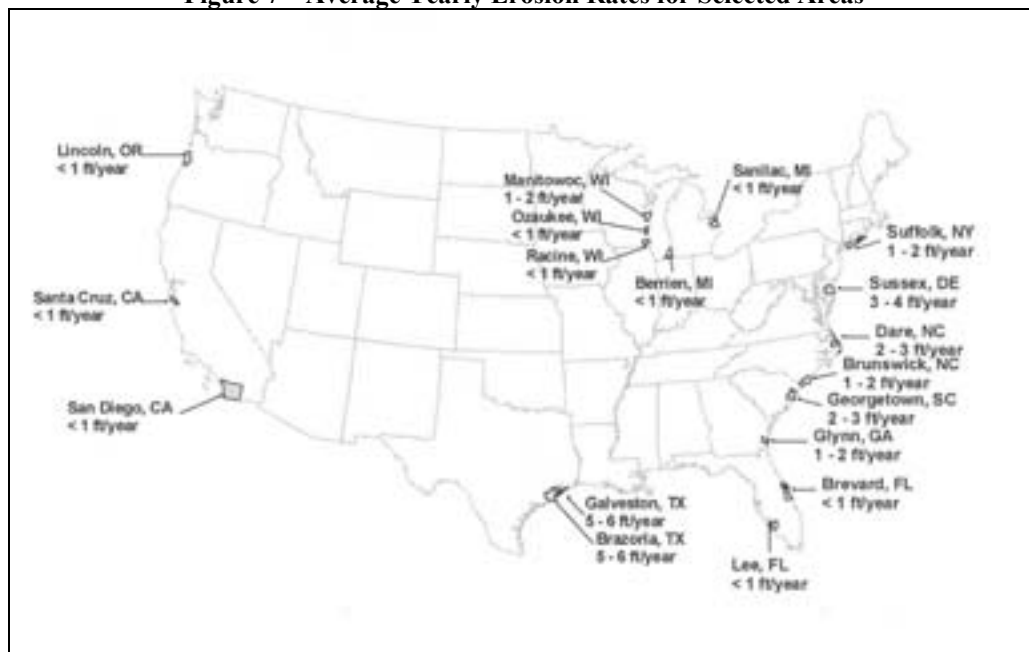
Source: U.S. Army Corps of Engineers

While the replenishment projects described above assist in short-term and seasonal protection of structures and the maintenance of beach width, long-term beach erosion has been identified in the Delaware coastal region as a major area of concern for coastal communities over the next 60 years. A number of reports published in the past few years have detailed some alarming predictions regarding the erosion of Delaware’s Atlantic shoreline. A February 1998 report, written for the Department of Natural Resources and Environmental Control (DNREC), estimates that Delaware’s beaches experience, on average, between two to four feet of annual erosion. The beaches at Fenwick Island, Bethany Beach, South Bethany, Middlesex, and Sea Colony have been identified as erosion “hotspots”, losing an average of approximately four feet of beach per year. Figure 7 illustrates national erosion averages, and shows that the Delaware coastline is much more affected by erosion relative to other areas studied. Figure 8 details total damage estimates over a 30-year period as a result of flooding and erosion. Bethany Beach was one of the study areas included in the report.

In response to the identified risks involved with development along the state’s shoreline, the Delaware Legislature passed the Beach Preservation Act (Chapter 68, Title 7 of the Delaware Code) in 1972. It establishes a Building Line along the coast as part of the Regulations Governing Beach Protection and the Use of Beaches. The Building Line, which parallels the coastline, is designated on DNREC maps. No construction may take place seaward of the line without a Coastal Construction Permit or Coastal Construction Letter of Approval from the department. Construction, expansion, or modification of any structure within the beach area landward of the Building Line, including all buildings and amenities requires a Letter of Approval. The alteration, removal, or deposition of any substantial amount of beach sand or other materials landward of the Building Line and within the beach area also requires a Letter of Approval. However, no additional statewide legislation has been passed in direct response to the

erosion forecasts published in recent years. In 2004, the Town of Bethany Beach responded to the community's need for beach-replenishment resources by hiring a lobbyist to represent the interests of the town in federal discussions regarding the allocation of beach-replenishment funding. This action was ultimately a result of the failure of Sussex County to respond to this identified need, despite significant efforts for regional cooperation on this issue area by the town. This issue may be assisted in the future through better municipal cooperation through a regional organization such as the Delaware Association of Coastal Towns. In the future, the Town of Bethany Beach may wish to pay particular attention to the relationship between its beach strand and its development regulations in order to preserve the integrity of the community and maintain a safe and livable environment for its residents and visitors.

Figure 7 – Average Yearly Erosion Rates for Selected Areas



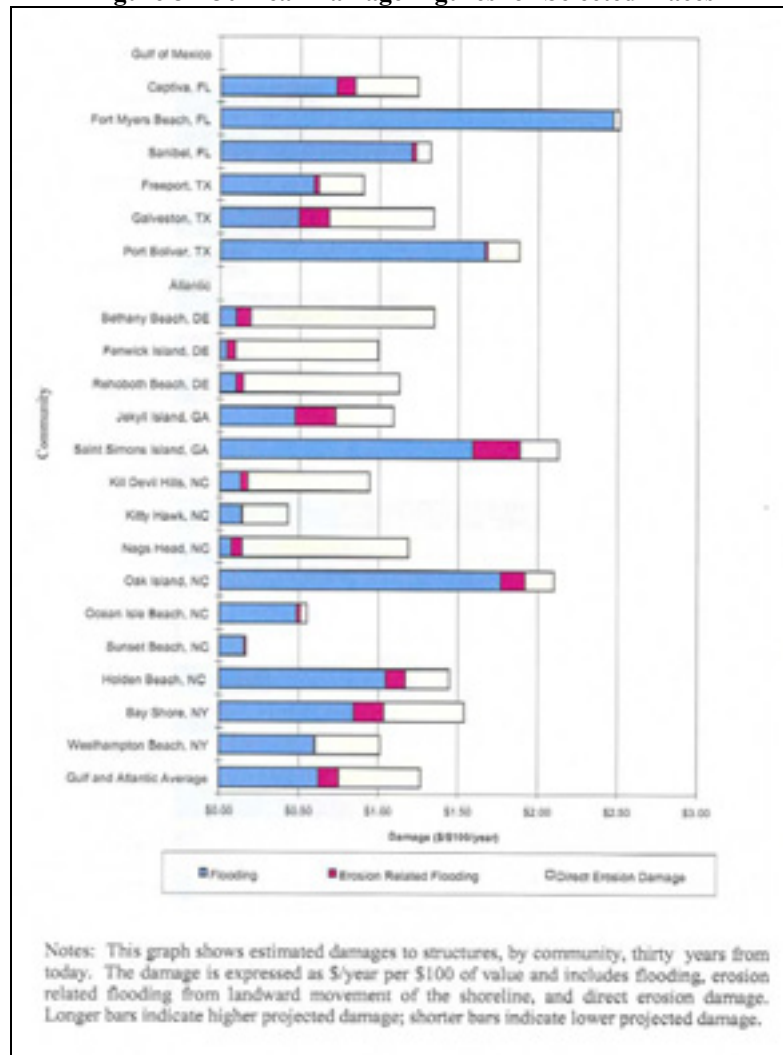
Source: Heinz Center, 2000

Figure 7 displays the average yearly erosion rates for the beach strands of specific counties in the U.S. As shown, Sussex County's yearly erosion rate of 3-4 feet is the highest identified along the nation's Atlantic coast. Indeed, the annual beach-erosion rate for Sussex County is the highest of any ocean-coastal-erosion rate identified below. This data is especially alarming for the Town of Bethany Beach, where a considerable number of structures—more than 300 according to Table 18—stand very close to the existing shoreline and could be damaged in the very near future due to a rapidly eroding beach strand. The data seem to suggest the need for some short-term and long-term plans regarding the preservation of the existing shoreline, the protection of structures near the beach, and the development of beachfront lands over the long term. The town and the state may find it necessary to formulate coastal policies and activities to promote sustainable development in this area that is both highly sensitive and vulnerable to very quick changes in size, shape, and integrity.

Figure 8 displays information regarding estimated structural damage over the next few decades for specific areas studied in a 2000 report by the Heinz Center for the Federal Emergency Management

Agency (FEMA). Bethany Beach is among the towns studied, and some interesting comparisons can be made from the data displayed. Delaware's Atlantic coast—represented in the figure below by Bethany Beach, Fenwick Island, and Rehoboth Beach—seems especially susceptible to erosion-related damage as compared to other places studied. This unique trait of the Delaware beach strand seems to suggest the need for local, regional, and statewide policies aimed at preserving the integrity of the coastal environment and preventing erosion-related damage for the residents of these areas, which includes Bethany Beach. Policies and activities that seek to reinforce the dune line, replenish lost beach width, and maintain the character of the town's unique coastal environment are the recommended approaches to addressing these environmental issues.

Figure 8 – 30-Year Damage Figures for Selected Places



Source: Heinz Center, 2000

Critical Natural Areas

A number of critical natural areas have been identified within the municipal boundaries of Bethany Beach. These natural environmental features can be found on Map 4 in the Appendix. The specific areas are identified and described in detail below.

Flood Plain

A significant portion of the town lies within a 100-year-flood plain, including the entire portion of the town north of Garfield Parkway (S.R. 26), the area of town east of S.R. 1 and north of Wellington Parkway, and some smaller sections just south of S.R. 26 in the central and western portions of the town. The flood plain is the area surrounding a stream or channel that is inundated or covered with water during a 100-year flood (see definition below). While every flood event will have a unique flood plain based on the amount of rainfall received, the 100-year-flood plain is accepted as the “regulatory” limits of flooding for flood insurance purposes and for many jurisdictional zoning and development practices. “100-year” refers to the return period of an event; in this case it refers to a flood. It can also refer to storms, droughts, and other acts of nature. The term is misleading because it implies that the 100-year flood occurs once every 100 years. The true definition is a statistical measure; there is a one-percent chance (1/100) that a flood of this magnitude will occur in any given year. Several other returns periods are discussed in flood studies. FEMA generally gives mention to the 10-, 25-, 50-, 100-, and 500-year events. Each describes an increasingly larger flood event, with a decreasingly small probability of occurrence.

Wetlands

The Town of Bethany Beach contains significant areas of both tidal and non-tidal wetlands. Most of the wetland areas are located north of S.R. 26 and west of S.R. 1 in Bethany Beach. Tidal wetlands occur along the coast where tidal flooding occurs, whereas non-tidal wetlands are beyond the reach of the tides. Water in tidal wetlands comes mainly from ocean-driven tides, while precipitation, river overflow, and groundwater are major sources of water for non-tidal wetlands. Tidal wetlands include non-vegetated mudflats exposed at low tide, rocky shores (with or without algae), salt and brackish marshes (tidally flooded grasslands), and mangrove swamps (salty shrub thickets and forests in the tropics). These areas are periodically flooded by tides, some every day and many less often (some only by storm tides). In the U.S., they occur along the Atlantic, Pacific, Arctic, and Gulf of Mexico coastlines. Tidal wetlands are most extensive in the southeastern U.S. where they have formed behind barrier islands and along coastal rivers. Tidal wetlands in saline and brackish areas are called “estuarine wetlands” as they are part of the estuary, where salt water mixes with fresh water running off the land via rivers. Non-tidal wetlands are wetlands of America’s interior, although they also occur in the U.S. Coastal Zone in areas beyond the reach of the tides. They include: 1) the shallow-water zone of lakes, rivers, and ponds, 2) aquatic beds formed by water lilies and other floating-leaved or free-floating plants, 3) emergent wetlands dominated by herbaceous plants (including grasses, sedges, and flowering herbs), 4) shrub wetlands characterized by brushy growth (woody plants typically with multiple trunks and not growing above 20 feet in height) and 5) wooded swamps or forested wetlands dominated by trees of

various sorts. Most non-tidal wetlands are called “palustrine wetlands,” according to the U.S. Fish and Wildlife Service’s wetland-classification system. They include freshwater wetlands and inland saline wetlands (alkaline wetlands) in arid and semiarid regions.

Groundwater-Recharge Areas

There are two areas of land in Bethany Beach that have been identified as excellent groundwater-recharge areas, which include a large area on both sides of Kent Avenue and a smaller area in the northeast corner of the town. These are defined as areas of land which, by the nature of the surface soil and underlying rock type, are particularly important for allowing surface water to percolate to underground storage. These areas are particularly important to the Town of Bethany Beach, which relies entirely on groundwater for its public water supply.

Trees

Preserving the character of the Bethany Beach community includes the protection of its natural visual resources as well as the built environment. Large foliage, such as trees and ornamental shrubs, contribute vastly to the visual appeal and healthy environment that exists in Bethany Beach. Chapter 223 of the Town of Bethany Beach municipal code currently provides minimal protection for public trees, shrubs, and plants. The Delaware Forest Service’s Urban and Community Forestry Program provides \$100,000 each year in funding for tree planting, tree care, and tree-management projects on publicly owned lands. In addition, the U.S. Forestry Service’s Tree City USA Program, offered through the National Arbor Day Foundation, provides additional funding for tree protection, education, and public awareness projects. Currently, 12 Delaware municipalities participate in the Tree City USA program, including two in the Bethany Beach area (Ocean View and Rehoboth Beach). Participation in the program requires that the town have a tree board or department, a tree-care ordinance, a community forestry program with a budget of at least \$2 per capita, and an Arbor Day observance or proclamation.

Emergency Management and Natural-Disaster Mitigation

Emergency Response and Coordination

Local emergency-management-and-response coordination in the Town of Bethany Beach is executed by the local police force in conjunction with local fire and rescue services. The town has both a staff of full-time police officers and a volunteer fire-and-rescue organization located in the community. The Delaware State Police and the Delaware Emergency Management Agency (DEMA), in cooperation with local fire and rescue units, conduct regional and statewide emergency response. Two large-scale emergency-planning-and-response organizations operate in the region: DEMA and the Delmarva Emergency Task Force.

Evacuation Routes

Statewide emergency-evacuation routes have been established for the Bethany Beach area by Sussex County and the State of Delaware. Three primary evacuation routes exist in Bethany Beach: S.R. 1

northbound to the Kent County line, S.R. 26 westbound to U.S. 113 north, and County Road 361 (Kent Avenue) south to State Route 20.

Project Impact

In 1999, the Town of Bethany Beach was designated a “Project Impact Community” by the Federal Emergency Management Agency (FEMA). Project Impact was launched by FEMA in 1997. Working with state and local governments, this initiative utilizes a common-sense approach to building disaster-resistant communities. Growing from seven pilot communities, the program now includes nearly 200 designated communities throughout the country. Project Impact’s goal is to reduce the damage-repair-damage cycle by implementing preventive measures before disasters strike. In November 2000, FEMA and Bethany Beach signed a formal agreement to turn the town into a disaster-resistant community. The town received grant monies from FEMA to coordinate, plan, and implement specific emergency-management policies and programs. The town continues to plan and implement emergency-management programs and policies with the resources provided by FEMA under the Project Impact program.

Goal Statement – Environmental Protection

The Town of Bethany Beach wishes to act to protect identified natural resources and environmentally sensitive areas in and around the town and reduce the dangers posed to town residents and visitors by natural disasters.

Recommendations – Environmental Protection

Recommendation 1: Respond to Existing and Expected TMDL Standards

Along with other communities in Delaware’s coastal region, the Town of Bethany Beach shares the responsibility for maintaining the quality of the air and water in and around eastern Sussex County. In addition, the state and federal governments have begun to adopt specific standards for the quality of natural resources.

Recommendation 2: Develop Strategies to Achieve the 50-Year Replenishment Project

The preservation of the Bethany Beach community and its unique character depends heavily on the preservation of its most prominent resource, the beach. However, the town’s ongoing efforts to preserve and reinforce the integrity of its beach strand will certainly depend heavily upon the town’s relationships with other municipalities, the State of Delaware, and the federal government. It is recommended that the town evaluate its current policies regarding beach preservation and replenishment and consider the development of a written policy regarding beach replenishment, in order to ensure long-term state and federal commitments for the Bethany-South Bethany 50-year replenishment project. The written policy should also include emergency beach replenishment options.

Recommendation 3: Develop Policies to Maintain Critical Natural Resources

The natural environment in Bethany Beach contributes to the integrity of all life in the region. It is recommended that the town complete a comprehensive and ongoing analysis of its policies regarding the protection of the critical natural areas designated on Map 4 of the Appendix. The town should seek to adopt and implement policies and programs that are appropriate for the effective preservation of these natural areas, which include wetlands, source water protection areas, and trees.

Recommendation 4: Maintain Inter-Agency Coordination for Emergency Management

The safety of Bethany Beach's residents and visitors during a natural disaster or emergency depends heavily on regional cooperation and policy integration between many governments and agencies in the Delmarva region. It is recommended that the town maintain and strengthen its existing relationships with those agencies involved in emergency management. This may include extensive information sharing and distribution, as well as active participation in the projects and programs of DEMA and the Delmarva Emergency Task Force. It is further recommended that the town continue to utilize the resources obtained through FEMA's Project Impact to increase its emergency-management capacities.

2-8. Economic and Community Development

This section of the plan presents a profile of the town's economic and community resources, including man-made structures, places, and objects as well as natural resources and community capacities. This section will also provide details regarding some current community-development projects being undertaken by the town.

Economic Profile

Labor pool

As the population of a city or town increases, the number of available workers should also increase. This has certainly been the case in Bethany Beach over the past two decades, as the number of workers in the town has increase proportionally with the growing population. Table 19 details the number of workers in Bethany Beach and the industry in which they work for the past two census periods.

Table 19 – Employment by Industry, Bethany Beach, 1990 and 2000

Industry	1990 Jobs (% of total)	2000 Jobs (% of total)
Agriculture	5 (4.0%)	3 (0.8%)
Construction	7 (5.5%)	29 (8.0%)
Manufacturing	6 (4.8%)	18 (4.9%)
Wholesale Trade	4 (3.1%)	6 (1.7%)
Retail Trade	33 (26.2%)	47 (13.0%)
Transportation	0 (0.0%)	6 (1.7%)
Information	5 (4.0%)	16 (4.4%)
Finance, Insurance, Real Estate	19 (15.1%)	48 (13.2%)
Professional Services	11 (8.7%)	39 (10.8%)
Education	8 (6.3%)	69 (19.1%)
Arts and Entertainment	0 (0.0%)	39 (10.8%)
Other Services	23 (18.3%)	22 (6.1%)
Public Administration	5 (4.0%)	20 (5.5%)
Total	126 (100.0%)	362 (100.0%)

Source: U.S. Census 1990 and 2000

The total labor pool for Bethany Beach has remained roughly one-third of the total population for the past 20 years. However, some significant changes have occurred in the type of employment held by workers in Bethany Beach. While some industries, such as manufacturing and finance, insurance, and real estate, have maintained similar proportions of the workforce, industry sectors such as arts and entertainment and education have increased as a proportion of the total town workforce. The proportion of jobs in the retail sector has decreased by half over the period studied, indicating the possible presence of increasingly secure and well-paying full-time employment in the region. In general, the labor pool in the Town of Bethany Beach seems to be increasing in diversity and keeping up with population growth as a whole. However, the population and demography profile provided earlier in this plan suggests that future population increases may not contribute proportionally to the resident labor pool. As the community of Bethany Beach becomes increasingly composed of older, retired individuals, the available and active labor pool in the town can be expected to decline. As a result, the town may need to employ

persons from elsewhere in the region, increasing the need for a focus on an effective affordable-housing strategy in Sussex County. But for now, the workforce of Bethany Beach seems to be improving in composition and keeping up with local population growth.

Local Businesses

Including all categories of commercial enterprise, the Town of Bethany Beach hosts more than 100 businesses that comprise a fairly diverse local economy. Businesses in the town operate in a wide range of categories, including retail, service, food, hospitality, recreation, and banking. Collectively, the town's economic sector employs hundreds of permanent, full-time workers and thousands of seasonal personnel. The sections below detail the number and type of businesses that operate in the town for each category, as defined by the Bethany-Fenwick Chamber of Commerce.

Accommodations

The Town of Bethany Beach hosts a large number of single-family homes and townhouses that are rented periodically during the summer months, but there are very few hotel, motel, and bed and breakfast establishments here. Two larger motel establishments are located adjacent to the beach, just south of Garfield Parkway. A handful of businesses in the town represent this category; however, a variety of accommodations exist in the town, from simple motels to a quaint, upscale bed and breakfast. With the increasing number of permanent residents in the town and the subsequent expected decrease in available rental homes, the market demand for such formal accommodations may increase substantially. However, the maintenance of the existing accommodations in town coupled with the decreasing availability of rental houses may contribute significantly to the town's overall goal of establishing a family-oriented, quiet, residential town.

Arts, Entertainment, and Recreation

Bethany Beach hosts a number of entertainment and recreational establishments; however, very few of them remain open throughout the year. With the exception of a cycle and fitness store and several art galleries, many of these businesses open only in the summertime. While this may be economically efficient, this provides very few local entertainment options for year-round residents. This category may be a core target for future economic development efforts and investment.

Restaurants and Eateries

The Town of Bethany Beach hosts more than 30 restaurants and eateries, offering a range of options from fast food to elegant dining. In addition, approximately half of these establishments remain open all year, providing permanent town residents with a substantive selection of dining experiences year round. The variety of cuisine offered by the town's restaurants is impressive, including Italian, Chinese, Mexican, Vegetarian, seafood, pizza, deli and subs, steakhouse grill, and many others. During the summer season, town eateries offer a wide range of snack foods, frozen novelties, and specialty candies in addition to many more restaurant options. In all, the Town of Bethany Beach features many dining

options that provide year-round services for seasonal residents and visitors as well as permanent residents.

Professional Services

The town hosts relatively few establishments that offer professional services, which may be due to the seasonal nature of the town. While more than a dozen real estate brokers operate in town (mostly in home offices), other services seem conspicuously absent. Banking, repair and maintenance, clothing cleaning and tailoring, and design services are limited, and other important services are non-existent. Considering the increasing age and permanence of the town's population, there may be a significant present and future need for a range of professional offices and establishments. Specialty medical services and investment services may be included as targets for future local economic-development activities or investment.

Retail Stores

Bethany Beach boasts approximately 50 retail stores that offer a very diverse mix of products and services. While this may seem to be a very good number for the small community of Bethany Beach, the large majority of these retail establishments are specialty stores that are open only a few months during the year. Very few of the retail businesses in Bethany Beach remain open and available to permanent residents throughout the year. While some essential retail shops such as convenience stores and grocery stores remain open all year, most of the specialty clothing and gift shops that provide diversity and richness to the retail business sector in Bethany Beach cater specifically to the summer crowds. As the permanent population of the town grows over the coming years, the demand for year-round retail shopping experiences that extend beyond necessities can be expected to increase. The town may find it important to complete an inventory or analysis of its year-round retail businesses and target specific retail sectors for economic-development activity or investment.

Historic and Cultural Resources Inventory

Historic Structures

In 2001 and 2002, the Delaware State Historic Preservation Office (SHPO) completed a historic- and cultural-resources inventory in the Town of Bethany Beach. SHPO staff members surveyed structures, monuments, parks, and other cultural resources in the town to identify those with remarkable historic significance and integrity. Experts found that the town itself has a rich history but that few resources remain with the integrity required by the National Register of Historic Places. Due to the growing popularity of Delaware's coastal communities, the physical integrity of many of the local historic resources has been compromised over the years by multiple additions, significant renovations, and demolition. However, SHPO was able to identify several significant historic resources in Bethany Beach that have been well preserved. Of the 141 total properties surveyed, SHPO identified 12 that could be considered "eligible resources" for preservation under federal National Historic Preservation Act guidelines. In addition, the Town of Bethany Beach Planning Commission identified additional

resources that were not identified by SHPO but are considered significant to the Bethany Beach community.

104 Second Street (John M. Addy House)



John Addy House (104 Second Street)

During the summer of 1902, six Pittsburgh-area businessmen and their families began to build cottages in Bethany Beach. Built between 1902 and 1903, four of the original “Pittsburgh Six” cottages still survive. This folk Victorian cottage was built in 1902 by John M. Addy, and is one of the “Pittsburgh Six.”

109 First Street (Errett House)

Nearly identical to the John M. Addy House is this symmetrical, one-and-a-half-story folk Victorian cottage, built by W.R. Errett and still owned by members of his family.

99 First Street (Dinker House)

This house, situated on the ocean side of Atlantic Avenue, is the second built by W.A. Dinker and another of the “Pittsburgh Six.” This hip-roofed, two-and-a-half-story cottage was originally called “The Oriole” because of its orange and black paint.

48 North Atlantic Avenue (Latimer House)

Standing at the northeast corner of Atlantic Avenue and Second Street is this last surviving member of the “Pittsburgh Six” built by R.S. Latimer. It is a cross-gable, three-bay house with a side hall entrance and a wrap-around porch.

101 Parkwood Street (Journey's End)



Journey's End (101 Parkwood Street)

This large beach cottage, known as “Journey’s End,” is a popular guest house that dates back to 1927. During the Second World War, the house was used to board troops and was known as Fort Maggie after the owner, Margaret Hughes. Appearing to be two, two-and-a-half-story houses connected by a common roof, Journey’s End maintains much of its historic integrity.

99 Campbell Place (Drexler House)

Built in 1905, the Drexler House stands at the northeast corner of Campbell Place and Atlantic Avenue and was the home of former state senator Louis Drexler. Moved three times in its lifetime, the house has now been reoriented to allow easy access to the beach from its front entrance.

98 Central Avenue (Drexler West)

This two-and-a-half-story folk Victorian cottage is known as “Drexler West” and is another early example of the town’s historic architecture.

9 South Pennsylvania Avenue

This small folk Victorian house at the northwest corner of Pennsylvania Avenue and Hollywood Street was built around 1902 and is a surviving example of the town’s historic architecture.

204 Hollywood Street

On the south side of Hollywood Street is a small folk Victorian house built in 1901 by Minto Hassler. Although extensively remodeled over the years, the form and size of the original structure remains intact.

Campbell Hall, Disciples of Christ Assembly

Located on the Disciples of Christ Assembly grounds, Campbell Hall was built in 1938 and became the conference center for the Capital Area Disciples of Christ. During the Second World War, the building was leased by the War Department, which controlled the property through the fall of 1944. Following the end of the war, the conference grounds reopened and resumed hosting conferences and camps for the Capital Area Disciples of Christ.

Loop Canal

The Bethany Beach Loop Canal, located at the foot of First Street, was dug by the Bethany Beach Improvement Company in 1910. The mile-long canal connected the town with the Assawoman Canal, which was dug in 1890 to connect the Indian River Bay and Little Assawoman Bay. The waterway eliminated rough land travel to the town and ended in a loop to give access to the *Allie May*, a steamship designed to travel in shallow waters that could not reverse.

The Addy Sea



The Addy Sea is one of the most prominent and historic structures in Bethany Beach. Currently operating as a popular bed and breakfast establishment, the Addy Sea attracts many hundreds of visitors to the Delaware seashore's "quiet resort" each year. A complete description from the establishment's website conveys the history and significance of this cultural resource:

The oceanfront Addy Sea, located on the corner of Oceanview Parkway & North Atlantic, steeped in history and legend, is one of Bethany's most famous landmarks. A mere glance at its late-Victorian exterior, clothed in the classic cedar shingles the town's early houses wore and trimmed with lacy gingerbread, brings to mind a bygone era in which visitors came to the beach by steamer and horse-drawn buggy. John Addy, one of Bethany's original settlers, built the Addy Sea for his family in 1902. The Family began renting it to church groups during the depression. It changed hands in the 70's and the Gravattes who have been welcoming guests for 25 years, continue to operate the Addy Sea as a bed and breakfast inn. The Addy Sea has 13 guestrooms and accommodates 37 comfortably.

Current Economic and Community Development Projects

Garfield Parkway Beautification Project

Figure 9 - Bethany Beach Streetscape Enhancements, Conceptual Layout



Source: Community Conservation Group (C.C.G.) and Slater Associates, Inc.

The Town of Bethany Beach has worked with private consultants and engineers to develop a plan to improve the aesthetics and functional capacity of Garfield Parkway east of State Route 1. As the major commercial and recreational center of the town, this area has become a major focus of proposed safety and visual improvements. Figure 9 displays the details of the proposed improvements, which include:

- Relocation of utility infrastructure (poles, etc.) to the alleys north and south of Garfield Parkway
- Reorientation of parking spaces along the length of Garfield Parkway, adding a total of 14 additional spaces
- Installation of trees and other mature landscaping;
- Expansion and improvement of pedestrian infrastructure, including a four-to-seven-foot widening of the sidewalks, improvement of crosswalks, and intersection “bump-outs”
- Installation of a traffic circle at the intersection of Garfield Parkway and Atlantic Avenue

Slated improvements that are a part of this community-development project have not yet begun, and the town continues to work closely with the consulting engineers as well as DelDOT in order to facilitate a successful start and swift completion. This cooperation, coupled with timely state funding, is the key ingredient for a successful start and swift completion of the project. DelDOT has approved an initial \$144,000 in Transportation Enhancement funding to reimburse the town for design costs, and the state agency anticipates approving additional funding for construction of the project. In addition, the town’s tree-protection ordinances may qualify this project for funding under the Department of Agriculture’s Urban Forestry Program, which would provide a grant to match DelDOT funding. The town will use acquired resources to determine an appropriate design and implementation strategy.

Bandstand Improvement Project

Figure 10 – Improved Bandstand, Conceptual Image



Source: Town of Bethany Beach

The Town of Bethany Beach is currently in the final planning phase of a project to reorient and improve the aesthetics of the town bandstand, which lies at the eastern terminus of Garfield Parkway. As shown in Figure 10, the bandstand and seating area will be reoriented to the south to allow for the redesign of the area and the installation of aesthetic improvements. In addition, the reorientation of the bandstand itself will allow for the improvement of accessibility to the bandstand, beach, and boardwalk area from Garfield Parkway. It will also redesign the town square to provide a more friendly year-round use. Proposed improvements to the town bandstand area are slated to begin in 2004 and be completed before the beginning of the summer season in 2005.

Bethany Beach Nature Park

In 2002, the Town of Bethany Beach began initial plans to create a nature center and park on the “Natter property,” a large tract of public open space and wetlands located adjacent to the west of the Villas of Bethany West development. The Addy III, a historic beach cottage built by one of the town’s original and most prominent residents, was donated to the town and moved to the site to serve as the nature/welcome center. Town officials have engaged state officials in guiding and validating the project, and the renovation of the Addy III has recently been completed. Planning, design, and construction of the natural park area are expected to begin in the coming months.



Bethany Beach Nature and Conservation Center (Addy III)

Goal Statement – Economic and Community Development

The Town of Bethany Beach wishes to utilize its resources effectively to consistently and responsibly promote and improve a safe and enjoyable community environment that reflects the needs and interests of the Bethany Beach community.

Recommendations – Economic and Community Development

Recommendation 1: Create a Comprehensive Local Economic Development Plan

While the business sector in Bethany Beach seems to be keeping up with the growth and evolution of the local community, it may be important for the town to clearly state its priorities and investment plans regarding economic development. Developing a comprehensive economic-development plan that targets specific business and retail sectors can not only expedite the process of economic development but also guarantee that the businesses that develop here are of the appropriate character to serve the local community. Using the information and goals included in this plan, it is recommended that the town consider further planning and investment activities aimed at attracting and retaining businesses that can better serve the local resident population and provide a stable economic foundation for the town's long-term future.

Recommendation 2: Complete a Local Historic and Cultural Resources Inventory

The data and information included in this plan come directly from the work of the University of Delaware's Center for Historic Architecture and Design (CHAD) and the State Historic Preservation Office (SHPO). While their inventory methods are highly effective for identifying historic sites and architecture that is historically significant on a regional and national scale, the local cultural significance

of other sites and structures may be overlooked by the process. It is recommended that the town complete its own local inventory of historic and cultural resources, using participation and input from the local community to construct a portrait of Bethany Beach's most important and preservation-worthy resources.

Recommendation 3: Encourage Historic Preservation Activities

The preservation of historic resources plays a significant role in recognizing community values and maintaining the integrity of the town's character. Even during the completion of this plan, the town has lost at least one major historic resource, a fact that illustrates the conflict between the desire for regional growth and the need to conserve the assets of the community. It is recommended that the town encourage the preservation of the historic and cultural resources identified both in this plan and by the inventory recommended above. This recommendation may be implemented in a number of ways, including the integration of preservation considerations into the architectural- and design-review processes recommended earlier in this plan. In addition, guidelines regarding appropriate adaptive reuse of historic resources may be incorporated into existing or future development-review procedures.

Recommendation 4: Maintain Public Involvement in Future Projects

The Town of Bethany Beach engages in a number of public projects each year, many of which require detailed strategic planning and decision-making throughout the completion process. The direct and indirect involvement of the public allows for the establishment of key community values and the execution of decisions about public projects that reflects these expressed values. The public participation and information activities utilized recently by the town have reflected a deep commitment to the desires and sentiment of Bethany Beach residents, and this should continue into the future. The increased use of the town's website for such purposes should be considered as well as more local, hands-on participatory activities.

Recommendation 5: Implement Streetscape Plan

It is recommended that the Town of Bethany Beach vigorously pursue the steps necessary to begin the Garfield Parkway Beautification Project described above. This includes the engagement of officials at DelDOT, the Department of Agriculture, and other state agencies to obtain funding for integral project planning and construction elements.

Recommendation 6: Implement Bandstand Plan

It is recommended that the Town of Bethany Beach vigorously pursue the steps necessary to complete the improvements to the town bandstand area before the beginning of the summer season in 2005.

CHAPTER 3. IMPLEMENTATION

The Town of Bethany Beach seems to be reaching a critical time in its development. As the permanent population of the town grows and tourism to the Delaware seashore continues to increase, a primary challenge for the town will be the maintenance of those policies and activities that have made Bethany Beach a great place to live in and visit. As the population base grows, it is also important to develop new strategies and plans to effectively serve the needs of new, as well as current, residents. It is clear that the town wishes to remain small in size and family-oriented in character, and an understanding of community participation and intergovernmental cooperation persists in every activity undertaken here. It is also clear that the growth experienced in Sussex County is not just a local issue; indeed, the regional nature of recent development in the county necessitates that the State of Delaware, the county, and other municipalities dependent upon Bethany Beach's local beaches all must be involved in the establishment of policies and projects that will preserve the integrity of the town's shoreline, the safety of pedestrians and bicyclists, and the protection of local natural and cultural resources. Through strong commitments to this goal, voiced by all of these stakeholders, the Town of Bethany Beach will be significantly better prepared to successfully implement the recommendations in this plan.

In order to carry out the recommendations drafted in this plan, it is important to establish a strategy for their implementation. This establishes estimated timing and implementation strategies for the recommendations in Chapter 2 based on the town's capacity to carry out the recommendation and the level of intergovernmental coordination required.

3-1. Summary of Plan Recommendations

The following list is a compilation of plan recommendations by topic area, following the plan structure and order used in the preceding section. In addition, each of the recommendations is labeled according to the timing of the activity or activities involved. Short-term (ST) recommendations are those that require immediate planning and discussion, with implementation activity expected within one or two years. Long-term (LT) recommendations are those that require extensive intergovernmental planning and policy coordination and may take five, ten, or more years to complete. Immediate and ongoing (IO) recommendations are those that may or may not require immediate discussion or activity but also require long-range consistency in policy, planning, and action. For the details of each recommendation, please refer to the section to which they apply.

Housing

Recommendation 1: Establish an Architectural Review Board (ST)

Recommendation 2: Affordable Housing Strategy (LT)

Recommendation 3: Building Standards in Flood Plains and Flood Fringe Areas (ST)

Land Use and Annexation

Recommendation 1: Review and Revise Existing Codes (ST)

Recommendation 2: Maintain Land Uses and Promote Appropriate Redevelopment (IO)

Community Services and Facilities

Recommendation 1: Maintain Optimal Intergovernmental Relations (IO)

Water, Wastewater, and Stormwater Management

Recommendation 1: Determine Future Water Needs (ST)

Recommendation 2: System Mapping and Planning (LT)

Recommendation 3: System Improvements and Policy (LT)

Recommendation 4: Drainage and Stormwater Management (IO)

Transportation

Recommendation 1: Intergovernmental Coordination (Especially S.R. 26 Project) (IO)

Recommendation 2: Data Collection (LT)

Recommendation 3: Local Public Transportation (IO)

Recommendation 4: Regional Public Transportation (LT)

Recommendation 5: Pedestrian Safety (ST)

Recommendation 6: Bicycle Paths (LT)

Environmental Protection

Recommendation 1: Respond to Existing and Expected TMDL Standards (ST)

Recommendation 2: Develop Strategies to Achieve the 50-Year Replenishment Project (LT)

Recommendation 3: Develop Policies to Maintain Critical Natural Resources (LT)

Recommendation 4: Maintain Inter-Agency Coordination for Emergency Management (IO)

Economic and Community Development

Recommendation 1: Create a Comprehensive Local Economic-Development Plan (LT)

Recommendation 2: Complete a Local Historic- and Cultural-Resources Inventory (ST)

Recommendation 3: Encourage Historic-Preservation Activities (IO)

Recommendation 4: Maintain Public Involvement in Future Projects (IO)

Recommendation 5: Implement Streetscape Plan (ST)

Recommendation 6: Implement Bandstand Plan (IO)

3-2. Implementation Strategy

This section also consolidates the recommendations drafted in this plan, but organizes them based upon the timing involved in the integral activities rather than the topic area. This section may be seen as a rough strategic plan to detail those Short Term (ST) recommended activities that should be pursued immediately or require relatively little intergovernmental policymaking and coordination. Long Term (LT) recommendations and Immediate and Ongoing (IO) recommendations may require more intensive

planning over a number of years and demand that the town works closely and consistently with other governments or public agencies to successfully fulfill the details of the recommendation. For the details of each recommendation, please refer to the section to which they apply.

Short-Term Recommendations

Housing

Establish an Architectural-Review Board

Building Standards in Flood Plains and Flood-Fringe Areas

Land Use and Annexation

Review and Revise Existing Codes

Water, Wastewater, and Stormwater Management

Determine Future Water Needs

Transportation

Pedestrian Safety

Environmental Protection

Respond to Existing and Expected TMDL Standards

Economic and Community Development

Complete a Local Historic- and Cultural-Resources Inventory

Implement Streetscape Plan

Long-Term Recommendations

Housing

Affordable-Housing Strategy

Water, Wastewater, and Stormwater Management

System Mapping and Planning

System Improvements

Transportation

Data Collection

Regional Public Transportation

Bicycle Paths

Environmental Protection

Develop Strategies to Achieve the 50-Year Replenishment Project

Develop Policies to Maintain Critical Natural Resources

Economic and Community Development

Create a Comprehensive Local Economic-Development Plan

Immediate and Ongoing Recommendations

Land Use and Annexation

Maintain Land Uses and Promote Appropriate Redevelopment

Water, Wastewater, and Stormwater Management

Drainage and Stormwater Management

Community Services and Facilities

Maintain Optimal Intergovernmental Relations

Transportation

Intergovernmental Coordination (Especially S.R. 26 Project)

Local Public Transportation

Environmental Protection

Maintain Inter-Agency Coordination for Emergency Management

Economic and Community Development

Maintain Public Involvement in Future Projects

Encourage Historic-Preservation Activities

Implement Bandstand Plan

3-3. Intergovernmental Coordination

The quality of life of all of the people living in Bethany Beach will be affected by the land-development activities occurring within the town and on surrounding lands within Sussex County's jurisdiction. Therefore, it would be of great benefit to Bethany Beach, Sussex County, and surrounding municipalities to continue to develop a more cooperative relationship. Matters of joint concern among Bethany Beach and other jurisdictions must be discussed among the interested parties. Likewise, Sussex County and nearby towns may find that this enhanced relationship can help keep them informed of matters they may not be aware of occurring within Bethany Beach and help keep those matters from adversely affecting residents living in their respective jurisdictions.

Development that occurs outside the town limits is highly relevant to Bethany Beach, due to the economic and social impacts that it may have upon the town. The town should attempt to remain aware of land use changes and applications in nearby areas that will affect the town. The town should comment on these changes and applications through the state's PLUS review process and through the planning processes in Sussex County, Ocean View, Millville, and South Bethany. The town should

review and comment on the comprehensive plans and on planning and development activities within these jurisdictions. The Town of Bethany Beach should also continue to review and comment on DelDOT's Long-Range Transportation Plan, since traffic will continue to be a major issue.

Additionally, the Town should maintain a good dialogue with the Delaware Office of State Planning Coordination (OSPC) and the professional planner the OSPC has designated as the Sussex County Circuit Rider Planner. The Circuit Rider can help the town with a variety of issues, including assisting the town in updating its zoning ordinance, providing assistance with identifying the appropriate contact persons within state or county departments, identifying funding sources for programs developed to assist the municipalities in Delaware, and providing direction on alternatives to locating data and information the town may need in its efforts to apply for loans and grants.

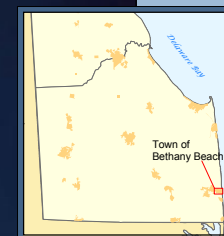
APPENDIX A. MAPS

- Map 1. Aerial View
- Map 2. Roads and Boundaries
- Map 3. Neighborhoods
- Map 4. Environmental Features
- Map 5. State Investment Strategies
- Map 6. Existing Land Use
- Map 7. Zoning
- Map 8. Future Land Use

Town of Bethany Beach, Delaware

Map 1. Aerial View

700 350 0 700 1,400 2,100 2,800 Feet



- Town of Bethany Beach
- Other Municipalities
- Parcel Boundaries
- Hydrology
- Delaware Boundary

June 2005

Sources:
 Digital orthophotography - Produced by Earth Data International in False Color Infrared at a scale of 1 / 2,400 with a 1 foot pixel resolution, March 2002.
 Parcels - Sussex County Planning Office, 2002.
 Hydrology - USGS 7.5 Minute Series Topographic Maps. Created in cooperative agreement between the State of Delaware and the USGS (1991-1993).
 Municipal Boundaries - Delaware Office of State Planning and Coordination, 2004.

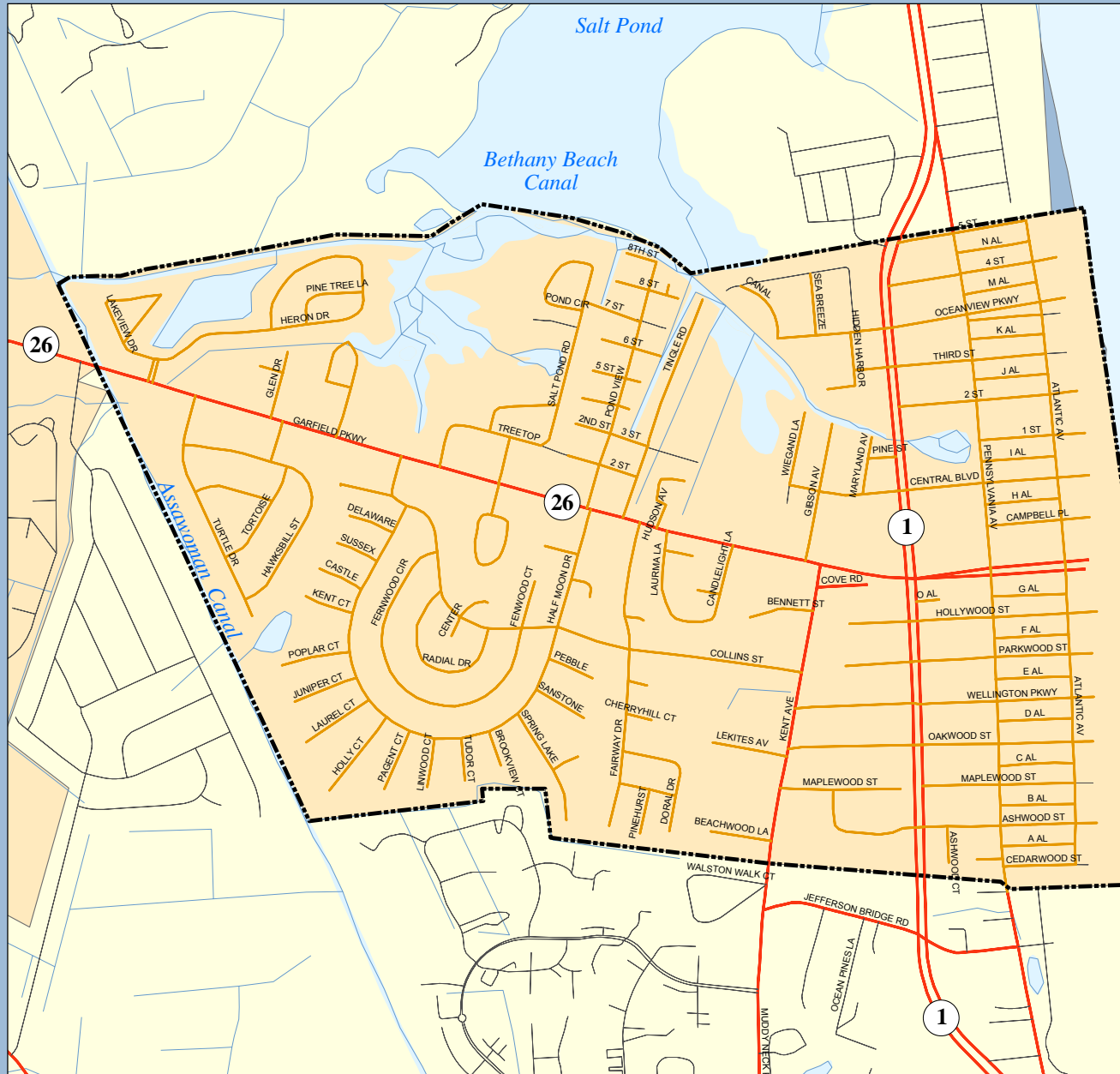
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Town of Bethany Beach, Delaware

Map 2. Roads and Boundaries

620 310 0 620 1,240 1,860 2,480
Feet



- Town of Bethany Beach
- Other Municipalities
- Municipal Roads
- State Maintained Roads
- Centerline Roads
- Hydrology
- Delaware Boundary

June 2005

Sources:
 Parcels - Sussex County Planning Office, 2002.
 Base map - Delaware Department of Transportation centerline file (2001) created from Digital Orthophoto Quarter
 Quads (1997).
 Hydrology - USGS 7.5 Minute Series Topographic Maps. Created in cooperative agreement between the State
 of Delaware and the USGS (1991-1993).
 Municipal Boundaries - Delaware Office of State Planning
 and Coordination, 2003.

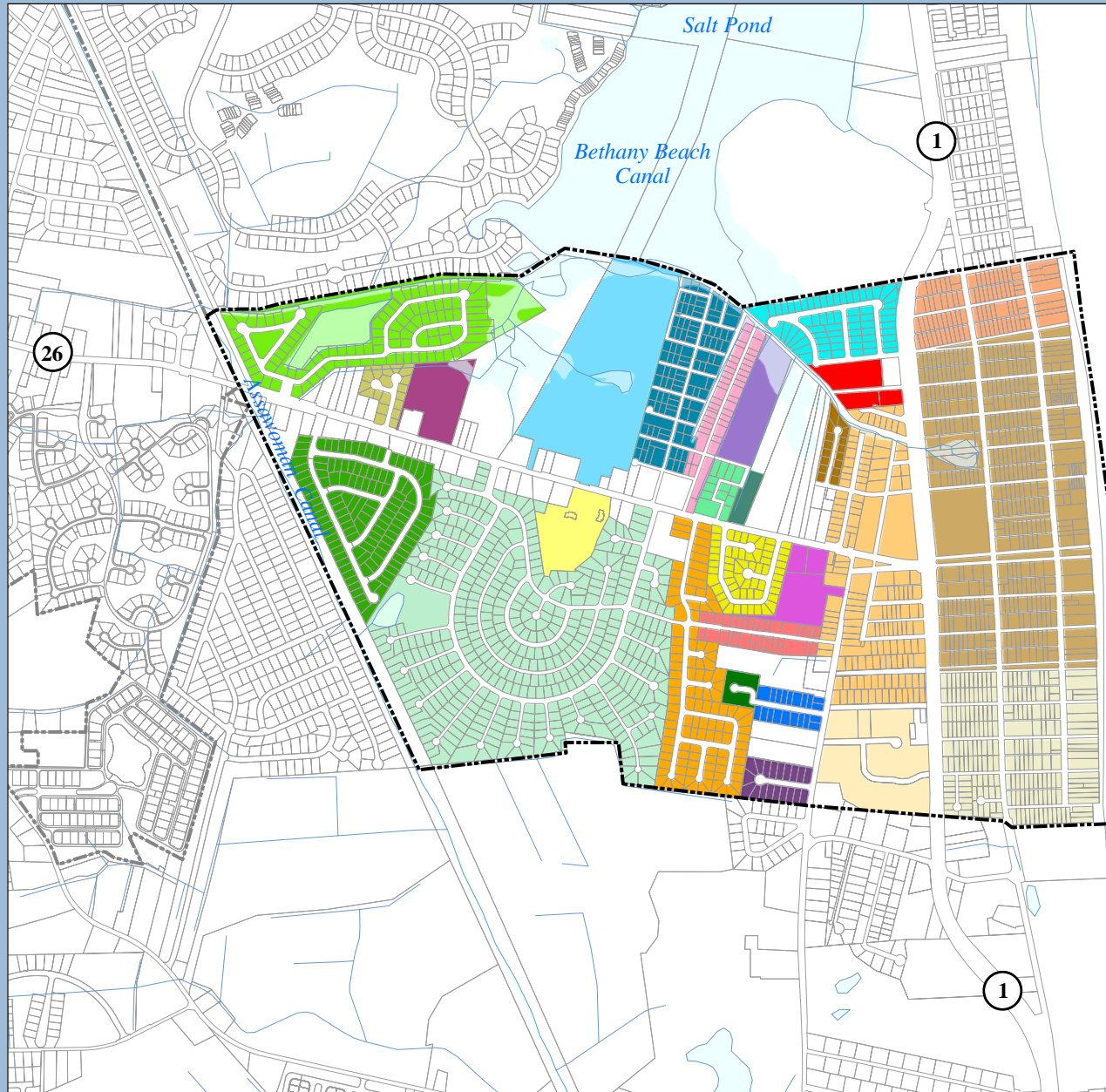
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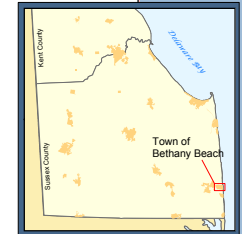
Town of Bethany Beach, Delaware

Map 3. Neighborhoods

860 430 0 860 1,720 2,580 3,440 Feet



ATLANTIC OCEAN



- | | |
|--------------------------|----------------------------|
| Town of Bethany Beach | East Central Bethany Beach |
| Other Municipalities | Fairway Drive |
| Parcel Boundaries | Hidden Harbor |
| Hydrology | Hudson Avenue |
| Lakes and Ponds | Lake Bethany |
| Atlantic Ocean | Lekites Avenue |
| Subdivisions | Northeast Bethany Beach |
| Bayberry Woods | Pond View |
| Beach Hollow | Sandy Pines |
| Beachwood Lane | Southeast Bethany Beach |
| Bethany Glen | Stewart's Watch Townhomes |
| Bethany Proper Townhomes | The Canal |
| Bethany West | Tingle Road |
| Candlelight Lane | Turtle Walk |
| Collins Street | Villas of Bethany West |
| Dolphin Manor | Westwood at Bethany |
| Downtown Bethany Beach | Wiegand Lane |

June 2005

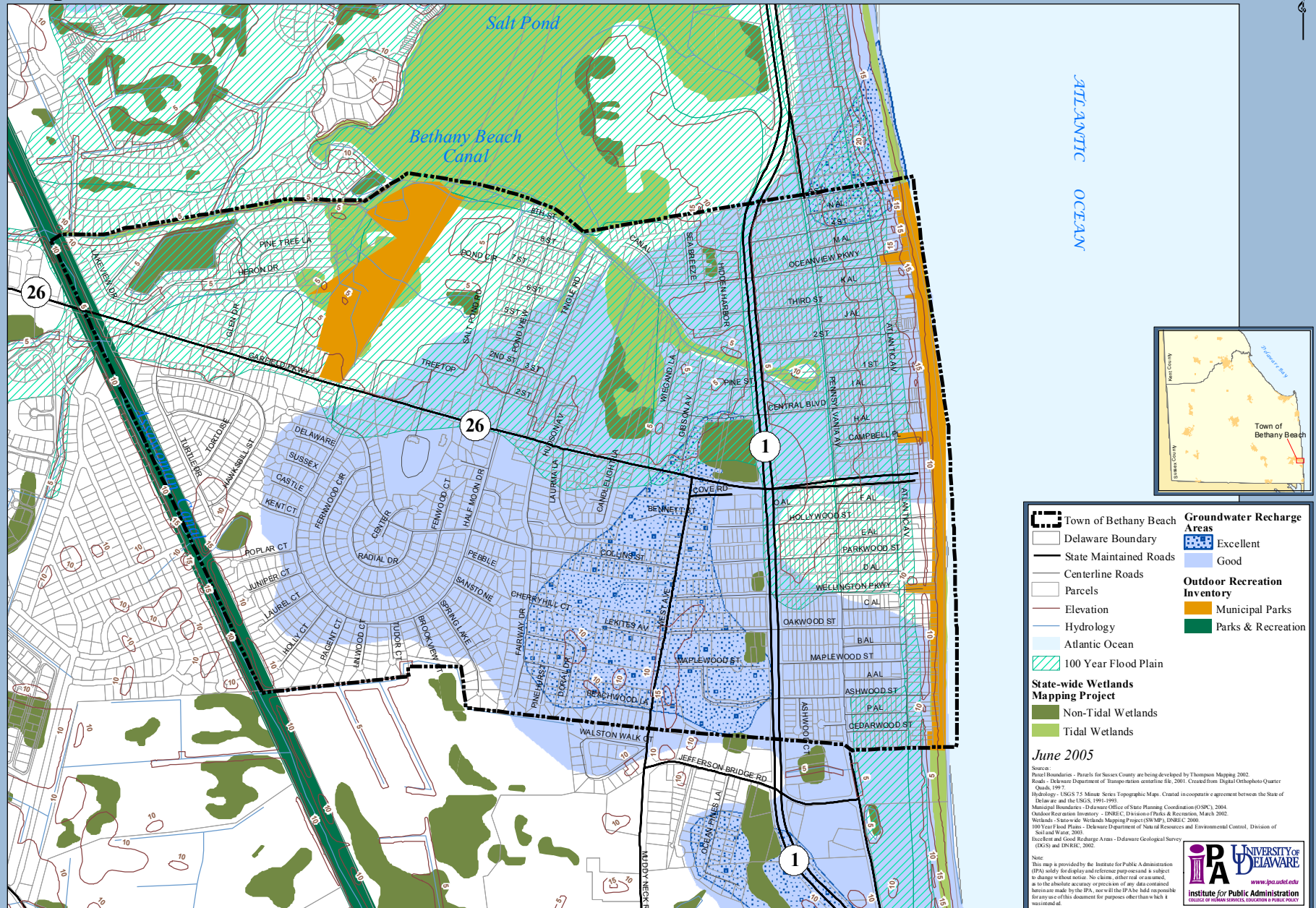
Sources:
 Neighborhoods - Developed by a Land Use Survey performed by the Institute for Public Administration, University of Delaware, Spring 2004.
 Parcels - Sussex County Planning Office, 2002.
 Base map - Delaware Department of Transportation centerline file (2001) created from Digital Orthophoto Quarter Quads (1997).
 Hydrology - USGS 7.5 Minute Series Topographic Maps. Created in cooperative agreement between the State of Delaware and the USGS (1991-1993).
 Municipal Boundaries - Delaware Office of State Planning and Coordination, 2004.
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Town of Bethany Beach, Delaware

Map 4. Environmental Features

640 320 0 640 1,280 1,920 2,560
Feet



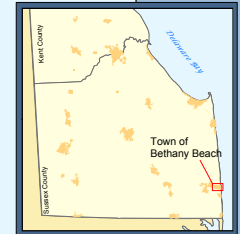
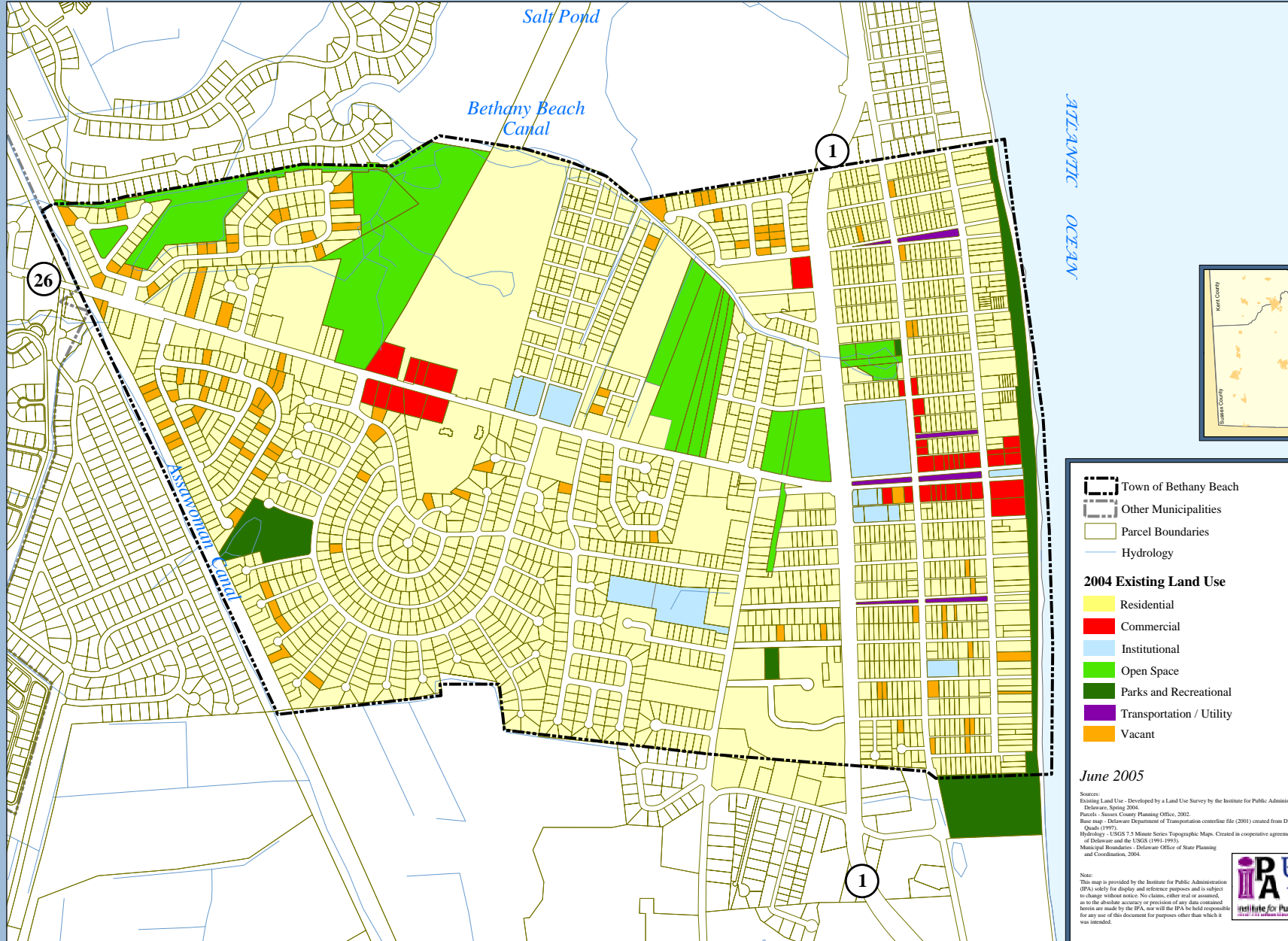
Map 5. 2004 State Investment Strategies



Town of Bethany Beach, Delaware

Map 6. 2004 Existing Land Use

640 320 0 640 1,280 1,920 2,560 Feet



- Town of Bethany Beach
- Other Municipalities
- Parcel Boundaries
- Hydrology

2004 Existing Land Use

- Residential
- Commercial
- Institutional
- Open Space
- Parks and Recreational
- Transportation / Utility
- Vacant

June 2005

Sources:
 Existing Land Use - Developed by a Land Use Survey by the Institute for Public Administration, University of Delaware, Spring 2004.
 Parcels - Sussex County Planning Office, 2002.
 Base map - Delaware Department of Transportation centerline file (2001) created from Digital Orthophoto Quarter Quads (1997).
 Hydrology - USGS 7.5 Minute Series Topographic Maps. Created in cooperative agreement between the State of Delaware and the USGS (1991-1993).
 Municipal Boundaries - Delaware Office of State Planning and Coordination, 2004.

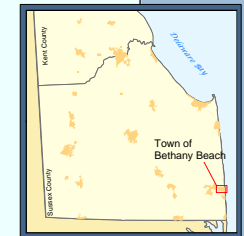
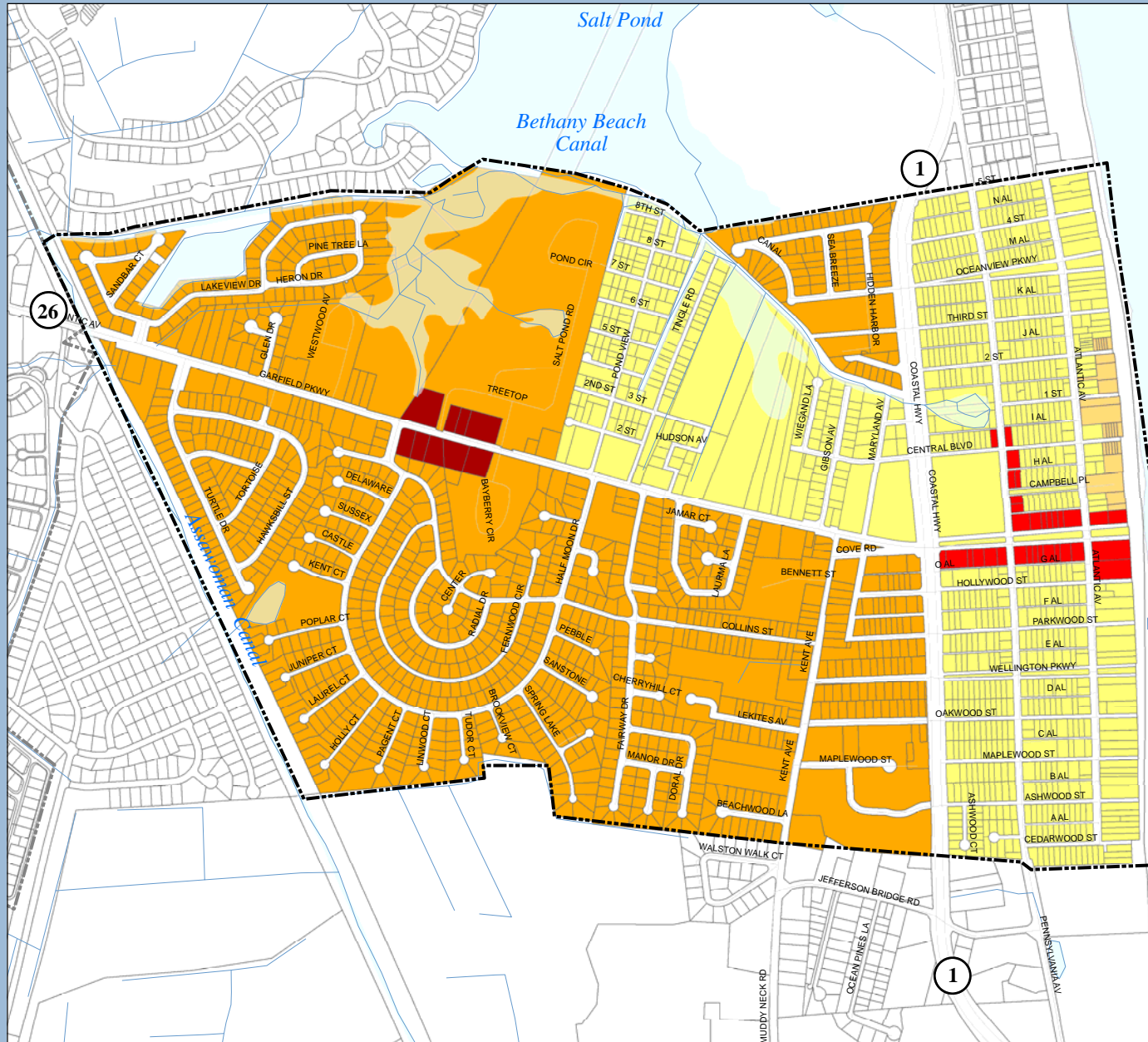
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Town of Bethany Beach, Delaware

Map 7. Zoning

600 300 0 600 1,200 1,800 2,400 Feet



2004 Zoning

- R-1: Central Residential District
- R-1A: Boardwalk Residential District
- R-2: Neighborhood Residential District
- C-1: Central Commercial District
- C-2: Neighborhood Commercial District

- Town of Bethany Beach
- Other Municipalities
- Roads
- Parcel Boundaries
- Hydrology
- Ponds and Canals

June 2005

Source:
Existing Zoning - Town of Bethany Beach, August 2004.
Parcels - Sussex County Planning Office, 2002.
Base map - Delaware Department of Transportation centerline file (2001) created from Digital Orthophoto Quarter Quads (1997).
Hydrology - USGS 7.5 Minute Series Topographic Maps. Created in cooperative agreement between the State of Delaware and the USGS (1991-1993).
Municipal Boundaries - Delaware Office of State Planning and Coordination, 2004.

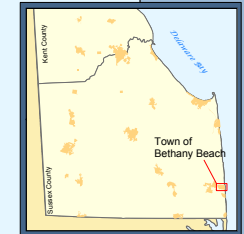
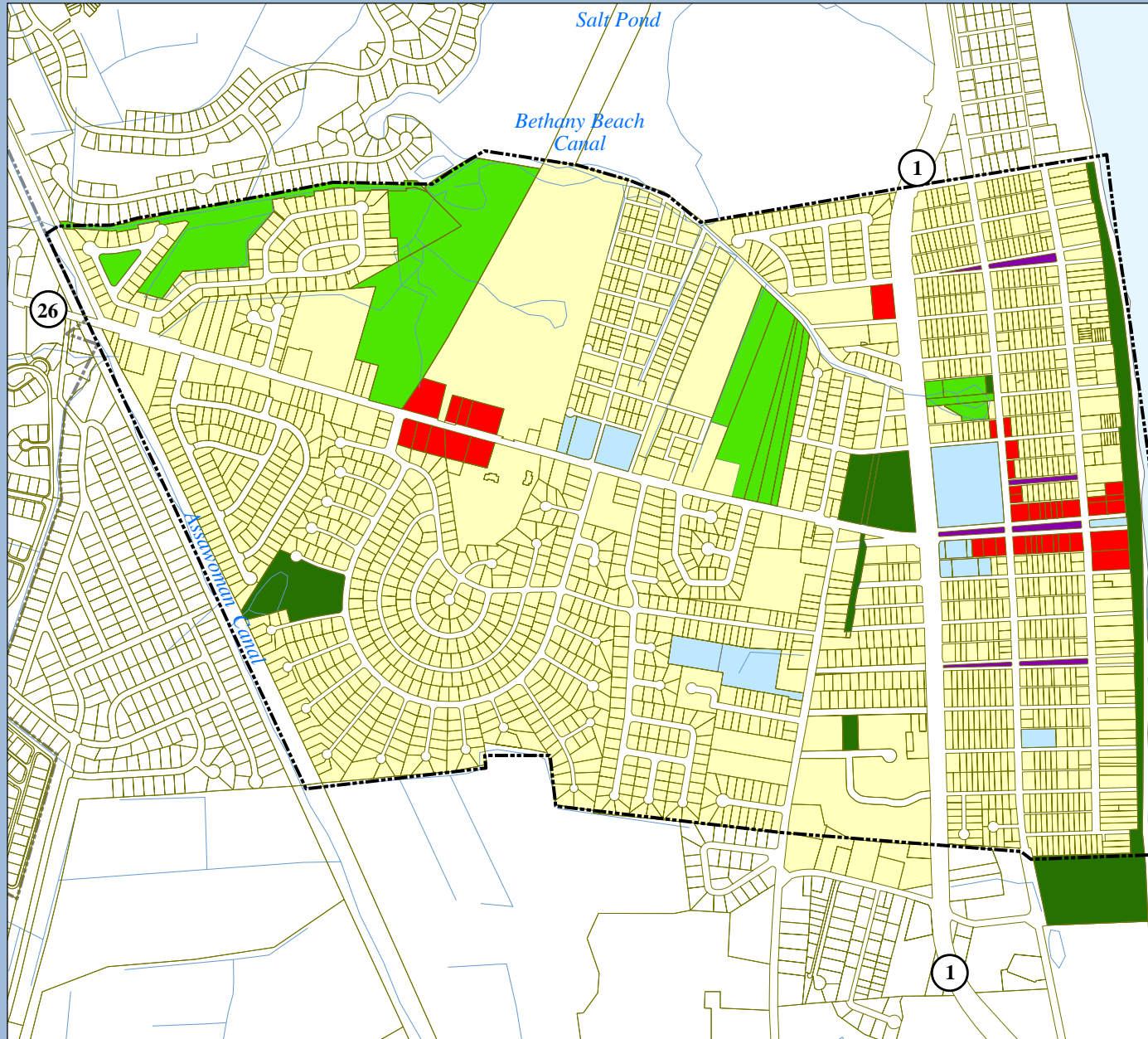
Note:
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Town of Bethany Beach, Delaware

Map 8. Future Land Use

650 325 0 650 1,300 1,950 2,600 Feet



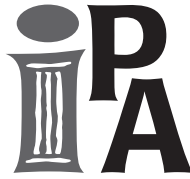
- Town of Bethany Beach
- Other Municipalities
- Parcel Boundaries
- Hydrology
- 2004 Existing Land Use**
- Residential
- Commercial
- Institutional
- Open Space
- Parks and Recreational
- Transportation / Utility

June 2005

Sources:
 Existing Land Use - Developed by a Land Use Survey by the Institute for Public Administration, University of Delaware, Spring 2004.
 Parcels - Sussex County Planning Office, 2002.
 Base map - Delaware Department of Transportation centerline file (2001) created from Digital Orthophoto Quarter Quads (1997).
 Hydrology - USGS 7.5 Minute Series Topographic Maps. Created in cooperative agreement between the State of Delaware and the USGS (1991-1993).
 Municipal Boundaries - Delaware Office of State Planning and Coordination, 2004.

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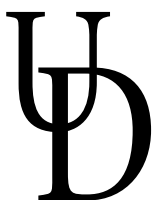


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