North Carolina Coastal Zone Management Program

OCEAN ISLE BEACH, N.C.

CAMA LAND USE

1986 UPDATE

COASTAL ZONE
INFORMATION CENTER

HD
211
.N8
O34
1986

PREPARED BY:

TALBERT , COX & ASSOCIATES, INC.

LOCAL ADOPTION: FEBRUARY 10,1987
CRC CERTIFICATION: MARCH 27, 1987

The preparation of this document was financed in part through a grant provided by the North Carolina Coastal Management Program, through funds provided by the Coastal Zone Management Act of 1972, as amended, which is administered by the Office of Ocean and Coastal Resource Management, National Oceanic and Atmospheric Administration.

HD211.N8 O34 1986

OCEAN ISLE BEACH, NORTH CAROLINA
LAND USE PLAN: 1986 UPDATE

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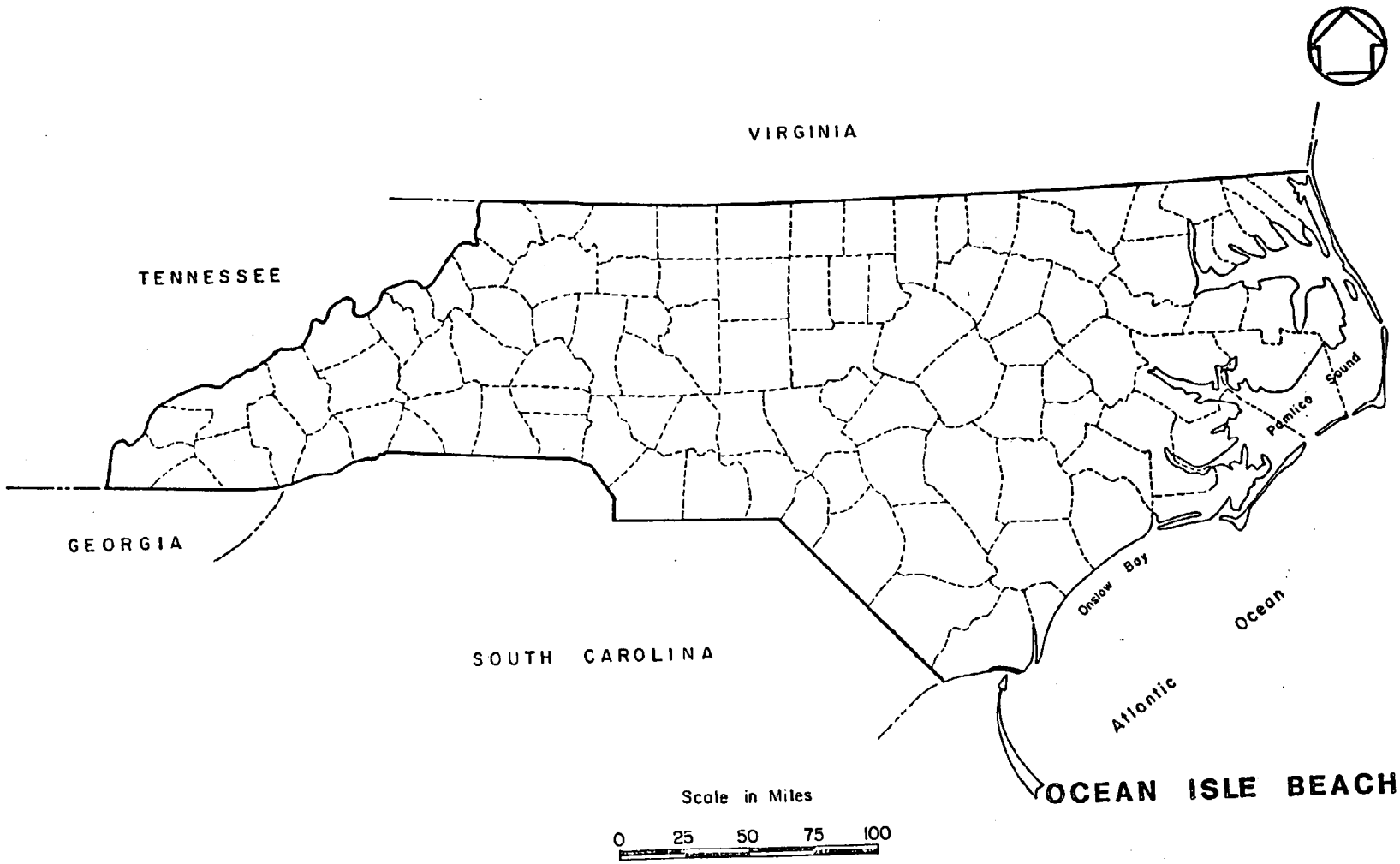
VIRGINIA
TENNESSEE
GEORGIA
SOUTH CAROLINA
Pamlico Sound
Onslow Bay
Atlantic Ocean
OCEAN ISLE BEACH
Scale in Miles
0 25 50 75 100

MAP I

OCEAN ISLE BEACH, NORTH CAROLINA
LAND USE PLAN: 1986 UPDATE

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PREFACE

OCEAN ISLE BEACH
LAND USE PLAN UPDATE, 1986
Analysis of 1981 Policy Statements/Implementation Actions

The CAMA Land Use Plan for coastal communities is essentially a policy document aimed at guiding localities toward sound growth management. Because circumstances, conditions, and issues change over time, the Coastal Resources Commission, under State law, requires the local land use plans to be updated every five years in order to "take a second look" at old policies for their relevance as well as examine newly emerging trends and concerns. The Commission is also requiring in all 1986 updates an assessment of the previous policy statements and implementation steps taken to effectuate them. This summary analysis of the 1981 policies is being presented here as a "Preface" to the 1986 Plan Update of the Town's Plan.

Policy Area

A. Resource Protection

Policy/Implementation	Status/Relevancy Actions
1. Ocean Isle Beach will continue to support Federal and State regulatory controls. Also, as it has done in the past, the Town will continue to enforce its own local controls on building and development. The local controls include the subdivision, zoning, leveling, dune protection, and flood damage and prevention ordinances.	1. Implemented. An on-going concern.
2. The Town will continually review its ordinances for consistency with CAMA's and its own management objective, and revise them where needed. It is the belief of the Town, however, that the current CAMA permit process and the State regulations regarding the placement of septic tanks, combined with the local ordinances listed in (1) above, provide adequate management tools for achieving the stated objectives.	2. Implemented. An on-going concern. All relevant ordinances we reviewed and placed in a single "Development Handbook (1985).

3. Ocean Isle Beach, recognizing that erosion along the beaches can cause many problems, supports beach renourishment projects that would allow approved suitable spoils to be taken from Intracoastal Waterway dredging to be placed on designated areas on the island.	3. Implemented. An on-going concern.
4. The Town, though aware that some inlets migrate as a natural ongoing process, supports stabilization of Inlet Hazard Areas near the Atlantic Ocean. This area is also subject to the minimum building set back line for Ocean Isle Beach. It is the policy of Ocean Isle Beach to not permit developments within the Ocean Erodible Area (which generally coincides with the Ocean beaches).	4. Implemented. An on-going concern. Also, significant accretion has occurred on the island's west end.
5. As long as the Town relies upon the system of horizontal well fields for part of its water supply, development on the land above these wells will not be allowed.	5. The use of these wells is being phased out, as the Town is connecting to the County water system.
6. Residential development will not be encouraged in airport approach areas.	6. An Airport Zoning Ordinance, which was prepared for Ocean Isle Beach by Brunswick County's Planning Department, has been adopted.
7. Until such time as a central sewage collection and disposal system can be developed, growth and development will not be encouraged in areas where septic tanks must be in compliance with State Health Regulations.	7. The Town is developing a centralized sewage system, the first Phase of which should be developed in late 1986.
8. During Fiscal Year 1981-82, Ocean Isle Beach will authorize the Mayor to apply for funds from the Office of Coastal Management in order to provide assistance in reviewing its local ordinances for consistency with CAMA.	8. Funds were applied for and awarded, but the Town decided not to utilize them at the time.

B. Resource Production

Policy/Implementation	Status/Relevancy Actions
1. Ocean Isle Beach will strictly enforce its existing sign ordinance and litter law to help keep the community neat and attractive.	1. Implemented. In April, 1984, an expanded, comprehensive sign ordinance was adopted.
2. The Town will continue to support the expansion of recreational opportunities that do not seriously detract from the general aesthetics of the community, or do not cause an unsafe generation of traffic.	2. In 1986, the Town will begin management of its first recreational park, proposed to contain tennis courts, etc.
3. Ocean Isle Beach will consider the development, adoption and enforcement of a Community Appearance Ordinance in extraterritorial areas and will continue to support and encourage private beautification efforts within Town limits.	3. On-going concern; ordinance not adopted.
4. The Town will continue to support public access to the beach strand.	4. The Town has applied for and received access development grants, and access planning funds.
5. In Fiscal Year 1984-85, the Town Board will conduct a study of ways to increase the efficiency of collection and removal of trash by the Town's sanitation unit in a more cost-effective and energy conservation manner. The board may seek the assistance and service of outside planning consultants.	5. In March, 1986, the Town-operated solid waste collection system was phase out, in favor of the services of a private contractor.

C. Economic and Community Development

Policy/Implementation	Economic & Community Development - Actions
1. The Town will continue to seek financial assistance to develop a central sewage collection and disposal system on the island, in order to avoid possible problems resulting from sole reliance upon septic tanks for all development.	1. Implemented. Sewer system currently being constructed and will eventually serve the entire Town, phasing out septic tanks.

2. Ocean Isle Beach will continue to provide suitable spoil sites for dredging of the Intracoastal Waterway by the Corps of Engineers. New development will not be encouraged in the existing spoil easement area.	2. Implemented.
3. The Town will seek Federal and State assistance in support of beach nourishment projects, and encourage local private efforts.	3. Implemented.
4. Ocean Isle Beach will continue to support and promote tourism as its main economic base. The development of non-intensive recreational and commercial land uses will be encouraged in order to enhance services for the public.	4. Implemented. On-going concern.
5. In Fiscal Year 1981-82, the Town Board will develop an official street and house numbering system in order to facilitate locating residences in emergency situations and in order to develop a uniform address system.	5. Implemented.
6. In Fiscal Year 1981-82, the Town will extend its extraterritorial jurisdiction to a portion of the adjacent mainland area north of the Intracoastal Waterway. Also, the Town's zoning and subdivision ordinances will be amended as appropriately determined.	6. Proceedings currently underway.
7. In Fiscal Year 1982-83, Ocean Isle Beach will seek funding assistance to develop more public waterfront access ways.	7. Implemented in FY 85-86 and 86-87.

D. Continuing Public Participation

Policy/Implementation	Continuing Public Participation - Actions
1. Ocean Isle Beach believes that its Planning Board, which has regularly scheduled meetings, all of which are open to the public, provides adequate opportunities for citizens to air their views concerning planning matters. The	1. Implemented.

Board will continue to be maintained at its present size.	
2. Ocean Isle will continue its policy of informing citizens of governmental issues and decisions by sending out a copy of the minutes of Town Board Meetings to all permanent residents.	2. Implemented. On-going concern.
3. The Town will use published public notices to inform citizens of pending decisions involving land use planning matters.	3. Implemented. On-going concern.

SECTION I :
Analysis of Existing Conditions
and
Projected Demand

OCEAN ISLE BEACH LAND USE PLAN UPDATE
1986

A. ESTABLISHMENT OF INFORMATION BASE

This 1986 Land Use Plan Update for Ocean Isle Beach has been prepared in accordance with requirements of the North Carolina Coastal Area Management Act (CAMA). Specifically, this document complies with Subchapter 7B, "Land Use Planning Guidelines," of the North Carolina Administrative Code, as amended, June 17, 1985.

The initial Land Use Plan for Ocean Isle Beach was prepared in 1976 as part of the overall Brunswick County Plan. However, the first five-year update in 1981 as required by the CAMA regulations, marked a significant step in the Town's history. The Town developed its own Land Use Plan independently of the County, representing its first locally-based policy formulation effort. The 1981 Plan, which was adopted by the Town and later approved by the Coastal Resources Commission, must also be updated after five years. This document represents the Town's compliance with this required, and, very useful exercise.

According to the Land Use Planning Guidelines, the major purpose of periodic updating of local land use plans is to identify and analyze newly emerging community issues and problems. An additional element which was not required in either the 1976 Plan or the 1981 Update is a "Storm Hazard Mitigation, Post-Disaster Recovery, and Hurricane Evacuation Plan," and is required to be included in the 1986 Update. This element is designed to help local governments effectively coordinate policies and actions relating to the impact of hurricanes or other severe storms. Another added emphasis in this 1986 update is the effects of increasing development activity on the quality of coastal waters.

As stated in the 1981 Land Use Plan, population growth, which requires an increasing utilization of land and other resources, can lead to undesirable consequences if the land and community facilities are unregulated or improperly managed. Ocean Isle Beach, through the development and subsequent updating of this foundational policy document, along with the enforcement of existing local controls, is seeking to avoid the negative results of unmanaged growth.

The guidelines further give the following objectives the update should meet:

- to further define and refine local policies and issues;
- to further examine and refine the land classification system and the land classification map;

- to assess the effectiveness of the existing land use plan and its implementation;
- to further explore implementation procedures, and;
- to promote a better understanding of the land use planning process.

Both the 1976 Land Use Plan and the 1981 Update provided much of the needed information base for this most recent update. However, in many cases, new information had to be developed. A number of data sources were tapped during the preparation of this plan in order to prepare updated analyses of population, housing, the economy, and existing land uses. Most of the data came from primary and secondary sources in the form of direct contacts with Town officials, (including members of the Planning Board), representatives of various state and federal agencies and/or previously published documents or reports. Also, on-site "windshield" surveys were conducted to obtain data on existing land use patterns. Efforts were made to obtain data that was as up to date and accurate as possible. Also, as well as a general citizens' public information meeting, several public meetings were held with the Planning Board in order to solicit citizens' input in identifying preliminary land development issues.

B. PRESENT CONDITIONS

1. Population

In the conventional land use planning process, population analysis and future growth projections are often relatively uncomplicated procedures of collecting one set of figures from standard secondary sources, such as the U. S. Census Bureau or State agencies, and making estimates of future growth based on recent or existing trends. For seasonally attractive localities, particularly those with a high tourist orientation, population analysis and attendant forecasting is not as uncomplicated. Such is the case with Ocean Isle Beach, North Carolina.

a. Year-Round Population

Ocean Isle Beach, like other summer resort communities experiences a wide fluctuation of population according to the season. Although the year-round permanent population has always been and remains relatively small, it has been steadily growing. The Town was incorporated in 1959 and made its first showing in the U.S. Census in 1960 with a permanent population of only five people. In 1970, however, the U. S. Census showed a year-round population of 78 people. The growth trend for permanent residents also carried over into the 1970's, when the permanent population, according to final U. S. Census figures reached 143. It should be noted that "Preliminary" 1980 Census figures, as reported in the

1981 Plan Update was 180 permanent residents. The "final" census figure of 143 is 37 persons less than the "Preliminary" total. It should also be noted that the final U. S. Census figure has been contested by the Town. Nevertheless, the year-round population of 143 persons represented an increase of 83 percent--an average increase of about 8 percent per year. Ocean Isle's rate of population growth during the decade from 1970 to 1980, according to final 1980 figures, was nearly double the rate of Brunswick County's--83 percent compared to 47.7 percent. For purposes of this 1986 Update of the Land Use Plan, however, the 1980 population figure contained in the 1981 Land Use Plan, i.e., 180, will be assumed as the most accurate figure.

The 1985 year-round population was estimated from a variety of sources. Initially, estimates from the State Data Center through 1984 were examined. However, this figure of 189 persons was only 46 more persons than the U. S. Census final 1980 count and only nine persons more than the level reported in the 1981 Plan. The State's estimate also was considered "too low" by Town officials. Also, the State estimates for 1985 for Ocean Isle Beach showed 285 permenant residents, again considered "low" by the Town. Projections and estimates were also obtained from the Brunswick County Planning Department. The County Planning Department produces annual population estimates of the County and its municipalities based on reports filed by the County Electrical Inspector, and cooperation from the Municipal Building Inspectors. Also, the Town's Police Department conducted a house-to-house survey in early 1986, reporting a total of 319 persons. Finally, the Town's records on applicants for resident auto decals, which are required for re-entry after a major storm, were carefully examined. These applications also reported on the number of children per unit as well. Non-resident owners also were eligible to apply for auto decals, which provides a good data base for counting some "summer residents". It was determined that these estimates, based on the Town's records were more accurate, and will be used as the "base" population for this Plan Update. Note Table 1, below:

Table 1: Ocean Isle Beach Year-Round Population: 1985 Estimate:

Year	Population	No. Change	% Change
1980	180	---	---
1985	372	192	107%

Source: 1981 Land Use Plan Update; Town of Ocean Isle Beach; (auto decal records)

Comparing the 1980 population estimate contained in 1981 Land Use Plan, to current estimates, the Town's population grew by a total of 107% over the five-year period, which is an annual average growth rate of 21.4%. This is a net numerical gain of 192 more persons. As the island community continues its growth as a

family summer resort, it is likely that more and more people will "come to the beach" to stay, and thereby increase the Town's year-round population. However, it is unlikely that the rate of growth, i.e., doubling every five years, will continue through the period covered by this plan, i.e., 1995. Between 1985 and 1990, based on discussions with Town officials and developers, a total increase of nearly 30% is not unrealistic. This increase in the year-round populace, i.e., an average annual increase of 5% would place 475 permanent residents in the Town by 1990.

After 1990, based on discussions with Town officials and land developers, it is also probable that the rate of population growth will increase gradually up to a 10% per year peak by 1995. This will be a total increase over the projected 1990 population of nearly 50%, or 223 more persons. The 1995 year-round population, therefore, is projected to be 698 persons. Notice Table 2, which follows:

Table 2: Ocean Isle Beach Population Projections 1990-1995:

Projection Year	Estimated Year-Round Population	Number Increase
1985	372	
1990	475	103
1995	698	223

Source: Projections by Talbert, Cox and Associates, Inc.

By 1995, the year-round population at Ocean Isle Beach could be double the 1985 estimate, for a total increase of 326 additional permanent residents. The highest numerical growth would take place between 1990 and 1995. Assuming an average household size of 2.5 persons per unit, this will represent growth from approximately 149 year-round households to 279 households, i.e., 130 more dwellings used for year-round occupancy. Current CAMA permit and building permit trends, as will be discussed later in this document, appear to support the projected growth trend. This growth will obviously have an impact upon the Town's provision of services. However, these specific impacts will be addressed in later sections of this plan.

b. Seasonal Populations

The year-round population for resort communities is just one component of the total population, especially in terms of impacts upon local facilities and services. The "seasonal" population, i.e., those persons drawn to the area during the summer months is perhaps more significant. In Ocean Isle Beach the seasonal population consists of summer residents and "weekenders" (i.e., persons who have permanent addresses elsewhere, but who own resi-

dences in Ocean Isle in which they spend all or part of the summer months); cottage and motel unit renters, and day visitors. Each of these sub-components will be discussed below:

(1) Summer Residents and Weekenders: Based on previously cited auto decal records for non-resident owners in 1985, 126 dwelling units were used by persons who have permanent addresses other than Ocean Isle Beach. A total of 323 persons (including children) were noted in this category. Usually, it should be noted, when the units owned by summer residents or "weekenders" are not being privately used, they are rented out as "cottages", and are therefore continuously occupied during the summer season.

(2) Cottage and Motel Renters: Based on records provided by the Building Inspector, as of September, 1985, Ocean Isle Beach contained a total of 1,720 dwelling units, including single family, multi-family (condominiums), and duplexes. If the number of units projected to be utilized by the year-round population, summer-resident, and weekend owners is subtracted from this total, then the number of dwellings available as rental beach "cottages" can be estimated. In the preceding discussion, it was stated that year-round residents occupy 149 units, and the summer and weekend owners utilize 126 for a total of 275 units. The total of 1,720 minus 275, leaves 1,445 units available for general rentals. Local realtors estimated that the average occupancy per rental unit is about eight (8) persons per dwelling. Therefore, when all 1,445 available rentals are completely occupied, a total of 11,560 additional persons are on the island.

There is only one active motel "The Winds" currently in Ocean Isle Beach. This motel contains 65 units. The management stated the motel has units to accomodate from two to eight persons, and that upon complete occupancy, the average is about five persons per unit. Therefore, during the summer peak occupancy, an additional 325 persons are in Ocean Isle Beach in this motel.

(3) Day Visitors: The final component of the seasonal population of Ocean Isle Beach consists of "day visitors," i.e., residents from nearby inland communities who come down to "spend a day at the beach." The typical peak day for day visitors is a Saturday during the summer--especially if it is a holiday weekend. Although it is very difficult to count all such visitors, an analysis of annual Average Daily Traffic (ADT) rates provided by the State Department of Transportation, provides some indication. The most recent traffic counts available for Ocean Isle Beach were taken in the spring of 1986 along N.C. Highway 904, between N.C. 179 and the old intracoastal waterway bridge, and near the intersection of 904-179, as a result of a specially requested volume count. The annual ADT count was 6,050 vehicles per day on N.C.

904, and 7,000 vehicles per day on N.C. 179-904. However, DOT officials stated that for seasonal areas, a "safe" projection of a 25% increase during the summer is reasonable. Therefore, the summer daily traffic volume at the same location on N. C. 904 could be 7,562 vehicle trips per day. These 7,562 trips to and from Ocean Isle Beach include those made by persons already on the beach, i.e., year-round residents and cottage and motel unit renters, as well as day visitors.

If it is assumed that each of the 1,720 dwelling units and the 65 motel units (a total of 1,785) has at least one automobile which makes an average of one trip across the waterway per day, i.e., two vehicle trips, then 3,570 of the 7,562 vehicle trips can be accounted for. It will be further assumed that the remaining 3,992 vehicle trips are made by day visitors. Since the total count would include traffic in both directions, then one-half of the cars are likely to be on the beach for a portion of the day, while the other half is leaving throughout the day. Thus one-half of 3,992 cars, i.e., 1,996 vehicles carrying day visitors may be assumed to be on the beach at any given time during a "peak" day. Town officials estimate that each such vehicle, on the average, contains about five occupants. The total number of day visitors on a "peak" day, therefore, is projected to be 5 x 1,996, or 9,980 persons.

c. Population Summary

Table 3, below, presents a summary of the various components of the "peak" seasonal population of Ocean Isle Beach in 1985.

Table 3: Ocean Isle Beach Population Summary, 1985

Component	1985
Year-Round Residents	372
Summer Residents	323
Cottage and Motel Renters	11,885
Subtotal "Resident" Population	12,580
Day Visitors	9,980
Total Peak	22,560

Source: Estimates and projections based on information provided by Town officials; and N.C.D.O.T. Planning and Research Branch

It is important to note that the 1981 Plan Update reported an estimated seasonal population of from 6,000 to 7,000 persons. The current seasonal peak, therefore, represents an increase of a little over three times the level reported in the previous Plan. The seasonal population at Ocean Isle Beach is obviously growing.

The composition of the population in terms of age, as reported in the 1981 Plan, still consists mostly of young to middle-age adults and retirees. However, the number of school-age children residing within the Town appears to be increasing. As the population increases, however, with more younger families choosing to permanently locate in Ocean Isle, the number of school-age children will likely continue to increase.

Also, as stated in the 1981 Plan, Ocean Isle Beach's permanent population still does not contain any racial minorities. As the overall population continues to grow, it is feasible that the future population will include members of minority groups.

2. Economy

The economy of Ocean Isle Beach, although it has grown, has changed little since the 1981 Plan. It is still dependent upon tourism and travel. Ocean Isle Beach lies between two other beach communities, Sunset Beach and Holden Beach, and borders the Intracoastal Waterway. The Town features white, powdered sand beaches, a gentle surf, quietude, and privacy. These attractions, as well as the opportunity for surf and pier fishing, offer relaxing vacations to thousands of visitors during the summer months each year, as noted under the discussion on the population components.

Ocean Isle's growing economic base consists mainly of services, such as motels, cottage rentals, restaurants, gifts and specialty shops, and privately-owned recreational facilities, such as water slides and mini-golf courses. All of these services are generally geared toward the traveling and vacationing public and, as such, are dependent upon the seasonal flow of visitors for their financial sustenance. The seasonal population influx also produces what is, by and large, a seasonal economy. Most of the businesses in the Town do not remain open all year-round. Obviously, some stores, shops, and service stations must remain open to serve the year-round population.

The service-based economy of Ocean Isle consists almost totally of commercial activities, which has grown substantially since 1981. There is no agricultural or farming activity in the Town; neither are there any manufacturing or industrial interests in Ocean Isle. The 1981 Plan reported only 26 commercial establishments, with a total average of about 90 employees. Of those 26 establishments, six were concerned with real estate. In 1985, however, the number of commercial establishments had grown to 43, with an average employment level of 205 employees and 16 were involved with real estate development, construction, or management. This represents a substantial increase in both economic and employment activity. The 1981 Plan reported the peak employment level (including 10 Town employees) to be about 100 persons. The 1985 average peak employment level of 205 does not include the now 12 Town employees. Total employment peak is currently projected

to be double the level five years ago. Real estate development and sales, as reported in the 1981 Plan, is still the most significant factor in the resort community's economy. For example, there were four major multi-family developments reported in the 1981 Plan; as of 1985, there are 24.

The continuing real estate development and sales in the Town will most likely foster a continual growth in the number of permanent residents. As permanent residents increase, the demand for local services also increases. As local commercial services and activities increase, the Town will witness even more expansion of its economic base.

Table 4, next page, contains a listing of the Town's business in 1985. A few of the residents are engaged in minor commercial fishing. This activity, however, is relatively small, and plays no significant role in the Town's economy.

Another indication of the significant and continuing growth trend of the Town's economy is the growth in property valuations in recent years. Notice Table 5, below:

Table 5: Ocean Isle Beach Assessed Valuations, 1983-86

Year	Assessed Valuation	% Change
1983	67,298,594	--
1984	77,584,307	15.3
1985	98,180,807	26.5
*1986	251,000,000 (est.)	n/a

Source: Town of Ocean Isle Beach

As real estate development and population increase, the total assessed valuation will also increase, providing needed local government revenues. (It should be noted that in 1986, properties were re-evaluated, which accounts for the dramatic increase from 1985.) Another development since the 1981 Plan which has greatly aided local government revenues is the North Carolina accommodations tax, paid by owners of rental units based on the occupancy level of their units.

3. Impact of Seasonal Population:

Since 1980, the seasonal population increases have tripled from 6,000 to 7,000 people to over 22,000. Naturally, the impact is substantial. The most significant impacts, as reported

* Re-evaluation year

TABLE 4: COMMERCIAL ESTABLISHMENTS AND AVERAGE NO. EMPLOYEES, 1985

Company or Institution	Service or Product	Approximate Number Employees
Frank Williamson Const.	Construction	5
Island House & Islander Restaurant	Restaurant	32
Sloane Realty	Real Estate & Real Estate Management	16
Cooke Realty	Real Estate & Real Estate Management	14
Betty Williamson Realty Inc.	Real Estate & Real Estate Management	4
Ocean Isle Beach Supermarket	Grocery	22
Sheffield Grocery	Grocery	5
The Beach Shop	Grocery & Specialties	5
The Deli	Restaurant	3
The Galley	Grocery	1
The Breakers	Grill, Amusement Center	5
Ocean Isle Pier	Grill, Amusement, etc.	5
Ocean Isle Realty	Real Estate	2
River Country Mini-Golf	Amusement	2
Ocean Isle Waterslide	Amusement	2
Ocean Isle Marina	Boating Equipment	1
Island Realty	Real Estate	2
Charles Fox Const.	Building	10
Sunshine Alley	Dress Shop	2
Handful of Sand	Dress Shop	1
Victoria Ragpatch	Dress Shop	1
R.H. McClure, Inc.	Builders & Real Estate	5
James Brown Const.	Builders	4
Beach Traders Realty	Real Estate	4
ABC Store	Liquor Sales	2
W.D.Z.D. Radio	Broadcasting, Inc.	9
Sand-Dollar Realty	Real Estate	2
Surf & Sail, Inc.	Reantals & Specialties	2
American Vacationers	Real Estate	2
The sports Loft	Clothing	1
Ocean Isle Interiors	Interior Decorating	3
Bee Hive	Gift Shop	1
The Windstore	Gift Shop	1
Shoreline Beauty Shop	Hair Styling	2
Benton & Floyd Realty	Real Estate	6
Party Mart	Grocery, Beer & Wine	3
Casey's Ice Cream Parlor	Ice Cream	1
Southern Sands Realty	Real Estate	4
Ocean Isle Pharmacy	Drug Store	3
Salty's Surf	Clothing etc.	1
Causeway Realty	Real Estate	2
Dennis & Thompson, Inc.	Real Estate	2
United Carolina Bank	Bank	5
Total		205

Source: Report to N.C. Local Government Commission

in the 1981 Plan, are upon the Town's economy and community facilities, such as parking, water, and sewer. However, since the 1981 Plan, Ocean Isle Beach has taken some significant steps to deal with both seasonal water and sewer demands. Although the Town still has 11 wells supplying most of its water supply, it is also connected to the Brunswick County regional water system. At the intersection of N.C Highways 179 and 904, there is a County demand valve serving Ocean Isle Beach. During periods of peak demand, the flow of County water is triggered automatically. During the "off season," however, the use of the County water system has not been necessary. Only about four of the Town's wells are utilized during the "off-season" period. Eventually (by 1987), the Town hopes to be relying completely on the regional-wide system for its year-round water supply.

Being an ecologically sensitive barrier island, with limiting soil types, disposal of effluent has always been a concern at Ocean Isle Beach, and although currently the Town does not have a central sewer system, one is currently being constructed in Phases. Phase I (projected to be completed by late 1986) will serve the Town from the west end to Raleigh Street, which is most of the developed area. The rest of the Town will be served by Phase II (projected to be completed in 1989). Both water and sewer service, in the future, as will be discussed under "Community Facilities Constraints," should be able to handle seasonal impacts for quite some time.

4. Existing Land Use Analysis

a. Current Conditions

The overall land use pattern in Ocean Isle Beach has changed little since the preparation of the 1981 Land Use Plan Update, or even since the 1976 Plan. The overall pattern is basically the same. Within the Town's corporate limits are approximately 1,950 acres of land, water, wetlands, and beaches. Notice Table 6 below, which shows a comparison between 1980 acreages and estimated 1985 acreages within the corporate limits.

Table 6: Corporate Limits Land Use Acreages: 1980-1985

URBAN	1980	1985	% Change
Residential	130.00	164.00	26.10
Commercial, offices	11.00	16.00	45.50
Governmental	5.00	5.00	0.00
Roads	45.00	50.00	11.10
Recreation	0.00	7.50	--
*Undeveloped	839.00	787.50	- 6.13
Subtotal	1,030.00	1,030.00	0.00
Water, wetlands, beaches	920.00	920.00	0.00
TOTAL ALL AREAS	1,950.00	1,950.00	--

Source: 1981 Land Use Plan; Ocean Isle Beach
* within the existing urbanized area; ** rounded figures.

Ocean Isle Beach, although rapidly developing, still has a substantial amount of developable land. Residential developments have witnessed an increase in both single-family and multi-family developments. Also, a minor annexation (one grocery store, by the owner's petition) north of the Intracoastal Waterway added a little more "urbanized" area to the Town's jurisdiction. However, with significant amounts of land available for development, combined with the proposed provision of essential services, such as water and sewer, it appears that Ocean Isle Beach will itself be able to sustain significant levels of increased urbanized growth and development. Notice Table 7, below, which shows recent building permit activity.

Table 7: Ocean Isle Beach Building Permits, 1982-1985

Unit Type	1982	1983	1984	*1985	Total 1982-85
Single-Family	83	99	102	99	383
Multi-Family	51	116	96	0	263
Duplex	2	6	2	6	16
Commercial	1	2	2	2	7
Total	137	223	202	107	669

Source: Ocean Isle Beach Building Inspection Department

The Building Inspector reported that nearly all of the units for which building permits are issued are actually constructed. Permit activity peaked in 1983, with more than half of the permits being for multi-family units. The decline in total permits in '84 and '85 is reflective of the decrease in multi-family permit activity. However, multi-family activity is projected to increase significantly over the next few years.

Another indication of the projected building and development trends in Ocean Isle is the number of CAMA major permit applications on file as of January, 1986. Notice Table 8, below:

Table 8: CAMA Permits in Ocean Isle Beach, January, 1986

Unit Type	No. Units
S. F.	459
M. F.	686
Duplex	2
Commercial	8
Total	1,155

Source: Town Building Inspections Dept.

It is likely that most, if not all these proposed development s will occur during the period covered by this plan, i.e., by 1995. If this is true, then the projected building development by 1995 (or sooner), is estimated in Table 9 below by comparing the CAMA permits by unit type with existing structures.

Table 9: Projected Building Development, 1995

Unit Type	1986	Undeveloped CAMA Permits	Total Projected 1995	% Increase
S.F.	1,047	459	1,506	44.0
M.F.	667	686	1,353	103.0
Duplex	6	2	8	33.0
Commercial	37	8	45	22.0
Government	2	1	2	50.0
Total	1,759	1,156	2,914	65.7

Source: Building Inspections Dept.

The largest percentage increase will come from multi-family (condominiums) development.

b. Land Compatibility Problems

In the conventional land use planning concept, a land compatibility problem is generally identified when two or more land use types are adjacent to each other and one is somehow restricted from expansion because of adverse conditions caused by the other use or uses, thus discouraging additional investment. Currently, there are no such land compatibility problems in Ocean Isle Beach. It should be pointed out that in the 1981 Plan, the Town's complete reliance on 12 wells for its potable water supply, along with the complete reliance upon septic tanks for wastewater disposal, was cited as the most significant "compatibility" problem. However, as discussed above, Ocean Isle Beach is currently connected to the County regional water system on a demand-supply basis, anticipating complete dependence upon County water in 1987. Also, the Town is moving ahead with Phase I of the new sewer system, including a treatment plant and collection lines to serve nearly the entire developed area. Phase I is to be operational by late 1986, with the rest of the Town being served by Phase II. The "well and septic tank" issue will no longer pose a problem of incompatibility.

c. Problems from Unplanned Development

In the 1981 Plan Update, the potential for water shortages and/or salt-water intrusion into the Town's wells were cited as major problems from unplanned development. However, future water supplies, as discussed above, should not pose any serious problems. Currently, problems from unplanned development relate to the demand of a growing seasonal and year-round population on other community facilities, such as improved solid waste management, emergency rescue, fire protection and other safety services, adequate public parking in commercial areas, facilities to handle pedestrian and recreational traffic (such as sidewalks, bike trails, and public estuarine access), and municipal street lighting.

Access to and from the island, from the mainland, was improved substantially in November, 1985, with the completion and opening of the new Odell Williamson Bridge, which is a high-rise span across the Intracoastal Waterway. However, the improved access may well mean more cars, more people, and more of the problems related to the items discussed in the above paragraph. Obviously, planning for more extensive services and result of increasing development is an issue which must be addressed by Ocean Isle Beach.

d. Areas Likely to Experience Changes in Predominant Land Use

The areas within the Town's current jurisdiction likely to experience changes in predominant land use during the planning period are those areas which are presently vacant. As previously mentioned, there are still large tracts of developable land on

Ocean Isle Beach which will likely be continuously developed throughout the planning period.

Also, in 1985 (partly in response to proposed major rule changes in coastal building requirements), a substantial number of CAMA development permits were applied for in Ocean Isle Beach. As of January, 1986, permits are on file for the construction of 1,147 additional residential structures, and eight commercial structures (See Tables 8 and 9, page 12). Although no exact time frame can be set for the development of these permitted structures, it is likely that they will be developed within the current planning period, i.e., by 1995.

A very significant land use change for the Town is the possible development of its first public recreational park. The land, about 7.5 acres located between Wilson and Laurinburg Streets, is being managed by the Town through an agreement with the original developer of the Town. The Town may install public recreation facilities with the approval of the land owner. Facilities discussed include two tennis courts, a volleyball court, horseshoes, shuffleboard, tot lot, and board walk around the perimeter, pedestrian walkways, public restrooms, and parking for automobiles and bicycles. The tennis courts are currently under construction and should be opened in the summer of 1986.

e. Areas of Environmental Concern (AEC)

The statutorily defined Areas of Environmental Concern (AECs) in Ocean Isle Beach were described in the 1981 Plan, and except for some changes in the "Ocean Hazards" category, remain essentially the same. However, these areas need to be described again for this 1986 Update. The AECs found for the Town of Ocean Isle come under the Estuarine System grouping and the Ocean Hazard Area category. The AECs under the Estuarine System group for Ocean Isle Beach are:

(1) Coastal Wetlands, which are defined as any salt marsh or other marsh subject to regular or occasional flooding by tides, including wind tides (whether or not the tide waters reach the marshland areas through natural or artificial water sources), provided this shall not include hurricane or tropical storm tides. Coastal Wetlands also contain certain marsh plant species. The Ocean Isle Coastal Wetlands occur generally in the northern portions of the island which are adjacent to the Intracoastal Waterway. The most substantial amount of wetlands is located in the northwest sector of the island between the Intracoastal Waterway and Old Sound Creek. Included are the marshlands adjacent to the Intracoastal Waterway. Some of these areas are important because the marsh maintains the high productivity of fish and shellfish and the complex food chains which are typically found in the estuaries.

(2) Estuarine Waters are defined as "all the water of the Atlantic Ocean within the boundary of North Carolina and all the water of the bays, sounds, rivers, and tributaries thereto seaward to the dividing line between coastal fishing waters and inland fishing waters" (N.C.G.S. 113A-113(b)(2). The Estuarine Waters are very important for a number of reasons, mainly because they serve as the birthplace and nursery areas of many species of fish and shellfish. Estuarine Waters support the valuable commercial and sports fisheries of the coastal area which are comprised of estuarine-dependent species such as menhaden, flounder, shrimp, crabs, and oysters. These species must spend all or some part of their life cycle within the Estuarine Waters in order to mature and reproduce. The Estuarine Waters within Ocean Isle Beach's jurisdiction include the Intracoastal Waterway, the major inlets on either end of the island (Shallotte Inlet on the east end, and Tubb's Inlet on the west end), and the finger canals located near the island's center.

(3) Public Trust Areas, which are sometimes partially defined as all waters of the Atlantic Ocean and the land thereunder from the mean high water mark to the seaward limit of State jurisdiction; all natural bodies of water subject to measurable lunar tides and lands thereunder to the mean high mark; all navigable natural bodies of water and land thereunder to the mean high water level or mean water level, as the case may be. Public Trust Areas are used for both commercial and recreational purposes. Current regulatins define that in Ocean Isle Beach the Intracoastal Waterway, Tubbs Inlet, Shallotte Inlet, Ocean Beaches, and the Atlantic Ocean adjacent to the beaches are all Public Trust AECs. These areas support recreational uses such as swimming, boating, water skiing and sportsfishing and commercial fishing.

(4) Estuarine Shorelines are defined as non-ocean shorelines which are especially vulnerable to erosion, flooding, or other adverse effects of wind and water and are intimately connected to the estuary. This area extends from the mean high water level or normal water level along the estuaries, sounds, bays and brackish waters for a distance of 75 feet inland. These areas are significant because development within the shorelines can influence the quality of estuarine life and can be subject to the damaging process of shorefront erosion and flooding. The shorelines of the Estuarine Waters described on this page and 75 feet landward are the Estuarine Shorelines in Ocean Isle Beach.

Areas of Environmental Concern within the Ocean Hazards Areas category are those areas considered to be natural hazard areas along the Atlantic Ocean shoreline where, because of their special vulnerability to erosion or adverse effects of sand, wind and water, uncontrolled or incompatible development could be hazardous. Ocean hazard areas include beaches, frontal dunes, inlet

lands, and other areas in which geologic, vegetative and soil conditions indicate a substantial possibility of excessive erosion or flood damage. The three major Ocean Hazard Areas are described below:

(1) Ocean Erodible Area: This is the area of which there exists a substantial possibility of excessive erosion and significant shoreline fluctuation. The seaward boundary of this area is the mean low waterline. The landward extent of this area, as described in the 1984 plan, is basically 60 feet. However, in November, 1984, a CAMA rule change resulted in the setback being doubled in size to 120 feet for "large structures." The "basic" setback requirements in the Ocean Hazards AECs for single-family or small structures must be doubled for any structure that has either a 5,000 S.F. or greater foundation for commercial buildings, or consists of more than four (4) units per residential foundation. These rule changes are applicable in the Ocean Erodible Area. Generally, however, the basic Ocean Erodible Area is determined as follows:

- a distance landward from the first line of stable natural vegetation to the recession line that would be established by multiplying the long-term annual erosion rate, as most recently determined by the Coastal Resources Commission, times 60, provided that where there has been no long-term erosion or the rate is less than two feet per year, this distance shall be set at 120 feet landward from the first line of stable natural vegetation; and

- a distance landward from the established recession line to the recession line that would be generated by a storm having a one percent change or being equalled or exceeded in any given year.

The Ocean Erodible Area for Ocean Isle Beach extends 120 feet inland from the first line of stable natural vegetation. This area is also the building setback line in Ocean Isle. For setback purposes, the rate of erosion has been set at two feet per year. In actuality, over the past 38 years, Ocean Isle Beach has experienced very little erosion, and in some areas, significant accretion has occurred.

(2) High Hazard Flood Area: This is the area subject to high velocity waters (including, but not limited to, hurricane wave wash) in a storm having a one percent chance of being equalled or exceeded in any given year, as identified as "V" zone on the flood insurance rate maps of the Federal Insurance Administration, U. S. Department of Housing and Urban Development. The 100-year flood elevation level for Ocean Isle Beach ranges from

13 feet above mean sea level in the "A" zones, and up to 17 feet in the "V" zones. The area with the greatest flood hazard potential extends along the ocean beach. The Town does participate in the "regular phase" of the Federal Flood Insurance Program and has "final" maps dated December 18, 1985.

(3) Inlet Hazard Area: The Inlet Hazard Areas are those lands identified by the State geologist to have a substantial possibility of excessive erosion that are located adjacent to inlets. This area shall extend landward from the mean low waterline a distance sufficient to encompass that area within which the inlet will, based on statistical analysis, migrate, and shall consider such factors as previous inlet territory, structurally weak areas near the inlet (such as an unusually narrow barrier island, an unusually long channel feeding the inlet or an overwash area), and external influences such as jetties and channelization.

Ocean Isle Beach has two Inlet Hazard Areas, one located near the eastern and one near the western ends of the island. The largest Inlet Hazard Area is located on the eastern end of the island on land adjacent to the Atlantic Ocean and Shallotte Inlet. This area has faced serious erosion problems, but currently appears to be eroding at a slower rate, according to the CAMA major permit officer serving Ocean Isle Beach. The other Inlet Hazard Area is located on the western tip of the Island, adjacent to the Atlantic Ocean and Tubbs Inlet. It should be noted also that near the western end of the island, the beach area is actually undergoing accretion, i.e., building up. According to CAMA major permit officer, the area also appears to be stabilizing.

In addition to the Ocean Erodible, Flood Hazard, and Inlet Hazard Areas, significant land forms such as ocean beaches and frontal dunes are also considered to be ocean hazards. Ocean beaches, which consists of the land area between the mean low waterline and the first line of vegetation, or where a significant change in elevation or slope alters the configuration of the land form, whichever is farther landward, occur all along Ocean Isle's southern border. There are also primary dunes within the Town's jurisdiction. However, because of height definitions, these would have to be determined on a case by case basis.

All development and development-related activity within the designated AEC's within Ocean Isle Beach, is currently regulated by the Coastal Area Management Act permit process.

5. Current Plans, Policies, and Regulations

a. Transportation

Ocean Isle Beach's most recent Thoroughfare Plan was adopted June 8, 1981. The most significant feature of this Plan was the construction of a new bridge across the Intracoastal Waterway.

However, the bridge, a new high-rise span, has been completed and was officially dedicated in November, 1985. Named the "Odell Williamson Bridge," in honor of the founder and principal developer of the barrier island Town, the new bridge greatly improved accessibility to Ocean Isle Beach. Other elements of the Thoroughfare Plan, if implemented, could improve traffic flow within the Town itself. All of N. C. 904 (except the actual bridge crossing), is being widened to three lanes, thereby providing a turning lane and increasing traffic capacity. The Town is currently considering its Town Engineering and Thoroughfare Planning needs.

Although there are no official policies on pedestrian traffic, the Town has discussed the idea of constructing sidewalks within areas which currently experience heavy pedestrian traffic.

b. Community Facilities

(1) Water Distribution Plan: Although the Town's water source is currently based on 12 wells, Ocean Isle recognized the limitations of continued reliance upon well expansion on the island for long-term water supplies. The water system distribution plan which was prepared for the Town by Boney and Associates, Consulting Engineers, with long-range plans of tying into the Brunswick County water system should become a reality in 1987. Currently, the Town receives water from the County system on a peak demand basis, i.e., when the demand on the Town's wells reaches a certain point, water flows from the County system automatically. As demand increases, another 8-inch line will be attached to increase water flow to the island.

(2) Waste Treatment Plants: Ocean Isle was included in a 1978 201 Facilities Plan for southwest Brunswick County. This plan, which showed a proposed waste treatment plant using land application methods, is now in the process of being implemented. A Preliminary Engineering Report, in reference to the 201 Plan, was prepared for Ocean Isle in 1979. The sewer system is being developed in two main phases. Phase I, which should be complete in 1987, will serve most of the developed portions of the Town, down to Raleigh Street. Phase II will serve the rest of the Town. The system is designed so that vacant, but developable, land area and lots can be served at densities allowed under the current zoning ordinance. It is projected that all of the developing areas will be served by the system. The initial treatment capacity of the new sewer system will be 750,000 gpd with definite, but currently unspecified, expansions planned for the future, as demand dictates. The land application disposal site will be located outside of the Town's jurisdiction on the mainland on Four-Mile Road, 1.8 miles north of N.C. 904.

c. Utilities Extension Policy

The Town's policy concerning extending water lines to newly developed areas (as stated in the 1981 Plan) is for the developer

to pay all of the costs of extension and installation. The Town, however, does the actual work. After construction, all the lines become the Town's property.

d. Recreation Policy

Ocean Isle is preparing to manage its first public park. Generally, the proposed seven point five (7.5) acre facility will be open to the public. The beaches provide most of the area's recreational opportunities, and public beach access is also provided at 13 locations along the strand, including one site accessible to the handicapped. If recreation policies are developed, however, other facilities such as bicycle trails, etc., will also need to be addressed.

e. Prior Land Use Plans

The 1981 Land Use Plan Update was Ocean Isle's first attempt at developing its own land use plan. In 1976, the Town agreed for Brunswick County to prepare Ocean Isle Beach's Plan as part of the County's Plan. The Town officials determined in 1981 that it would be in the best interest of Ocean Isle to formulate its own land use and land development policies because of increased development within the Town. So, the 1981 Update, which contained an assessment of conditions and trends, projected demand, and policies, along with implementation strategies, was the Town's first independent Land Use Plan.

f. Regulations and Enforcement Provisions

(1) CAMA Permits: Because of Ocean Isle's location and geographic features, most of the new development is regulated by the CAMA permit process. The Town's Building Inspector also serves as the CAMA Local Permit Officer. The Areas of Environmental Concern which were described in the preceding section are areas which need protection. Enforcement of the CAMA permit process is a major means for that protection.

(2) Zoning Ordinance and Zoning Map: Ocean Isle adopted a Zoning Ordinance and Zoning Map in 1972. The Ordinance established four use districts (two for residential uses, and two for commercial uses), and has been actively enforced. However, in 1981, the ordinance underwent a compilation and clarification process, including a clarification of building lot dimensions in each of the four zoning districts. The Building Inspector is also the Zoning Officer. In conjunction with the Zoning Ordinance, the Town also has both a Planning Board and a Board of Adjustment. Supplementary enforcement provisions in the ordinance include ocean set-back lines and a prohibition against the location of mobile homes within the Town. The Zoning Ordinance is the major

local tool for regulating development. Currently, Ocean Isle Beach enforces its Zoning Ordinance only within the Town limits and not within any extraterritorial area. Although no action has been taken, the Town has sought technical assistance from the N.C. Division of Community Assistance to help define an extraterritorial area.

(3) Subdivision Regulations: A Subdivision Ordinance was adopted by the Town in 1975 and has been used to regulate the general design of new residential development. The design standards are currently broad, allowing for considerable flexibility, but does address flood hazard prevention measures in specific terms. The Subdivision Ordinance, like the Zoning Ordinance, is enforced by the Building Inspector.

(4) Development "Impact" Fees: Since the preparation of the 1981 Land Use Plan, Ocean Isle Beach has adopted and enforced a policy whereby all developers/owners--whether of single-family or multi-family units--are required to pay an "impact" or "mitigation" fee of $1,000 per unit. This fee is intended to help mitigate the cost of providing Town services and is viewed as a contribution to the capital facilities and other supporting assets of the Town.

(5) Sedimentation and Erosion Control Ordinance: Ocean Isle does have an ordinance which imposes certain standards upon new development in order to protect the Town from problems associated with soil erosion and sedimentation. The ordinance, however, does not address beach development erosion problems, which are regulated by CAMA permits. The Building Inspector is the designated enforcement officer. Since the 1981 Plan Update, this ordinance has been updated and approved by the Land Quality Section, Division of Land Resources, N. C. Department of Natural Resources and Community Development.

(6) Dune Protection Ordinance: Ocean Isle has an ordinance which prohibits the use of any vehicles, including off-road vehicles (dune buggies, in particular) on any beach strand. This applies in particular to the area's sand dunes. This ordinance is also enforced by the Police Department.

(7) Septic Tank Regulation: Currently, at least until the completion of Phase I of the sewer system, septic tanks provide the only wastewater treatment system for Ocean Isle Beach. Septic tank installation is regulated by the Brunswick County Health Department. Each application is followed up with a site evaluation by a County Sanitarian, who determines suitability. If the lot or property is determined to be suitable for septic tank installation, a permit is granted. This practice will continue until all of the Town is served by central sewer. (See discussion on soils under "Physical Limitations", pages 21-22).

(8) Flood Damage Prevention Ordinance: Ocean Isle adopted a Flood Damage and Prevention Ordinance and began participation in the emergency phase of the Federal Flood Insurance Program in 1974. However, in 1985, with the publishing of final Flood Insurance Rate Maps by the Federal Emergency Management Administration, the Town entered the regular phase of the program. First floor building elevation requirements vary in the Town, ranging from 13 feet in the "A" zones to 17 feet in the "V" zones, including wave height calculations. The Flood Ordinance is enforced as part of the Town's building permit program. The Building Inspector is also the enforcement officer.

(9) Sign Ordinance: In April, 1984, Ocean Isle Beach adopted a sign ordinance which regulates the placement of all signs in the Town. This is designed to enhance and maintain the Town's aesthetics, as well as protect property values.

g. Federal and State Regulations

In addition to the local ordinances and County regulations listed and described above, there are various State and Federal regulations which could also affect land devleopment in Ocean isle Beach.

C. CONSTRAINTS: LAND SUITABILITY

As noted in the discussion of Existing Land Uses, there is a considerable amount of undeveloped land in Ocean Isle Beach which might have future development potential. However, the Town recognizes the importance of being aware of existing physical limitations to development. Physical limitations are important to recognize, both from the standpoint of guiding land use decisions and in protecting the health, safety, and welfare of the general public. Below is a discussion of the physical limitations to development in Ocean Isle Beach.

1. Physical Limitations

There are no man-made hazards within the current jurisdiction of the Town. However, a small airstrip located northeast of the intersection of N.C. 904 and S.R. 1156, could, in the future, be included within the Town's extra-territorial jurisdiction. The airstrip is small, being used mostly for small, private planes, and poses no significant threat to future development. It should be noted that Brunswick County prepared a draft Airport Zoning Ordinance for Ocean Isle which would regulate land uses in airport areas. The Town has adopted this ordinance.

Natural hazard areas in Ocean Isle are the same as the AEC's described and discussed under Ocean Hazard Areas, and include the Ocean Erodible Area, Flood Hazard Area, Inlet Hazard Area, Ocean Beaches, Frontal Dunes, and possibly, some Primary Dunes. These areas, which are defined and described geographically in Part b, 4. (e) (4), (pp. 16-17) of this section, do present physical limitations to development in Ocean Isle Beach. Erosion has been particularly acute on the east end of the island, where several houses have had to be removed because of severe erosion. However, the erosion rate appears to have slowed somewhat and was not adversely affected by the storms and hurricane of September, 1985.

In the 1981 Plan Update, it was reported that there were seven different soil types in Ocean Isle Beach, several of which could present problems both for building foundations and septic tank installation, according to the Brunswick County Soil Survey which was prepared in 1977. However, since that time a new Soil Survey has been completed for Brunswick County, and in some cases the soil types have been reclassified. Currently, only three soil types instead of seven (7) are classified for Ocean Isle Beach. The tree types are: Corolla series, Newham series, and Swansboro Fine Sand. According to Soil interpretation records, all three types have some limitation for septic tank placement, and only one (Corolla), has any limitations for structural foundations. Since the Town is in the process of developing a central sewer system, limited septic tank placements are not constraints to development. Also, the Corolla series composes a very small portion of the island's soil types, having negligible effect as a constraint to development.

2. Atlantic Intracoastal Waterway Easement: U.S. Army Corps of Engineers

During the 1930's, the Corps of Engineers was granted legal rights along the Atlantic Intracoastal Waterway (AIWW) of up to 1,000 feet inland from the waterway for maintenance purposes. By right of this easement, the Corps claimed access rights to the land for the placement of dredged and fill material upon it, as well as the option to cut away and remove the land. However, the existence of the easement was unknown to many property owners and land within the easement was subsequently platted into lots and houses developed upon it. The Corps still claimed it had right of access to use land for maintaining the waterway. Land used for the dumping of spoil would definitely pose a physical limitation to future development. However, since most of the land area of the original easement in Ocean Isle Beach has been either platted and/or developed, the Corps of Engineers agreed to relinquish its right of access to the property. Instead, the Corps and Ocean Isle Beach reached an agreement whereas the island's developers provided some alternative land area for the Corps to use as a spoil area. This land, located on Onslow Street, also poses a limitation for future development.

3. Horizontal Wellfields

As stated previously, Ocean Isle's current water service is still primarily based on a system of 13 wells, which tap a groundwater supply. Nine of these wells are horizontal wells on the island. These wells must be recharged in equilibrium to extraction, or serious chloride intrusion could occur. Currently, the wellfields take up significant amounts of land, since the wells are all of the horizontal type. In these wells, perforated horizontal pipes extend one hundred feet or more beneath the surface of an open field or vacant lot. As long as the wells are used, no development can take place on the land above them, making these lots undevelopable. However, after the Town is receiving all of its water from the County system, it will not be necessary to maintain these wells and they will no longer pose a limitation to development.

4. Slopes

The only area where the slope may exceed 12 percent are some of the frontal dunes, which are also ocean hazard areas and are protected by CAMA.

5. Fragile Areas

These are areas which could easily be damaged or destroyed by inappropriate or poorly planned development. In Ocean Isle Beach, the fragile areas coincide with the Areas of Environmental Concern. These areas are described in Part B, 4.(e) of this section and are summarized below:

- Coastal Wetlands: The marsh areas adjacent to the Intracoastal Waterway and Old Sound Creek, and some of the land around the finger canals, are considered Coastal Wetlands.

- Estuarine Waters: This includes the Intracoastal Waterway; Tubb's Inlet on the west end of the island; Shallotte Inlet on the east end; and the finger canals located near the center of the island.

- Public Trust Areas: According to current regulations, the two inlets on either end of the island, the Intracoastal Waterway, ocean beaches, and the ocean adjacent to the beaches, are the Public Trust Areas of Ocean Isle Beach.

- Estuarine Shorelines: This applies to the shorelines and 75 feet inward from the Estuarine Waters noted above.

- Ocean Beaches: The beach along the Atlantic Ocean, which extends along the entirety of the island's southern border, from the first line of vegetation or significant change in slope toward the ocean.

- Inlet Hazard Areas: The lands identified by the State geologist to have substantial possibility of excessive erosion located adjacent to inlets; Ocean Isle Beach has two such areas, as described on page 17.

Ocean Isle Beach does not contain any of the following fragile areas: complex natural areas; areas that sustain remnant species; areas containing unique geologic formations; registered natural landmarks; wooded swamps, prime wildlife habitats; scenic or prominent high points, or archaeologic or historic sites.

6. Areas with Resource Potential

There are no productive or unique agricultural lands within Ocean Isle Beach. The island also does not contain any potentially valuable mineral sites; publicly owned forests, parks, fish, and gamelands; or other non- intensive outdoor recreation lands, or privately-owned wildlife sanctuaries. However, the estuaries around Ocean Isle are considered to be important breeding areas for both finfish and shellfish.

D. CONSTRAINTS: CAPACITY OF COMMUNITY FACILITIES

1. Existing Water Service Areas

The current water service area for Ocean Isle Beach's municipal system includes the entire corporate limits of the Town and a small area outside of the Town limits. The Town limits include the entire island, bounded on the south by the Atlantic Ocean and

to the north, on both sides of the old road bed of N.C. 904 prior to the construction of the new bridge, by the Intracoastal Waterway. However, the corporate limits extend outward 200 feet from the centerline on either side of N.C. 904 as it crosses the waterway, northward to the intersection of N.C. 179. The businesses and residences along N.C. 904 are also served by the water system. Ocean Isle Beach currently has 1277 metered customers. This includes businesses and some condomimium complexes where one meter services several units.

In 1987, as discussed previously, Ocean Isle Beach will receive all of its water from the County system. It is unlikely that limited water supplies will pose a constraint to development throughout the period covered by this plan, i.e., 1995. The Brunswick County water system is proposed to eventually make centralized water available to the entire County. Presently, a little less then half of the County is served. The County's current water treatment plant can provide up to seven (7) million gallons of water per day (MGD), whereas the current usage is only about three (3) MGD. The new water plant near Leland, when complete and operational, will give the County system the daily output potential of 24 MGD. Also, there is no "cap" or limits proposed as to how much water Ocean Isle Beach or other communities can purchase from the system. If, by 1995, the daily average per capita water consumption for the "resident" population is 70 gallons per day, and about 13 gallons per day for "day visitors," the peak demand would be about 1.950 MGD. This should easily be available from the County system. Also, if in the future it becomes necessary for the Town to have another water supply line across the Waterway bridge, the bridge has the capacity to carry another line.

2. Sewer Service Area

By late 1986, there will be a central sewage collection and disposal system on Ocean Isle Beach for the first time in the Town's history. Waste water disposal will no longer be handled solely through the use of septic tanks. Phase I, to be completed in 1986, will serve the majority of the Town, while Phase II, to be completed in 1989, will serve the rest of the Town. The system is being designed to acccommodate the "build-out" of the island at current zoning densities.

3. Schools

The relatively few school-age children who reside in the Town attend the three schools in Shallotte, which is six miles away. Two of the three schools, West Brunswick High School and Union Primary, are currently operating near or over capacity levels. If the number of children in grades K-3 and 9-12 increases significantly in Ocean Isle Beach, then an expansion of school facilities may be needed. This is indicated by Table 10, below:

TABLE 10: Enrollment Levels and School Capacity: Shallotte, N.C.

School	1985-86 Enrollment	Design Capacity	Percent Utilization
W. Brunswick High (9-12)	933	1,000	93.3
Shallotte Middle (4-8)	1,079	1,200	89.9
Union Primary (K-3)	823	750	109.7

Source: Brunswick County Board of Education

4. Transportation

The major traffic arteries in Ocean Isle Beach are N.C. 904, which is the main access road to and from the mainland, including the new high-rise bridge, and S.R. 1144 (First Street). The other streets in the Town are neighborhood streets. Both N.C. 904 and S.R. 144 are paved and are maintained by the State Department of Transportation. N.C. 904 is in the process of being widened to three lanes from two lanes. The design capacities of these roads are currently estimated to be adequate to handle present traffic volumes. The new N.C. 904 bridge is located about 100 feet west of the old structure and required the relocation of two residences and two businesses. The new bridge, unlike the old bridge, consists of two lanes instead of one, and substantially increased the design capacity of N.C. 904. The maximum peak capacity is projected by N.C. DOT traffic engineers to be 19,100 vehicles per day [VPD]. Average Daily Traffic Counts (ADT), 1986, for N.C. 904 at its intersection with the waterway, determined by the State Department of Transportation, are provided below, along with projections for 1990 and 1995. The projections and seasonal adjustments are based on DOT estimates of 5% annual traffic growth rate, and a 25% seasonal factor for beach communities.

TABLE 11: Traffic Counts and Projections - N.C. 904

Year	ADT	**Seasonal Adjustment
1979	2,430	--
1986	6,050	7,562
1990	*7,354	9,193
1995	9,386	11,733

Source: N.C. DOT, Raleigh, N.C.
*Estimated at 5% annual growth rate
**Estimated at 25% increase

Traffic counts increased dramatically from 1979 to 1984 and exceeded previous NCDOT projections. During the next 10 years, traffic counts are projected by the DOT to continually increase in volume. Also, of concern to Ocean Isle Beach is the intersection of NC 904 with NC 179, which provides access to and from the new bridge. Because there was no traffic signal at this intersection,

turning either onto 904 from 179 or from 904 onto 179 was considered hazardous. "Bottlenecking" at the intersection could also have affected evacuation. However, N.C. DOT agreed with the need for a traffic signal at this intersection, and one was recently installed.

To summarize the discussion of Constraints, it should be pointed out that it is difficult to separate the major inhibitors of future development in Ocean Isle Beach into categories of "land suitability" and "capacity of facilities." Because of the physiography of the island, the two areas of constraint are closely connected. All of the constraints, however, do form a basis for discussion of issues leading to the formulation of policy alternatives.

E. ESTIMATED DEMAND

1. Population Trends

The demand for housing and other goods and services and the use of public facilities is a direct function of population levels. As Table 3, page 6, indicates, in summarizing the four components of Ocean Isle Beach's population, the total 1985 "resident" population, i.e., year-round residents, summer residents, and cottage and motel renters, is estimated at 12,580 persons, while the "day visitor" population for the same period was estimated to be 9,980. The population growth trends and building trends indicate an overall average annual growth rate of Ocean Isle Beach of about 5% per year from 1985 to 1990, followed by a faster rate of growth, i.e., increasing an additional 1% per year from 1990 to 1995, peaking at 10% annual growth by 1995. Assuming that the overall historical growth will continue at the same and projected rates, Table 12, below, shows the projected peak populations for Ocean Isle Beach from 1986 through 1995.

TABLE 12: Ocean Isle Population Projections: 1986-1995

Year	* Resident	Day Visitors	Total Peak
1986	13,209	** 9,980	23,189
1987	13,869	10,479	24,348
1988	14,563	11,003	25,566
1989	15,291	11,553	26,844
1990	16,056	12,130	28,186
1991	17,019	12,858	29,877
1992	18,211	13,758	31,969
1993	21,938	14,858	36,795
1994	21,438	16,047	37,485
1995	23,581	17,652	41,233

Source: Talbert, Cox & Associates, Architects, Engineers, & Planners
*Year-round residents, summer residents, and overnight visitors
**Same as 1985 because of use of 1986 actual traffic volume data

At the current and projected overall rates of growth by 1995, the "resident," i.e., persons living year-round, plus overnight rentals in cottages and motels, will be 23,581 persons, nearly double the 1985 level of 12,580. In addition, if "day visitors" grow at the same rates, the number will increase from 9,980 in 1985-86 to 17,652 in 1995. These projections, however, do not take into account the amount of developable land in the Town. Nevertheless, if these projections become reality, at periods of "peak" occupancy, e.g., a summer holiday weekend, Ocean Isle Beach could have 41,233 persons in the island community at one time. Such an increase does have implications for the provision of community facilities and services which need to be considered. These implications are discussed below.

2. Future Land Need

Ocean Isle Beach, as noted in Table 6, page 11, has considerable amounts of undeveloped, but developable, land remaining. Of the estimated total developable acreage of 1,030 acres, about 787.5 acres, or 76%, is currently undeveloped. It is difficult to project the total population carrying capacity of this acreage because of the imminent provision of centralized sewer and water and the current zoning allows for a variety of structural types and resulting different development densities. The 1985 "resident" population density (i.e., year-round residents and motel/cottage renters), was 12.2 persons per acre, which is an acceptable level. Table 12, page 27, shows that the projected "resident" population in 1995 will be 23,581 persons. At the same developable acreage, the "resident" density in 1996 could be 23.0 persons per acre, nearly double the current density. However, with the provision of centralized sewer and water, this level of density should pose no severe problems for the Town. Currently, the Zoning Ordinance allows for a minimum of 5,000 S.F. for construction of a single-family dwelling. At an average household size of 2.5 persons, and approximately 8 dwellings per acre, development density under current single-family provisions would equal 20 persons per acre. Obviously, the projected 1995 "resident" density should pose no difficulties and the land is available.

3. Community Facilities Needs

a. Water

With the growth in populations at Ocean Isle Beach--both year-round and seasonal--will come an increased demand for water services. However, as discussed previously, Ocean Isle Beach, through its complete connection with the Brunswick County regional water system by 1987, will be able to tap a relatively unlimited supply of water to meet peak demands. At an assumed consumption rate of 70 gallons per day for the "resident" population, and

about 13 gallons per day for "day visitors," the highest peak day water demand by 1995 would be 1.880 million gallons per day. (See Table 12, page 27.) The County-wide water system, which is to be completed prior to 1995, is projected to have a capacity of 24.0 MGD. The projected peak demand from Ocean Isle Beach in 1995 is estimated to be only 7.8% of the County's capacity. Sufficient water supplies should not be a problem during the period covered by this plan.

b. Sewer

Central sewer service will be initiated in Ocean Isle Beach by December 1986. This removal from sole reliance upon septic tanks will likely have a significant impact upon the Town's development. The proposed sewer system is designed to eventually serve the entire Town at current building densities. Since it is unlikely that Ocean Isle Beach will reach complete "build-out" during this planning period, i.e., by 1995, the increased demand imposed by population growth--both seasonal and year-round--should find no difficulty being met by the proposed system.

c. Solid Waste Disposal

The Town of Ocean Isle Beach has historically provided its own trash collection and disposal service, utilizing a Town-employed crew and Town-owned equipment. The solid waste was disposed of in the Brunswick County Landfill. However, beginning in mid-March, 1986, the Town officially got out of the direct solid waste disposal business when a private contractor took over this service. The private contractor utilizes its own crew and equipment, provides polycarts to all residences and dumpsters to businesses, and hauls the refuse to the Brunswick County Landfill. The Brunswick County Landfill is currently projected to last about seven (7) years, i.e., through 1992. It is likely that prior to that time, the County will have developed a new landfill or some other viable solid waste disposal alternative.

d. Recreation

The oceanfront and adjacent waterways provide the major recreational opportunities for residents and visitors of Ocean Isle Beach. Athough the Town does not have an officially adopted recreation policy, it has the potential to manage the development of a new park, displaying initiative in addressing additional recreation needs of its permanent population. The facility may contain tennis courts (currently being constructed), a volleyball court, horseshoes, etc., and other passive recreational facilities. The estimated 698 year-round residents by 1995 should be accommodated by these facilities. However, additional recreational facilities may be needed for the increasing levels of summer residents, i.e., motel and cottage dwellers and "day visitors." It is believed by the Town that the County shares the responsibility for meeting the needs of day visitors.

e. Police Protection

The Town's police force currently consists of five full-time sworn officers, and five auxiliary officers. Also, during the summer of 1985, one additional officer was employed during the tourist season. This level of police protection appears to have been adequate in the past. However, since steady growth is projected to occur in both the permanent and seasonal populations, additional full-time personnel will likely be needed. (See related discussions in this section on transportation and parking.)

f. Fire Protection

The Town's Volunteer Fire Department, consisting of about 25 volunteers, perhaps with the addition of more volunteers, should be adequate for Ocean Isle Beach throughout the planning period. The Town is currently planning to purchase additional fire fighting equipment. The Town is currently considering purchasing equipment, and may consider full-time personnel. However, if development densities increase, it will be imperative that all access routes be well-planned and clear of potential obstructions, e.g., on-street parking during peak population periods.

g. Emergency Rescue and Safety

Emergency medical rescue services are provided to Ocean Isle Beach by rescue squads in Shallotte (about seven miles away) and in Calabash (about 10 miles away). These services may need to be re-evaluated within this planning period.

h. Parking Facilities

Perhaps the most dramatic impact of the projected influx of day visitors over the next few years relates to public parking. Currently, Ocean Isle Beach does have some, but rather limited, public parking. There is space available at each of the walkover access sites; public parking has also been allowed, (to some extent) at the Ocean Isle Pier, although the pier is privately owned; and, the Town plans to lease space in the summer of 1986 to provide public parking for more than 150 cars. The estimated 1985 "peak day" parking demand by day visitors of 1,715 vehicles (see page 6) will nearly double by 1995 to 3,215 vehicles. Unless consideration is given to developing even more public parking facilities, or other alternatives, severe traffic problems could result.

i. Thoroughfare Access

With the completion of the new two-lane Odell Williamson Bridge across the Atlantic Intracoastal Waterway in late 1985, access to and from the Town improved greatly. According to the Traffic Engineering Section of the N.C. DOT, the new bridge is capable, at maximum, of carrying 19,100 vehicles per day (VPD).

As Table 11, page 26, indicates, the peak seasonally adjusted average daily traffic volume by 1995 is projected to be nearly 12,000 VPD, or about 7,100 VPD less than the projected maximum capacity of the new bridge. At current projected traffic growth rates, the new bridge would not reach maximum traffic volume until the year 2005.

The projected capacity of N.C. 904, after crossing the bridge onto Ocean Isle, has also been expanded by the construction of a turning lane. The State DOT estimated that the maximum capacity of the three-laned thoroughfare is 17,000 VPD, significantly above projected peak 1995 volumes. Generally, access onto and off the island community will be adequate throughout the current planning period. Internal traffic flows and pedestrian traffic along local streets--especially those providing access to the beach, such as First and Second Streets--however, should be of special concern. Internal traffic volumes appear heaviest along those streets. Pedestrian traffic is especially heavy along First Street; however, there are currently no sidewalks along the street. First Street's 60-foot right-of-way is currently paved to only 22 feet, indicating ample space for the possible construction of sidewalks.

An internal traffic flow plan, considering pedestrian traffic, needs to be developed for the Town, especially with the population projected to increase significantly.

j. Administrative Services

Currently, most of Ocean Isle Beach's administrative and personnel matters are coordinated under the supervision of the Mayor and department heads. As the populations increase, the administrative service load will also increase. The Town may need to consider employing additional personnel.

4. Summary of Trends and Facilities Demand: Policy Issues

The following statements are presented in summary of this Section I of the 1986 Land Use Plan Update, analyzing development trends and policy implications for the next 10 years.

- Both the "resident" and day visitor populations at Ocean Isle Beach have shown steady increases in recent years and are projected to continue increasing throughout the planning period.
- The resort-tourist based economy of Ocean Isle Beach is strong, contributing to growing tourism revenues in Brunswick County each year.
- Residential and commercial development in the community will continue. However, it is unlikely that all of the developable land within the Town's current jurisdiction will be developed during the period.

- At current and projected demand rates, water, sewer, and solid waste disposal capacities will need to increase during the planning period in order to adequately handle "peak" demands, particularly from day visitors. However, the issue of adequate water supply and sewer service has been addressed by the Town.

- Public safety, i.e., provision of adequate police and fire protection needs, will have to be continually assessed. Internal traffic, both pedestrian and vehicular, as well as public parking provisions will also have to be addressed.

All of the above issues and others, including storm hazard mitigation, and post-disaster recovery, will be addressed in more detail in Section II of this Plan, "Policy Statements."

SECTION II :

Policy Statements

SECTION II: POLICY STATEMENTS

The formulation of specific policies regarding growth, development, and management objectives is perhaps the most important part of any land use plan prepared under the State's Coastal Area Management Act. Because of regulatory requirements, these policies must often strike a delicate balance between desires and objectives of the citizens and the local government of Ocean Isle Beach and the objectives of the CAMA program, as overseen by the Coastal Resources Commission. Land development policies, which should be based on an analysis of existing conditions and projected trends, serve as general guides for effectuating desired development patterns. The land use policies also have important interface with local regulations, such as the zoning ordinance or subdivision regulations, as well as with State and Federal regulations and programs. For example, development permits issued under CAMA must be consistent with the local land use plans. Also, projects supported by State and Federal funds must be consistent with the local land use plans, prior to allowing expenditures.

Some relevant trends identified in Section I of this Plan include: the population of Ocean Isle Beach, both resident and day visitors, is constantly increasing; the Town's tourist-based economy continues to contribute strongly to tourist revenues in Brunswick County; along with continued growth of residential and commercial development, additional stresses will be placed on public facilities and services, such as water, sewer, police and fire protection, and parking, as the population increases. However, it should also be noted that Ocean Isle Beach has taken significant steps to address any problems with water and sewer service; both of these facilities should be adequate during the period. These are some of the issues which need to be addressed by the Town during the planning period.

The Coastal Resources Commission, recognizing the diversities which exist among the coastal communities, required the Town to specify particular development policies under four rather broad topics in 1981. For the 1986 Update, however, the CRC has added a fifth issue, i.e. "Storm Hazard Mitigation." In most cases, policies developed under these topics will cover most of the local development issues, but in some cases, they do not. In the latter case, the locality has the flexibility to address its own locally defined issues. The five required broad topics are:

- Resource Protection
- Resource Production and Management
- Economic and Community Development
- Continuing Public Participation
- Storm Hazard Mitigation, Post Disaster Recovery, and Evacuation Plans

After an analysis of the existing conditions and trends and input from the Town's citizens, the foregoing policies were developed to provide an overall framework for guiding growth and development in Ocean Isle Beach throughout the next planning period, i.e., through 1995.

A. RESOURCE PROTECTION: ESTUARINE SYSTEM

1. Areas of Environmental Concern

Ocean Isle Beach recognizes the primary concern of the Coastal Resources Commission, in terms of protecting resources, is managing Areas of Environmental Concern (AECs). The Town also shares this concern for the protection and sound management of these environmentally sensitive lands and waters. The AECs which occur in Ocean Isle Beach were identified in Section I of this Plan on pages 14 through 17, with areas within both the Estuarine System and Ocean Hazards area. In terms of developing policies, the Estuarine System AECs, which include Coastal Wetlands, Estuarine Waters, Estuarine Shorelines, and Public Trust Areas, will be treated as one uniform grouping since they are so closely interrelated. Another reason for grouping these AECs together is the fact that the effective use of maps to detail exact on-ground location of a particular area, sometimes pose serious limitations.

Ocean Isle Beach's overall policy and management objective for the Estuarine System is "to give the highest priority to the protection and perpetuate their biological, social, economic, and aesthetic values and to ensure that development occurring within these AECs is compatible with natural characteristics so as to minimize the likelihood of significant loss of private property and public resources." (15 NCAC 7H. 0203) In accordance with this overall objective, Ocean Isle Beach will permit those land uses which conform to the general use standards of the North Carolina Administrative Code (15 NCAC 7H) for development within the Estuarine System. Specifically, each of the AECs within the Estuarine System is discussed below.

a. Coastal Wetlands

Coastal wetlands, which are defined as any salt marsh or other marsh subject to regular or occasional flooding by tides, including wind tides (whether or not the tide waters reach the marshland areas through natural or artificial water sources), provided this shall not include hurricane or tropical storm tides. Coastal wetlands also contain certain marsh plant species. In Ocean Isle, coastal wetlands occur generally in the northern portions of the island which are adjacent to the Intracoastal Waterway. The most substantial amount of wetlands is located in the northwest sector of the island between the Intracoastal Waterway and Old Sound Creek. Also included are the marshlands adjacent to the Intra-

coastal Waterway, and the land adjacent to the finger canals leading to the waterway. These areas are important because the marsh maintains the high productivity of fish and shellfish and the complex food chains which are typically found in the estuaries. The first priority of uses of land in these areas should consider "conservation" of the sensitive areas, with conservation meaning the lack of imposition of irreversible damage to the wetlands. Generally, uses which require water access and uses such as utility easements, fishing piers and docks, will be allowed, but must adhere to use standards of the Coastal Area Management Act (CAMA: 15 NCAC 7H).

b. Estuarine Waters and Estuarine Shorelines

The importance of the estuarine waters and adjacent estuarine shorelines in Ocean Isle Beach was discussed in Section I of this document on pages 15-16. The Town is very much aware that protection of the estuarine waters and adjacent estuarine shorelines can be important to fishing, both commercially and for recreation, and for the continued maintenance of qualitative development. Ocean Isle Beach recognizes that certain actions within the estuarine shoreline, which is defined as the area extending 75 feet landward of the mean high waterline of the estuarine waters, could possibly have a substantial effect upon the quality of these waters. The estuarine waters within Ocean Isle Beach's jurisdiction include the Intracoastal Waterway, the major inlets on either end of the island (Shallotte Inlet on the east end, and Tubb's Inlet on the west end), and the finger canals located near the island's center. The adjacent shorelines, up to 75 feet inland, are the estuarine shorelines.

In order to promote the quality of the estuarine waters, Ocean Isle Beach will evaluate uses as to compatibility with both the estuarine shorelines and the protection of the estuarine system. Residential, recreational, and commercial uses may be permitted within the estuarine shoreline, after consideration has been given to the following:

- A substantial chance of pollution occurring from the development does not exist
- Development does not have a significant adverse impact on estuarine resources
- Development does not significantly interfere with existing public rights or access to, or use of, navigable waters or public resources.

c. Public Trust Areas

Ocean Isle Beach recognizes that it is believed that the public has certain established rights to certain land and water areas. In Ocean Isle Beach, the Intracoastal Waterway, Tubbs Inlet, Shallotte Inlet, ocean beaches, and the Atlantic Ocean

adjacent to the beaches are all Public Trust AECs. These areas support recreational uses such as swimming, boating, water skiing, and sportsfishing and commercial fishing. These public areas also support valuable commercial and recreational fisheries, tourism, and also are of significant aesthetic value. Appropriate uses include those which protect public rights for navigation and recreation. Projects which would directly or indirectly block or impair existing navigation channels, increase shoreline erosion, deposit spoils below mean high tide, cause adverse water circulation patterns, violate water quality standards, or cause degradation of shellfish waters, shall generally not be allowed without careful review. Allowable uses shall be those which do not cause detriment to the physical or biological functions of public trust areas. Such uses as navigational channels, drainage ditches, bulkheads to prevent erosion, piers or docks, shall be generally permitted.

d. Policy Statements: Development in AECs

Sections a, b, and c, above, included a brief discussion of Ocean Isle Beach's policy on land uses in the statutorily defined Areas of Environmental Concern (AECs). Protection of environmentally sensitive as well as vitally important public resources is a strong ongoing concern of the Town of Ocean Isle Beach. The overall policy of the Town in relation to Resource Protection shall be as follows:

(1) Ocean Isle Beach shall continue to give priority to those uses which are compatible with appropriate management of the Estuarine System. It is the intent of the Town to safeguard and perpetuate the system's biological, social, economic and aesthetic values and to insure that any development occurring within the system is compatible with natural characteristics, so as to minimize the likelihood of significant loss of private property and public resources.

e. Policy Implementation

Ocean Isle Beach believes that the existing development permit system enforced by CAMA, the U. S. Army Corps of Engineers, combined with enforcement of the Town's Zoning Ordinance, Subdivision Regulations and Dune Maintenance and Protection Plan, represent adequate measures to protect the discussed resources. Enforcement of these provisions will continue.

2. Areas of Environmental Concern: Ocean Hazards Areas

Ocean Hazards Areas of Environmental Concern are the second broad category of AECs occurring in Ocean Isle Beach. These are areas along the Atlantic Ocean shoreline which have a special

vulnerability to erosion or other adverse effects of sand, wind, and water. Because of this vulnerability, improperly managed growth and development could expose life and property to unreasonable levels of danger. The Ocean Hazards in Ocean Isle Beach, as discussed on Pages 16-17 of this document include: 1) the ocean erodible area; 2) the high hazard flood area; and 3) the inlet hazard area.

For both the ocean erodible and inlet hazard areas, development of any type is prohibited or tightly controlled by existing regulations and enforcement provisions. It is the susceptibility to change from the constant forces of waves, wind, and water upon the sands that form the shore, which may cause these areas to be considered "hazardous." These forces are magnified during storms and can cause significant changes in bordering land forms (such as dunes and beaches), as well as to any structures located on them. It is the flexibility of these land forms (dunes and beaches), however, which also lends protection from the magnified energies of wind and water as a first line of defense for development located behind them. The important, basic and essential function of the beach and dunes is their capacity for storing sand, serving to absorb and thereby dissipate the initial impact of excessive wind and waves.

Thus, it is important to consider policies which are aimed both at protecting the land forms (dunes and beach) and any structures which are allowed to be constructed in those areas.

a. Policy Statements: Ocean Hazards Area

Generally, all land uses in the areas classified under the "Ocean Hazards" category, i.e. ocean erodible, high hazard flood, and inlet hazard areas, shall be consistent with the requirements of existing State, Federal, and Local regulations, and the Ocean Isle Beach Zoning Ordinance, Subdivision Regulations, Dune Maintenance and Protection Plan, and the Town's requirements for the National Flood Insurance Program and the Town's building set-back line.

(1) Allowable land uses shall generally be designed and constructed so as to maximize structural protection from wind and water and to minimize damage to the protective land forms of dunes and beaches.

(2) Ocean Isle Beach continues to support comprehensive shoreline management such as the Corps of Engineers beach renourishment project as a preferred control measure to combat oceanfront erosion.

(3) When existing dunes are "added to," this shall be accomplished in a manner which minimizes damage to existing vegetation. Any areas filled should be replanted immediately or stabilized temporarily until planting can be successfully completed.

b. Implementation

(1) Ocean Isle Beach will continue to enforce its local regulations as cited above, and continue to support the CAMA major and minor permitting, and the Corps of Engineers 404 wetlands permitting programs.

3. Natural and Cultural Resources

As noted in Part C.6, page 24 of Section I, Ocean Isle Beach does not contain conventionally-recognized areas with resource potential, or any of the following fragile areas: complex natural areas; areas that sustain remnant species; areas containing unique geologic formations; registered natural landmarks; wooded swamps; prime wildlife habitats; scenic or prominent high points; or known archaeologic or historic sites. Therefore, it is not applicable to develop policies on these issues at this time. However, should any significant cultural resource be identified within Ocean Isle Beach's jurisdiction, the Town will support protection and enhancement of those resources.

4. Development in Areas with Constraints

The constraints to development in Ocean Isle Beach were discussed in Section I, pages 22-31 of this report. Elements posing constraints to growth and development can relate to physical land capability constraints such as availability of developable land, man-made or natural hazards, AECs, special fragile areas, or areas with soils limitations. Also, the capacity of community facilities and services such as water, sewer, solid waste disposal, police and fire protection and parking can often pose constraints to development. All of these are facilities which need to be considered by any community in proposing land development policies.

There are no known man-made hazards in Ocean Isle Beach prohibiting development and the natural hazards are closely linked to AECs in both the Estuarine System and Ocean Hazards category, as are also the "fragile" areas. The physical limitations included a small airport, which is owned by the Town. Other limitations noted were: soil types, which were described by the Brunswick County Soil Surveys as having limitations for septic tank suitability; horizontal well fields on the island; and fragile areas that coincide with the Town's AECs and which were included in the preceding policy discussion. The only major limitation in terms of community facilities is the lack of a central sewer system, which the Town is currently in the process of developing. Eventually, the entire Town will be served by a central sewer system and since private septic tanks and small package treatment plants will not be allowed, soil conditions as they relate to septic tank placement will not be major policy concerns.

As a barrier island community, it is not suprising that nearly all of Ocean Isle Beach's entire jurisdiction is located in the 100-year flood zone area, i.e. subject to a one percent chance of major flooding in any given year. Also, as stated previously, the Town has certain "high velocity" or "V-17" flood zones identified on recent Flood Insurance Rate Maps prepared by the Federal Emergency Management Agency (dated December 18, 1985). Both the 100-year flood area and V-Zones pose possible serious constraints to development. However, most of the V-Zones are located along the immediate oceanfront in areas where virtually any type of development is prohibited. But the 100-year flood zones includes virtually the Town's entire jurisdiction and it is not practical to prohibit development in all areas. (An approximate 12 acres of land between Shelby Street and Duneside Drive--probably a dune system--is in the Zone "C," minimally flooded areas, as well as a .4 mile stretch along N.C. 904 north of the AIWW Bridge.)

As the discussion and tables on pages 32-37 indicated, at current and projected demand rates during "peak" utilization, Ocean Isle Beach may need expanded capacity in the provision of solid waste disposal, police protection, emergency rescue, and fire protection services during the next 10 years. Also, it was noted that need for vehicular and pedestrian access, and parking would likely increase in significance as constraints during the planning period because of present limitations on internal roadways. Ocean Isle Beach, as stated previously, was developed primarily as a quiet, relaxing, family-oriented beach. This appeal attracts thousands of visitors each year. It is vital, therefore, to the Town that this appeal continues to be maintained at the highest level of quality. In consideration of all of the constraints relating to the physical capacity of the land, and the capacity of community facilities, the following policies are proposed:

a. Policy Statements: Physical Constraints to Development

(1) Since in many cases, conditions posing physical limitation to growth and development in Ocean Isle Beach are closely associated with identified areas of environmental concern or other sensitive areas, the Town believes that these areas should generally be protected from any adverse or potentially adverse development. Also, development in certain areas which could result in unnecessary risks to the safety and protection of life and property should also be seriously evaluated. Specifically:

° Residential development will not be encouraged in airport approach areas.

- As long as the Town relies upon the system of horizontal well fields for part of its water supply, development on the land above these wells will not be allowed.

- Ocean Isle Beach's policies on development in fragile areas are the same as those stated for Areas of Environmental Concern.

- Until the central sewage collection and disposal system can be developed for those areas, growth and development will not be permitted in areas where septic tanks will not function. All septic tanks must be in compliance with State Health Regulations through the Brunswick County Health Department.

- Development will be discouraged in areas where soils are not suitable for proposed construction. Development may be constructed if corrective measures for stabilizing building foundations are incorporated into development design.

(2) Allowable land uses in areas posing physical constraints should be only those approved through the CAMA and Army Corps of Engineers "404" permitting processes and by the Town of Ocean Isle Beach's building and development ordinances, as well as its Dune Protection Ordinance.

(3) All uses allowed in the Town's Zoning Ordinance shall be permissable in the 100-year flood zones, provided that all new construction and substantial improvements comply strictly to the Town's Flood Damage Prevention Ordinance, which has been adopted in conjunction with Ocean Isle Beach's participation in the National Flood Insurance Program.

(4) In relation to capacity of community facilities, it shall be the policy of the Town of Ocean Isle Beach to attempt to provide services, such as water, sewer, police and fire protection, solid waste collection, and traffic accessibility, to meet needs and anticipated peak demand during the planning period.

b. <u>Policy Implementation</u>

(1) The existing local ordinances and building regulations in Ocean Isle Beach shall continue to be enforced. Also, the Town will continue to comply with State and Federal regulatory programs for areas with physical constraints to development, including CAMA and the Corps of Engineers 404 program.

(2) In FY 1987, the Town of Ocean Isle Beach will seek assistance in the preparation of a report on "Feasible Alternatives for Public Parking" to help clearly define the extent of the parking problem in the Town and to propose feasible solutions.

(3) In FY 1987, the Town will request that the area Traffic Engineer, with the State Department of Transportation, conduct a traffic analysis of First and Second Streets, and recommend alternatives to the Town

5. Hurricane and Flood Evacuation Needs and Plans

This area will be treated in a separate section of this Land Use Plan, which will include policy statements on hurricane and flood evacuation as well as storm mitigation and post disaster recovery policies.

6. Protection of Potable Water Supplies

In 1987, Ocean Isle Beach will receive all of its water supply from the Brunswick County water system, and the existing horizontal well fields will no longer be the source of water for the Town. However, as stated under resource protection policies, as long as the Town relies upon the system of horizontal well fields for any part of its water supply, development on the land above active wells will not be permitted.

7. Use of Package Treatment Plants

It is projected that in late 1986, the Town of Ocean Isle Beach's sewer system will become operational, serving the majority of the Town. As a result, the use of all package treatment systems will be eliminated and all future new developments will be required to connect onto the Town's sewer system. This provision is also expected to foster improvement in the quality of the Town's surface waters.

8. Stormwater Runoff

The Town of Ocean Isle Beach shares the concern of the State Division of Environmental Management (DEM) that stormwater runoff from urbanized areas may be contributing to declining surface water quality in some areas. Maintenance of water quality is of some concern to Ocean Isle Beach. The Town recognizes the value of water quality maintenance both in terms of protecting commercial and recreational fishing resources and providing clean water for other recreational purposes. The Town will continue to enforce local ordinances and state building regulations relating to stormwater runoff resulting from development. Currently, Ocean Isle Beach is considering adoption of local stormwater management and runoff requirements.

9. Marina and Floating Home Development

The development of bulkheads, marinas, and private boatslips in Ocean Isle Beach have generally been allowed and regulated by the Town's Zoning and other development ordinances, as well as CAMA. These uses will be continued as long as they are in compliance with State, federal and local regulations.

In recent years, Ocean Isle Beach and other coastal communities have become increasingly concerned over the issue of "floating homes", i.e., waterborne vessels used not only as "boats" but as permanent domiciles. The legal aspects of this issue have been debated in many areas.

However, in Ocean Isle Beach, the issue of floating homes has not been a significant problem. Nevertheless, the Town has an ordinance prohibiting water and power to boats at docks.

10. Industrial Impacts of Fragile Areas

There are no conventional industrial impacts on fragile areas in Ocean Isle Beach and the Town does not anticipate nor will encourage industrial development.

11. Development of Sound and Estuarine System Islands

Policies related to managing growth and development in these areas are included in policy statements regarding development in Areas of Environmental Concern and in areas with physical constraints, particularly dealing with "fragile" areas. Basically, however, Ocean Isle Beach recognizes the value of its estuarine system islands and has classified them "conservation" or "conservation spoil." (See Section III, "Land Classification System.")

B. RESOURCE PRODUCTION AND MANAGEMENT

1. Recreational Resources/Fisheries

In most coastal counties and towns, "resource production and management" usually relates to agricultural, forestry, mining, fisheries, as well as, recreational resources. In Ocean Isle Beach, however, recreational and fisheries resources are the only relevant ones in the conventional sense. In resort settings such as Ocean Isle Beach, because of the abundant water areas (which are also Estuarine and/or Public Trust Waters), recreational and fishery resources quite often overlap. The overall, major recreational resource is the "beach" and the attractiveness of the Atlantic Ocean. Fishing, both as a recreational and commercial resource, is important to Ocean Isle Beach and to all of Brunswick County. Proper utilization of water resources is of utmost concern to Ocean Isle Beach. The Town recognizes the value of water quality maintenance both in terms of protecting commercial and

recreational fishing resources and providing clean water for other recreational purposes. Recreational opportunities, such as boating, swimming, water skiing, surf boarding, and sports fishing, are not only viable resources for Ocean Isle, but also are important economic attractions for the Town. The seasonally-based economy, as documented in Section I of this plan, is dependent upon the continued preservation and maintenance of these resources. Projections for the 10-year planning period indicate a growth both in the permanent and seasonal populations of Ocean Isle Beach. Both the aesthetics and recreational opportunities of the Town are important resources which need to be protected and managed.

a. Policy Statements

With the above-stated concerns in mind, the Town of Ocean Isle Beach adopts the following policy:

- The Town supports current on-going State and federal programs designed to enhance the proper utilization of water resources within its jurisdiction. Ocean Isle Beach addresses water quality concerns through locally enforced stormwater runoff rules and lot coverage requirements. It is the Town's belief, however, that where feasible, lands and waters should be classified according to their historic uses.

b. Implementation

- The Town will continue to enforce local regulations as well as support State and Federal initiatives, related to maintaining and enhancing proper water use.

2. Off-Road Vehicles

It is important to Ocean Isle Beach that the aesthetics of the beach strand be maintained. It is also important to the Town that the integrity of the island's sand dunes be maintained. The intrusion of off-road vehicles onto the strand and dunes is viewed as being inconsistent with the management objective of maintaining the quality and character of these sensitive areas.

In accordance with its Dune Protection Ordinance, the Town of Ocean Isle Beach does not allow off-road vehicles on dunes or on the shoreline area, with the exception of public service or emergency vehicles. These provisions shall continue to be enforced.

3. Residential and Commercial Land Development

Residential land development is the predominant land use type

in Ocean Isle Beach, with commercial land uses basically limited to those which support tourism. As discussed in Section I, under "Land Use Trends," the dominant residential pattern is likely to continue. This is the main reason the Town has taken definite, positive steps toward developing a central sewer system and procuring water from the Brunswick County Regional Water System. Additional discussion and policies are presented in the following sub-section, "Economic and Community Development," under "Desired Urban Growth Patterns."

C. ECONOMIC AND COMMUNITY DEVELOPMENT

The economic vitality of Ocean Isle Beach, as stated previously, relates directly to tourism. Second-home sales and cottage rentals, which attract thousands of visitors each summer, and to a lesser degree, day visitors from inland communities, are important elements in the island's economy.

The land development pattern in Ocean Isle Beach, as shown on the attached Land Use Map, is mostly residential. Nearly all of the commercial development is located along N.C. 904. Although both the permanent and seasonal populations are projected to increase, the overall land development pattern will likely remain the same. Ocean Isle Beach's main regulatory tool for managing land development in the Town has been the Zoning Ordinance. This Zoning Ordinance, which reflects the Town's overall desired development patterns, is aimed at creating a balance between residential and commercial and multi-family/single-family developments. (See policies under "Desired Urban Growth Patterns" and "Types and Densities of Desired Development.") Eventually, but not within the current planning period, all development, including residential, commercial, etc., will be limited in Ocean Isle Beach because of limited availability of land. Issues currently before the Town concern the responsibility for service provisions, availability of support facilities such as parking, access (vehicles and pedestrians) and economic impacts. The relevant policy areas to be addressed are discussed below, along with the Town's policy position.

1. Local Commitment to Providing Services to Development

As areas develop, it is the policy of the Town that the developer/owner share in the financial responsibility of providing basic utility services, i.e., water and/or sewer. Within this current planning period, the Town will be served by the Brunswick County water system and its own central sewer system. The Town will remain committed to providing other basic urban support services to new areas as they develop, i.e., police and fire protection, building inspections, and municipal administration.

2. Redevelopment of Developed Areas

Most of Ocean Isle Beach has no need for consideration for

redevelopment. However, in some sections of the Town, older structures, including houses and motels, have been or may be torn down to allow for the construction of new similar uses on the same site. In keeping with the dynamic character of the community, Ocean Isle Beach supports such activity as a positive re-use of land resources, enhancing the Town as a whole. Such redevelopment shall be permitted as long as the activity complies with the spirit and intent of existing regulatory requirements. It is the Town's policy that density allowances for redevelopment areas conform to existing Town building and zoning regulations.

3. Desired Urban Growth Patterns

a. Policy

As it is very important that the atmosphere and character of a quiet, relaxing family beach be maintained, Ocean Isle Beach is not interested in developing any manufacturing industries within the Town. Also, intense commercial developments, beyond that necessary to serve tourists, will not be encouraged. Commercial accommodations and other residential development is desirable in the Town. Residential development is regarded as desirable for the Town, as long as no major or irreversible damage threatens any environmentally sensitive area. Single-family detached dwellings are the predominant residential-type in Ocean Isle Beach, although more multi-family units are being developed or proposed.

Currently, no mobile homes are allowed within the Town's jurisdiction. It is the Town's intentions, as reflected in its zoning ordinance and zoning map, to allow a mixture of residential-type accommodations in a balanced manner and to discourage spot-zoning. Development with higher density levels than single-family or two-family uses is not viewed as being desirable in the finger canal areas.

Should Ocean Isle Beach choose to exercise its extra-territorial jurisdiction across the Intracoastal Waterway, then a mixture of uses, including residential subdivisions (conventional and mobile homes), highway commerical, and perhaps neighborhood commercial, would be considered allowable uses. However, a more detailed analysis needs to be done for this area.

a. Policy

Since it is the desire of Ocean Isle Beach to avoid incompatible land uses, the Town will continue to enforce its current ordinances and local building permit program to help achieve a desirable balance between commercial and residential development. The Town will also continue to enforce the State CAMA permit process and State Health Regulations regarding septic tank placement (until the central sewer system serves the entire Town).

b. Implementation

(1) The Town will continue to enforce its current land use regulations to encourage development of the Town primarily as a residential resort area with appropriate supporting retail and tourist-oriented services.

4. Commitment to State and Federal Programs

Ocean Isle Beach is generally receptive to State and Federal programs, particularly those which either enhance or improve the Town's facilities. The Town will continue to cooperate with such programs, including CAMA. The North Carolina Department of Transportation road and bridge improvement programs are very important to Ocean Isle Beach because of ever-increasing traffic volumes.

Examples of other State and Federal programs which are important to and supported by Ocean Isle Beach include: dredging and channel maintenance, as well as beach renourishment and restoration, by the U. S. Army Corps of Engineers; and Federal and State projects which provide efficient and safe boat access for sports fishing.

5. Assistance to Channel Maintenance and Beach Renourishment

Proper maintenance of channels, particularly the Atlantic Intra-Coastal Waterway, is very important to Ocean Isle Beach because of the impact of commercial and recreational fisheries and general boating. Historically, Ocean Isle Beach has provided direct assistance to the Corps by helping to obtain or provide spoil sites. Ocean Isle Beach is supportive of the Corps of Engineers' maintenance of the Intracoastal Waterway. Ocean Isle Beach is generally supportive of keeping new development out of designated spoil sites; however, the Town believes that existing structures in the original 1,000-foot easement area should be recognized and protected.

Beach nourishment is also an important concern of Ocean Isle Beach. The Town recognizes that beach erosion can be a major threat. Ocean Isle Beach is committed to beach nourishment projects in the area and has entered into an agreement with the Corps of Engineers so that all suitable dredged sand can be deposited on the beach as artificial renourishment. Also, during the 1981 plan updating process, the Town supported a local renourishment project which included the planting of 60,000 sprigs of American Beach grass on the west end of the island. These plantings have helped to maintain the stability of the sands. Funds for these plantings came from private sources.

The Town will seek Federal and State assistance in support of beach nourishment projects, and encourage local private efforts.

6. Tourism

The importance of tourism to Ocean Isle Beach is obvious, as has been discussed in other parts of this plan. The natural resources of the beach along the Atlantic Ocean and inland waterways which continue to attract thousands to this island community each summer are vital generators of income for many businesses. The tourist season also provides employment for some island residents and for some mainland residents of Brunswick County as well. According to the Travel and Tourism Division, North Carolina Department of Commerce, in 1984, travel and tourism accounted for $98,429,000 in expenditures in Brunswick County compared to $16.7 million in 1979. Although detailed figures are not available for Ocean Isle Beach, relative to its size, the island community probably generated a respectable percentage of this total. To simply say that tourism is important in Ocean Isle Beach would be a severe understatement. Policy alternatives concerning support of tourism are few in an area where it forms the economic base. In fact, all of the other policy statements under Economic and Community Development relate to tourism. Therefore, Ocean Isle Beach will continue to support and promote tourism as its main economic base. The development of non-intensive recreational and commercial land uses will be encouraged in order to enhance services for the public.

7. Beach and Waterfront Access

Relatively free and open access to the ocean front and other waterways is an important consideration for any beach community. This is a fact which Ocean Isle Beach recognized in the initial stages of its development. The developer of the community dedicated public easements to provide pedestrian walkovers to the beach and thus free and open access to the strand. The initial plans called for the development of the easement areas as the seasonal and permanent populations increased. There are 13 of these public easements and all are currently maintained. (In 1981, at the time of the land use update, only seven were maintained.) These 13 walkovers are located near the island's more densely developed areas. As the Town continues to grow, more easement access ways will need to be developed. The Town will consider developing and adopting a detailed "Shoreline Access Plan."

Access to other water areas mainly for sports fishing is also open to the public. There is one private pier on the island, which has allowed parking and access for pier fishing and one marina boat ramp facility with accompanying parking. Throughout the Town, there are public parking spaces for lease on property leased by the Town on an annual basis. The Town has no immediate plans to increase public parking spaces. It is the belief of Ocean Isle Beach that Brunswick County should participate in the provision of public parking.

a. Policy

Ocean Isle Beach will continue to support free and open public access to the ocean front and other waterways by seeking State and/or Federal financial assistance to develop beach walkovers and boat access ramps.

8. Types, Density, and Location of Development

As discussed under "Desired Urban Growth Patterns," the residential type of development in Ocean Isle Beach is a balanced mix of single-family or duplex construction or multi-family structures. In accordance with the Town's Zoning Ordinance, and policies aimed at protecting natural resource and fragile areas, more dense residential development such as townhouses, cluster homes, and mid-rise to high-rise condominiums are permitted. Ocean Isle Beach believes that development densities should not be allowed to exceed those contained in the current zoning ordinance. All zoning ordinance amendments requesting increased densities, shall be scrutinized very carefully by both the Planning Board and the Town Board of Commissioners. Services will need expansion to serve newly developing areas and anticipated high levels of "day visitors" during the period.

As far as location of various types of development is concerned, Ocean Isle Beach desires as much as practicable that all development be designed and placed so as to be compatible with the residential character of the Town. All new development will adhere to the Town's building and development regulations. Also, due to concerns about the "approach" to the Town from across the Waterway, Ocean Isle Beach may consider annexations and extraterritorial zoning, if feasible, in order to facilitate orderly growth and development.

9. Energy Facility Siting and Development

The Town of Ocean Isle Beach does not believe this to be a relevant policy issue for the Town, and, therefore, no policies will be established at this time.

10. Special Development Issue: Transportation and Internal Access Improvements

As noted on page 31, Ocean Isle Beach needs to consider plans to improve pedestrian and vehicular access in the beach community. These issues will be addressed under "Economic and Community Development," as special policy and implementation items.

a. Vehicular Access

Traffic flows for both pedestrians and vehicles are heaviest along First and Second Streets. Both streets are paved to a width of approximately 22 feet, although the existing rights-of-way are significantly wider (60 feet for First Street, and also 60 feet for Second Street). Vehicular access and traffic flows would be safer if these two streets had wider pavements--to at least 26 feet. Also, an additional improvement on the west side of N.C. 904 would be the construction of a new street from N.C. 904 westward to the right-of-way of Fourth Street. (The proposed alignment is shown on Sheet 2 of Map 5, attached.)

b. Pedestrian Access

Currently, there are no sidewalks along either First or Second Streets, despite heavy pedestrian use. The rights-of-way are adequate to allow for both widening of the pavement and the construction of a minimum 4-foot-wide sidewalk on one side of both streets. Also, because N.C. 904, which runs from the Ocean Isle Beach Pier across the waterway to N.C. 179, is the major thoroughfare providing access to the Town, adequate pedestrian access, i.e., sidewalks, should also be provided along N.C. 904.

c. Bicycles

Bicycles, by state law, are treated like other moving vehicles and should be operated on thoroughfares, according to normal traffic regulations. Bicycles, for example, should not be operated on sidewalks. If both First and Second Streets are widened, however, then in addition to safer vehicular movement, accessibility would also be enhanced for bicycles. Eventually, as the Town develops, consideration may be given to the development of scenic bike trails or bikeways. However, such recreational facilities may not be warranted at this time.

d. Policy and Implementation Statements

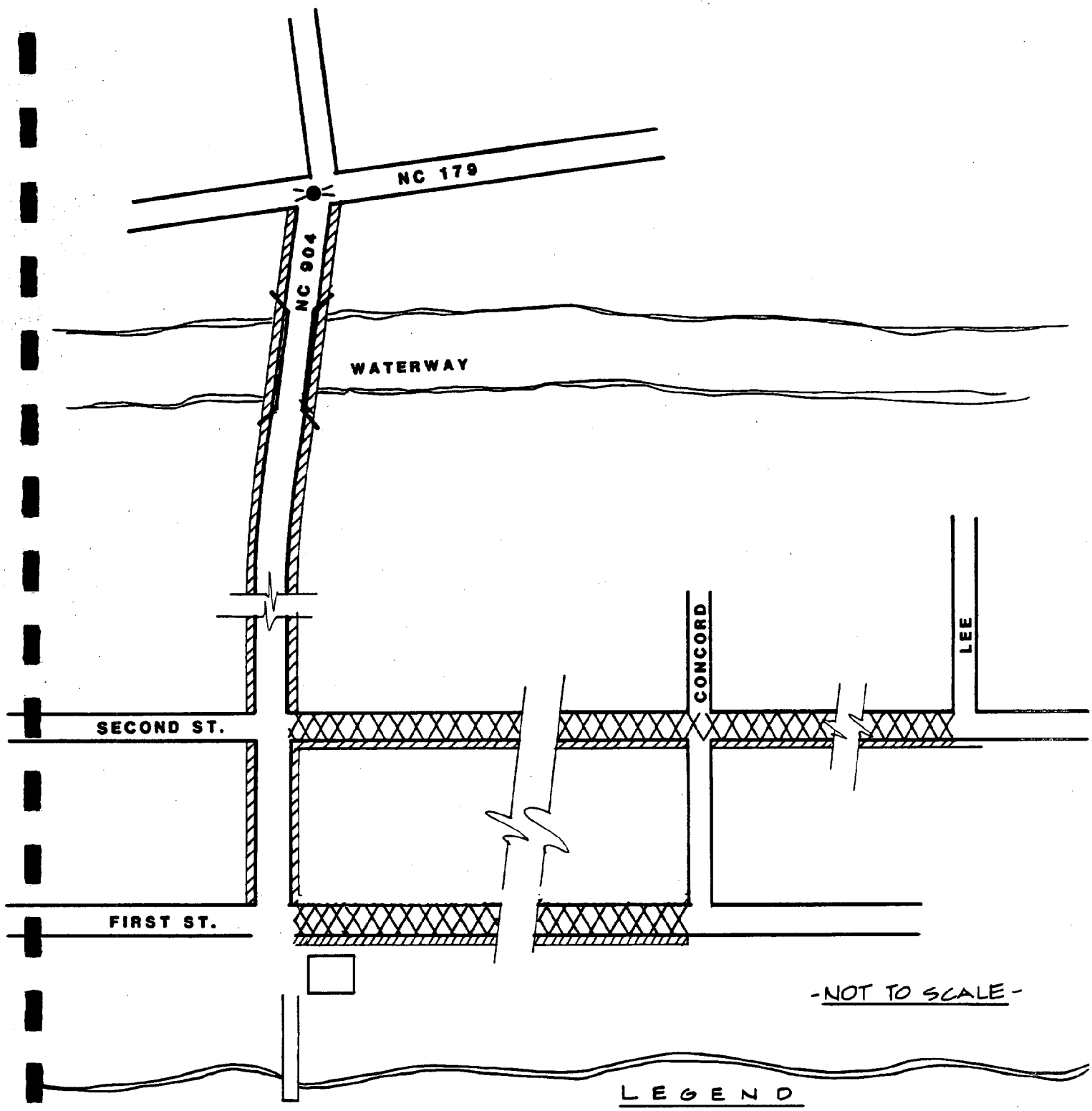
(1) The Town of Ocean Isle Beach will seek financial assistance to have the pavements widened on both First and Second Streets. A significant portion of First Street is included within the N.C. Secondary Route system and is DOT-maintained.

(2) In FY 87, the Town will allocate funds to begin construction of sidewalks along First and Second Streets, and along N.C. 904 from the Ocean Isle Pier to the new Intracoastal Waterway bridge and across the bridge to N.C. 179. Sidewalks on Second Street should extend from Laurinburg to Lee Street, and on Front Street, from the Pier to Concord Street.

(3) In FY 86, the Town requested that NCDOT install a traffic signal device at the intersection of N.C. 904 and N.C. 179, in order to enhance the safety of traffic movements, especially turns, at this intersection. The signal has been installed.

(4) In the long-term, seek to develop a new street from N.C. 904, westward to the right-of-way of the existing Fourth Street (see Sheet 2, Map 5, attached).

Preliminary sketch design of the access improvement areas are shown on Map 2, attached, and general potential layout on Map 3, next page. (Note that Maps 1 and 3 are bound with the document, while Maps, 2, 4, and 5 are attached to the rear of the report.)



OCEAN ISLE BEACH

MAP 3

ACCESS IMPROVEMENT AREA

1986

D. CONTINUING PUBLIC PARTICIPATION POLICIES

Ocean Isle Beach recognizes that an important element in developing and implementing any local policies or plans regarding the use of land in the Town, is involvement of the Town's citizenry. From the initial stages of development of this 1986 update of the Town's CAMA Land Use Plan, Ocean Isle Beach has sought to provide open opportunities for citizen input. A "Public Participation Plan" was developed for the plan updating process, outlining the methodology for citizen involvement. The plan stated that public involvement was to be generated primarily through the Town Planning Board and through "public information" meetings, advertised in local newspapers and open to the general public. The monthly Planning Board meetings also are open to the general public. (See Appendix 1.)

Specifically, during the beginning stages of the update process, the Planning Board met with the planning consultant to review and discuss preliminary development issues; afterwards, a public information meeting was announced in the Brunswick Beacon newspaper, and public notices of the meeting were posted on the door of the Town Hall. This meeting was held February 11, 1986, with citizens, the Planning Board, the planning consultant, and the Town Board of Commissioners attending. Citizens provided input and voiced their concerns about land use trends and policies. A second advertised public information meeting was conducted on June 10, 1986, with the Town Board again attending. Throughout the plan development process, the Town Planning Board was actively involved. A series of meetings, or "working sessions" were held. All of these meetings were open to the public. Specifically, work sessions and/or meetings were held on the following dates: October 24 and November 11, 1985; February 3, March 3, April 7, May 8, June 2, 1986, June 24, 1986, and June 26, 1986.

The preliminary draft plan, prior to submission to the CRC, was presented to the Town Board of Commissioners on June 24, 1986, and received for final review on June 26, 1986.

In addition to direct citizen's input through the public meetings, interviews were conducted with representatives of various agencies in the Ocean Isle Beach-Brunswick County area to solicit input. These included the County Planning Department, Emergency Management Office, County Health Department, and the North Carolina Department of Transportation.

Currently, the Planning Board is composed of three of the Town's residents. Ocean Isle has demonstrated its desire to keep citizens informed of governmental issues by mailing out copies of the minutes of the Town Board meetings to all year-round residents. This is a practice not duplicated in many communities. Ocean Isle Beach is committed to keeping its citizens informed and giving them opportunities to participate in the planning and decision-making process.

Policy choices are:

- Ocean Isle Beach believes that its Planning Board, which has regularly scheduled meetings, all of which are open to the public, provide adequate opportunities for citizens to air their views concerning planning matters. The Board will continue to be maintained at its present size, unless extraterritorial expansion dictates changes.

- Ocean Isle will continue its policy of informing citizens of governmental issues and decisions by sending out a summary of the minutes of Town Board meetings to all permanent residents.

- The Town will use published public notices to inform citizens of pending decisions involving land use planning matters.

E. STORM HAZARD MITIGATION, POST-DISASTER RECOVERY, AND EVACUATION PLANS

The entire North Carolina Coastal region, including Ocean Isle Beach, faces the possible threat of damage each year from hurricanes or other major storms.

The purpose of this section of the 1986 CAMA Land Use Plan Update, is to assist Ocean Isle Beach in managing development in potentially hazardous areas through establishing hazard mitigation policies and to reduce the risks associated with future hurricanes by developing post-disaster reconstruction/recovery policies, and reviewing the adequacy of current evacuation plans. The overriding concept of this element is simply "planning ahead of time."

With this introduction, the following pages will present the storm hazard mitigation and post-disaster recovery policies, and review of the existing evacuation plan along with appropriate discussions.

1. Storm Hazard Mitigation: Discussion

Hazard mitigation, or actions taken to reduce the probability or impact of a disaster could involve a number of activities or policy decisions. The starting point, however, is to identify the types of hazards (including the relative severity and magnitude of risks), and the extent of development (including residential, commercial, etc.) located in storm hazard areas.

Hurricanes are extremely powerful, often unpredictable forces of nature. The two most severe effects are fatalities and property damage, which are usually the result of four causes: high winds, flooding, wave action, and erosion, each of which are discussed briefly below:

a. High Winds

High winds are the major determinants of a hurricane, by definition, i.e., a tropical disturbance with sustained winds of at least 73 miles per hour. Extreme hurricanes can have winds of up to 165 miles per hour, with gusts up to 200 miles per hour. These winds circulate around the center or "eye" of the storm. Although the friction or impact of the winds hitting land from the water causes some dissipation of the full force, there is still a tremendous amount of energy left to cause damage to buildings, overturn mobile homes, down trees and powerlines, and destroy crops. Also, tornadoes are often spawned by hurricane wind patterns. Wind stress, therefore, is an important consideration in storm hazard mitigation planning, particularly for barrier

island communities. Ocean Isle Beach has certain areas identified as "high velocity" or "V-17 zones," located primarily along the immediate ocean front. Because of a hurricane's size and power, however, it is a possibility that all of Ocean Isle Beach would be subject to the same wind velocity in the event of a major storm.

b. Flooding

Flooding, on the other hand, may not affect all areas with equal intensity. The excessive amounts of rainfall and the "storm surge" which often accompany hurricanes can cause massive coastal and riverine flooding causing excessive property damage and deaths by drownings. (More deaths are caused by drowning than any other cause in hurricanes.) Flooding is particularly a problem in barrier island areas because of the storm surge and low-lying areas. However, flooding can cause extensive damage in inland areas also, since many coastal areas have low elevations and are located in high hazard or "Zone A" flood areas according to the Federal Emergency Management Agency Maps. Based on recent flood insurance maps prepared for and adopted by Ocean Isle Beach, virtually all of the Town is classified as being in the 100-year "high hazard" flood zone, or Zone A. (Approximately 12 acres between Shelby Street and Duneside Drive, and a .4 mile stretch along N.C. 904 north of the Intracoastal Waterway bridge, is in "Zone C," i.e., minimally flooded area.) Because of low elevation, it is likely that all of the beach area would be subject to flooding during a severe hurricane. (See Map 4, "Composite Hazards," attached.)

Consideration of potential flood damage is important to Ocean Isle Beach's efforts to develop storm mitigation policies.

c. Wave Action

Damage from wave action is connected very closely to the storm surge, i.e., wind-driven water with high waves moving to vulnerable shoreline areas. Areas most likely to be affected are ocean erodible areas and estuarine shoreline areas. The ocean erodible area in Ocean Isle Beach, as defined on page 16-17 of this Plan, includes the area basically considered as "the beach." In conjunction with CAMA requirements and the Town's building regulations, the only "development" allowed in this area is piers. As discussed above, there are both "A" zones and "V" zones in Ocean Isle Beach. According to FEMA maps, base flood elevations above mean sea level are calculated to range from up to 13 Ft. in "A" zones and up to 17 Ft. in "V" zones. All of the elevations shown on FEMA maps for Ocean Isle Beach include calculations for the "wave surge" height. The potential for wave action damage to development in Ocean Isle Beach is greatest within the "first row" of development along the oceanfront behind the regulated building

line. Within this area, there are 218 single-family lots developed (some lots may contain duplexes, for projection purposes; however, one unit per lot will be assumed), 248 condominium units), 65 motel units, and 7 commercial establishments other than motels. Notice the summary of property most susceptible to wave action damage included below:

Table 13: Summary of Property Most Susceptible to Wave Action Damage

Type	No.	Est. Pct. Town's Total
1. Single Family	218	21.0
2. Condominiums	248	38.0
3. Motel Units	65	100.0
4. Commercial	5	13.5

Source: Based on data from Town Building Inspector, Projections by Talbert, Cox & Associates

Table 14 indicates that about 27% of all structures in the Town could be affected by severe wave action.

The estuarine shoreline within Ocean Isle Beach's jurisdiction, as described on pages 15-16, includes all of the land area around "Soundside" of the island, inland to a distance of 75 feet from the mean high water mark.

d. Erosion

The final major consideration in storm hazard mitigation is severe erosion, caused by a combination of high winds, high water, and heavy wave action. Generally, in Ocean Isle Beach, the areas most susceptible to storm-related erosion are the undeveloped oceanfront areas, estuarine shoreline AEC, and ocean erodible area, as described on pages 15-16. Shoreline erosion, particularly resulting from rapidly receding flood waters, could lead to loss of property through portions of waterfront lots being washed away or even actual structural damage to buildings. Erosion potential is an important factor to consider in developing storm hazard mitigation policies.

e. Summary: Storm Hazard Mitigation Considerations

In summary, all four of the major damaging forces of a hurricane, i.e., high winds, flooding, wave action, and shoreline ero-

sion could have a potential significant impact upon Ocean Isle Beach in the event of a major storm. The degree of susceptibility to losses and/or damages is an important consideration in storm hazard mitigation planning. Table 14, below, provides some perception of the percent of the Town's building structures (residential and commercial, etc.), subject to the potentially devastating effects of a major storm:

Table 14: *Percent of Structures Subject to Storm Damage Factors, Ocean Isle Beach

Storm Impact	Percent Structures Possibly Affected	*Tax Value
1. High winds	100%	251.0
2. Flooding	100%	251.0
3. Wave Action	27%	67.8
4. Shoreline Erosion	5%	12.6

Source: Based on projections derived from examination of Existing Land Use Map and discussion with Town personnel. Map prepared by Talbert, Cox & Associates.
*1986 estimates, in millions

The information in the Table above is preliminary and is not intended to convey the impression that every single structure possibly affected by damaging factors would be affected, only that the potential is there.

f. Policy Statements: Storm Hazard Mitigation

In order to minimize the damage potentially caused by the effects of a hurricane or other major storm, Ocean Isle Beach proposes the following policies.

(1) High Winds: Ocean Isle Beach supports enforcement of the N. C. State Building Code. The Town will continue to enforce the State Building Code on wind resistant construction with design standards of from 120 to 150 mph wind loads.

(2) Flooding: Ocean Isle Beach is an active participant in the National Flood Insurance Program and is supportive of hazard mitigation elements. Ocean Isle Beach is participating in the regular

phase of the insurance program and enforces a Flood Damage Prevention Ordinance. The base flood elevation, as set out in the ordinance, ranges from the bottom of the first supporting member of a structure in the "V" zones, to the first floor elevation in the "A" zones. The elevations shown on the flood maps include the calculated "wave surge" height.

Ocean Isle Beach also will continue enforcement of the CAMA and 404 Wetlands development permit processes in areas potentially susceptible to flooding.

(3) Wave Action and Shoreline Erosion: Ocean Isle Beach will continue compliance with the CAMA development permit process for estuarine shoreline areas and the requisite development standards which may encourage both shoreline stabilization and facilitation of proper drainage. During the next planning period, an erosion recovery policy will be formulated.

g. Implementation: Storm Hazard Mitigation

(1) Ocean Isle Beach will continue to enforce the standards of the State Building Code.

(2) The Town will continue to enforce State and Federal regulations which aid in mitigation of hurricane hazards, including CAMA and the U. S. Army Corps of Engineers 404 permit process, FEMA, as well as local ordinances such as zoning and subdivision regulations.

h. Other Mitigation Policy Areas

According to the CAMA Planning Guidelines, policy statements should also address the following three areas:

(1) Means of dealing with structures and uses which do not conform to the hazard mitigation policies.

(2) Means of encouraging hotels, restaurants, and similar large commercial structures to locate outside of erosion-prone areas.

(3) Policies which deal with the acquisition of parcels located in hazard areas or rendered unbuildable, for the purpose of public access.

All existing structures which do not conform to the Town's mitigation policies can only be subject to existing regulations. No additional requirements will be imposed. For the second area listed above, Ocean Isle Beach believes that current regulations, i.e., CAMA and local zoning and subdivision regulations, are adequate at this time to address this issue. And for the third policy area listed above, the Town believes that there would be no need to acquire such a parcel, since if it is unbuildable, it is likely not suitable for any other use. Also, Ocean Isle Beach believes its access needs are, at present, adequately provided for.

2. Post-Disaster Reconstruction Plan

Ocean Isle Beach recognizes that in the event of a major storm, it will be very important to have a general recovery and reconstruction plan. Ocean Isle Beach has its own Civil Preparedness Emergency Operation Plan and an Emergency Ordinance which empowers the Mayor to declare a State of Emergency, and to initiate appropriate action including joint action with Brunswick County. In both 1984 and 1985, under threats from Hurricanes Diana and Gloria, the Mayor exercised these powers. Specifically, the Mayor has the authority to: order evacuation of the Town; implement and direct evacuees to assigned shelters for the area; ensure the security of the evacuated areas; and control re-entry into evacuated areas. However, other than re-entry, there are no elements relating to formal post-disaster and reconstruction policies for the Town. Some additional elements are needed. This section of the Land Use Plan Update will address this issue.

a. Appointment of a "Post Disaster Recovery Team"

In the event of a major storm having landfall in or near Ocean Isle Beach, when evacuation orders are issued, the Mayor may appoint a "Post-Disaster Recovery Team". The total team, under the Mayor's leadership, may consist of the following, or others because of the potential unavailability of some team members:

(1) Town Services Coordinator
(2) Chief, Volunteer Fire Department
(3) Police Chief
(4) Town Building Inspector
(5) Town Commission Members
(6) Street and Utilities Commissioner

The Mayor may appoint a Team Leader who will be responsible to the Mayor. The base of operations will be designated by the Mayor. The Disaster Recovery Team will share responsibility for the following, as the Mayor so directs:

(1) Establishing an overall restoration schedule.

(2) Setting restoration priorities.

(3) Determining requirements for outside assistance and requesting such assistance, through the Mayor, when appropriate.

(4) Keeping the appropriate County and State officials informed.

(5) Keeping the public informed, as instructed.

(6) Assembling and maintaining records of actions taken and expenditures and obligations incurred.

(7) Recommending to the Mayor to proclaim or continue the local "state of emergency" if warranted.

(8) Commencing and coordinating cleanup, debris removal and utility restoration which would include coordination of restoration activities undertaken by private utility companies.

(9) Coordinating repair and restoration of essential public facilities and services in accordance with determined priorities. This will include contacting appropriate state, local, and federal authorities, including CAMA permit officers where necessary.

(10) Assisting private businesses and individual property owners in obtaining information on the various types of assistance that might be available to them from County, Federal, and State agencies.

b. Immediate Clean-Up and Debris Removal

As soon as practical after the storm, the Mayor or designee will direct appropriate Town personnel and/or private contractors and, as necessary, request State and/or Federal assistance to begin clearing debris from the Town's roads. Giving attention to roads will be the first priority, then utilities, and then beaches.

c. Long Term Recovery/Restoration

The Disaster Recovery Team, under the Mayor's direction, will be responsible for overseeing the orderly implementation of the reconstruction process after a major storm or hurricane in accord with the Town's building and land use regulations and policies.

(1) Damage Assessments: Damage assessments will be necessary to determine as quickly as possible a realistic estimate of the amount of damage caused by a hurricane or major storm. Information such as the number of structures damaged, the magnitude of damage, and the estimated total dollar loss will need to be developed.

As soon as practical after the storm, i.e., clearance of major roadways, in addition to the Disaster Recovery Team, the Mayor shall appoint a Damage Assessment Team (DAT) for assistance. This team may consist of the Building Inspector, Fire Chief, a local realtor or building contractor, and the Streets and Utilities Commissioner. If sufficient personnel is available, two Damage Assessment Teams will be established. The DAT will immediately begin to make "windshield" surveys of damaged structures to initially assess damages and provide a preliminary dollar value of repairs or replacement. The following general criteria shall be utilized:

- Destroyed (repairs would cost more than 50 percent of value).
- Major (repairs would cost more than 30 percent of the value).
- Minor (repairs would cost less than 30 percent of the value).

° Habitable (some minor damage, with repairs less than 15 percent of the value).

Each damage assessment will be documented according to County tax records. Also, Town tax maps and/or records may be used for identification purposes). The total estimated dollar value of damages will be summarized and reported to the Mayor.

(2) Reconstruction Development Standards: Generally, reconstruction shall be held at least to the same development standards as before the storm. However, developed structures which were destroyed and which did not conform to the Town's building regulations, zoning ordinances, and other storm hazard mitigation policies, i.e., basic measures to reduce damage by high winds, flooding, wave action or erosion, must be redeveloped according to those policies. In some instances, this may mean relocation of construction, or no reconstruction at all. Building permits to restore destroyed or damaged structures, which were built in conformance with the Town's building code and Town storm hazard mitigation policies, shall be issued automatically. All structures damaged more than 50% of value, if repaired, will be repaired according to the Town's building code. All structures suffering minor damage, regardless of location, will be allowed to be rebuilt to the original condition prior to the storm.

(3) Development Moratoria: Because of the density of development at Ocean Isle Beach and the possible extensive damage caused by a major storm, it may be necessary for the Town to prohibit all redevelopment activities for a certain period of time after a storm. This decision will be the responsibility of the Mayor. This "moratorium" could allow the Town time to carefully assess all damage in view of existing policies, building regulations, and ordinances, in order to help determine whatever existing policies, etc., should be revised to mitigate similar damage from future storms. The intent of such a moratorium would be to learn all the lessons possible and try and determine what steps and precautions the Town can take in rebuilding so as not to suffer damage to the same extent. If a moratorium is established, the time frame will be commensurate with the extent of the damage. The actual time frame will be established by the Board of Commissioners.

(4) Repair/Reconstruction Schedule: The following schedule of activities and time frame are proposed with the realistic idea that many factors of a hurricane may render the Schedule infeasible.

Activity	Time Frame
(a) Complete and Report Damage Assessments	As soon as possible after storm
(b) Begin Repairs to Critical Utilities and Facilities	As soon as possible after storm
(c) Permitting of Reconstruction activities for all damaged structures ("minor" to pre-storm original status, "major" to State Building Code and hazard mitigation standards	*After any moratorium, and/or completion of all assessments

(5) Agency Responsible for Implementation: The Mayor may designate an overall Emergency Coordinator. The Mayor may also delegate the oversight of the reconstruction and recovery effort and implementation of the plan.

(6) Repair and Replacement of Public Utilities: If utility lines or any component of the water or sewer system are damaged and it is determined that the facilities can be relocated to a less hazardous location, then relocation will be considered during reconstruction. This activity will also be coordinated with the Brunswick Electric Membership Corporation for electrical service and other utility companies.

3. Hurricane Evacuation Plan

a. General

As stated previously, Ocean Isle Beach has a civil preparedness Emergency Operation Plan and Emergency Ordinance which authorizes the Mayor to direct emergency operations in the event of a hurricane.

*If one is declared.

Specifically, the Mayor determines a base of operations and coordinates other Town personnel in carrying out the following:

- Notify the public as early as possible that evacuations may be necessary.
- Contact all realtors in an effort to obtain a count of all persons currently on the island.
- Line up emergency rescue facilities.
- Relocate any Town records, equipment, etc., which could be damaged by water.
- Make door-to-door checks.

It is the Town's general policy not to evacuate late at night, but to attempt to complete all evacuations during the daylight hours. Night evacuations are viewed as only adding to the potential hazards. The Town maintains open radio communications and contact with the State Highway Patrol and with Brunswick County. Brunswick County maintains 24-hour radio communications during hurricanes. The County also provides evacuation shelters on the mainland, coordinates stocking of shelters with the Red Cross, and manages and coordinates traffic flows along evacuation routes.

b. Evacuation Time

The evacuation time from Ocean Isle Beach would vary according to the season in which a storm would be threatening. In the "off season," when tourism is at its lowest (as occurred during both Hurricanes Diana and Gloria), the evacuation time was approximately 1-3 hours. However, if a storm should occur during the peak of the summer tourist season, it may take up to 4 hours during daylight. However, evacuations should be greatly improved now, since the new two-lane mid-rise bridge over the Intracoastal Waterway has been opened. In times past, the only access to the mainland was a single-lane swing-span drawbridge. The current projected evacuation times are adequate within the standard warning time provided by the National Weather Service. Evacuation shelters are provided in the 10 schools in Brunswick County. The closest one to Ocean Isle Beach is the Shallotte Middle School, located at the intersection of N.C. 179 and the Shallotte town limits.

4. Re-Entry

Procedures for re-entry are addressed in the State of Emergency, declared by the Mayor. Basically, during the imposition of the evacuation, no one other than required Town personnel and emergency personnel are allowed back across the Waterway. Also, all residents or property owners have been required to display an auto decal, which can be purchased at the Town Hall.

SECTION III

LAND CLASSIFICATION SYSTEM

SECTION III: LAND CLASSIFICATION SYSTEM

The land classification system provides a uniform way of looking at how the use of land interacts with environmentally sensitive areas and with the development needs of a particular locality. It is not a strict regulatory device in the sense of a zoning ordinance or zoning map. It represents more of a tool to aid in understanding the relationships between various land use categories and how these relationships help shape local policy. Particular attention is focused on the intensity at which land is used and the level of services needed to support that intensity. The regulations for the Coastal Area Management Act state:

> "The land classification system provides a framework to be used by local government to identify the future use of all lands in each county. The designation of land classes allows the local government to illustrate their policy statements as to where and to what density they want growth to occur, and where they want to conserve natural and cultural resources by guiding growth." (7B.0204) (a)

The five land classifications, along with a land classification map, are therefore intended to serve as a visual representation of the policies stated in Section II of this plan. The map depicting these classifications must be as flexible as the policies that guide them. (See the attached Land Classification Map, Map 5.)

Only three of the Coastal Resources Commissions' five land classifications and one subclass are relevant to the land development policies of Ocean Isle Beach. They are identified and described below.

A. DEVELOPED

The developed class of land use provides for continued intensive development and redevelopment of existing cities. Areas to be classified as "developed" include lands currently developed for urban purposes or approaching a density of 500 dwellings per square mile that are provided with usual municipal or public services, including at least public water, sewer, recreational facilities, police and fire protection. Areas which exceed the minimum density but which do not have public sewer service may best be divided into a separate class to indicate that although they have a developed character, they will need sewers in the future.

Within Ocean Isle Beach, the areas complying with the above definition, except for the provision of central sewage service, include: the commercial area on N.C. 904 north of the Intracoastal Waterway, the residential area along the first eight finger canals near the island, and the first and second row of lots along

the oceanfront, east of N.C. 904 to Lumberton Street. Lots in these areas are nearly completely developed, and all of the undeveloped acreage will likely be developed by or before 1995.

B. TRANSITION

Transition land is classified as those lands providing for future intensive urban development within the ensuing ten years on lands that are most suitable and that will be scheduled for provision of necessary public utilities and services. They may also provide for additional growth when additional lands in the developed class are not available or when they are severely limited for development.

Lands classified "transition" may include:

1. lands currently having urban services, and
2. other lands necessary to accommodate the urban population and economic growth anticipated within the planning jurisdiction over the next ten years.

Lands classified for the latter reason must:

a. be served or be readily served by public water, sewer, and other urban services, including public streets, and
b. be generally free of severe physical limitations for urban development.

The "transition" class should not include:

a. lands of high potential for agriculture, forestry, or mineral extraction, or land falling within extensive rural areas being managed commercially for these uses, when other lands are available;
b. lands where urban development might result in major or irreversible damage to important environmental, cultural, scientific, or scenic values; or
c. land where urban development might result in damage to natural systems or processes of more than local concern; and
d. lands where development will result in undue risk to life or property from natural hazards or existing land uses, e.g., frequently flooded areas.

The lands in Ocean Isle Beach that will be classified "transitional" are those areas adjacent to the currently developed areas on the island and based on their historic use. This includes the land area around the remaining finger canals, all of the remaining platted lots on the island, and the unsubdivided land on the west end.

The relationship between the "developed and transition" classification is usually an important one. The first class is meant to define the already intensively developed areas and/or those areas where intensive urban-type development is likely to occur. Transitional lands are those areas where public investment decisions will be required to provide the necessary urban services. These become important areas to closely monitor. The Coastal Resources Commission has further clarified this relationship as described below.

The Developed and Transition classes should be the only lands under active consideration by a county or municipality for intensive urban development requiring urban services. The area within these classes is where detailed local land use and public investment planning will occur. State and federal expenditures on projects associated with urban development (water, sewer, urban street systems, etc.) will be guided to these areas. Most of the "transitional" lands on Ocean Isle Beach already have access to the Town's water system and are included in the municipal service area (i.e., police and fire protection).

C. CONSERVATION

The "conservation" class provides for effective long-term management of significant limited or irreplaceable areas. This management may be needed because of its natural, cultural, recreational, productive, or scenic values. This class should be limited to lands that contain: major wetlands; essentially undeveloped shorelands that are unique, fragile, or hazardous for development; necessary wildlife habitat or areas that have a high probability for providing necessary habitat conditions; publicly-owned water supply watersheds and aquifers; and forestlands that are undeveloped and will remain undeveloped for commercial purposes.

In Ocean Isle Beach, the lands described as the following Areas of Environmental Concern are listed in this classification: Coastal Wetlands (the unplatted, undeveloped lands south of the Intracoastal Waterway and north of Old Sound Creek); Estuarine Shorelines (excluding areas adjacent to already-developed lots); Inlet Hazard Areas; and the Ocean Erodible Area.

D. CONSERVATION SPOIL

This is a subclass of conservation and will be used to classify lands which would generally be suited for use as spoil areas for the maintenance of major waterways, but not for other uses. This would include areas used, or to be used, by the U.S. Army Corps of Engineers.

E. OTHER CLASSIFICATIONS

1. Community

The "community" classification provides for clustered land uses to meet housing, shopping, employment, and public service needs within the rural areas of a county. It is usually characterized by a small grouping of mixed land uses which are suitable and appropriate for small clusters of rural development not requiring municipal sewer service.

2. Rural

The "rural" class provides for agriculture, forest management, mineral extraction, and other low-intensity uses on large sites, including residences where urban services are not required and where natural resources will not be unduly impaired. These are lands identified as appropriate locations for resources management and allied uses: land with high potential for agriculture, forestry, or mineral extraction; lands with one or more limitations that would make development costly and hazardous; and lands containing irreplaceable, limited, or significant natural, recreational, or scenic resources not otherwise classified.

SECTION IV

RELATIONSHIP BETWEEN POLICIES AND LAND CLASSIFICATION

SECTION IV: RELATIONSHIP OF POLICIES AND LAND CLASSIFICATIONS

After the Land Classification System is developed, the Coastal Resources Commission requires each land use plan to relate the Policy Section to the land classification map and to provide some indication as to which land uses are appropriate in each class.

A. DEVELOPED AND TRANSITION CLASSES

As discussed in Section I, Analysis of Existing Conditions, the development of both single-family and multi-family structures is likely to continue in Ocean Isle Beach. The developed and transition classes were specifically designed to accommodate these projected more intensive developments and land uses. This will include commercial uses, parks and open space, community facilities, and transportation. Hazardous or offensive uses, such as power plants, airports, and storage facilities, will not be in these classes. Where identified constraints, such as poor soils, AIWW easements, or other fragile areas occur within these classes, the areas will not be considered as Developed or Transition.

B. CONSERVATION AND CONSERVATION SPOIL CLASSES

The Conservation Class is designated to provide for effective long-term management of significant limited or irreplaceable areas which include wetlands; undeveloped shorelines that are unique, fragile, or hazardous for development; wildlife habitat areas; publicly-owned watersheds and aquifers; undeveloped forestlands; and cultural and historical sites. Policy Statements under Resource Protection and Resource Production and Management issues, address the Town's intentions concerning the Conservation Class.

The Conservation Spoil Class will apply to lands which must be managed on a long-term basis, but are suitable as spoil sites for the maintenance of major waterways, including the Atlantic Intracoastal Waterway, by the Corps of Engineers.

APPENDICES

APPENDIX 1

TOWN OF OCEAN ISLE BEACH PUBLIC PARTICIPATION PLAN FOR THE 1985-86 CAMA LAND USE PLAN UPDATE

I. Introduction

The Town of Ocean Isle Beach, in compliance with requirements of the North Carolina Coastal Area Management Act, is preparing an update to its Land Development Plan. The purpose of this plan is to update growth and development trends of the Town and to re-assess the need for capital improvements and expansion of the Town's infrastructure along with the study of the capacity for and efficiency of municipal services.

A significant aspect of the plan updating process is the involvement of the Town's citizenry. This Public Participation Plan will outline the means by which the Town will foster and encourage such participation throughout the planning process.

II. Public Participation Plan

Public involvement in the 1985-86 Land Use Plan Update will be generated primarily through meetings with the Town of Ocean Isle Beach Planning Board. This Board is composed of three (3) local residents. Also, general "public information" meetings will be held to present and discuss issues before the general public. All such meetings will be publicized through advertisments in the customary manner of posting public notices. Presentations will also be made before the Ocean Isle Beach Town Commissioners. Note that all Planning Board and Board of Commissioners' meetings are open to the public.

III. Tentative Meeting Schedule

The initial preliminary schedule of meetings is as follows:

A. Meeting with Planning Board to review preliminary development issues, November 11, 1985, 1:00 P.M.

B. Meeting with the Town Board of Commissioners to review preliminary issues, December 10, 1985, regular meeting 4:00 P.M.

C. Public information meeting with citizens, Jamuary 13, 1986, 4:00 P.M.

Other meetings and work sessions will be scheduled and appropriately publicized throughout the land use plan update process. The above schedule is presented as being prelimimary.

The above Plan was unanimously adopted by the Board of Commissioners Town of Ocean Isle Beach on motion by Commissioner Marvin Stanley, seconded by Commissioner Debbie Fox this 8th day of October, 1985.

Alberta C. Tatum

Alberta C. Tatum, Town Clerk

LaDane W. Bullington

LaDane W. Bullington, Mayor

SEAL

MAPS

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