COASTAL ZONE
INFORMATION CENTER

MOREHEAD CITY

N.C. COASTAL RESOURCES COMMISSION

Morehead City

Land Development Plan

HD
268
.M67
P76
1976

PLANNING DEPARTMENT
CARTERET COUNTY
P. O. DRAWER 630
BEAUFORT, N. C. 28516

AUTHENTICATED
U.S. GOVERNMENT
INFORMATION
GPO

COASTAL ZONE
INFORMATION CENTER

N.C. COASTAL RESOURCES COMMISSION
HD268.M67P76 1976

Proposed Morehead City
Land
Development Plan

May 21, 1976

PLANNING DEPARTMENT
CARTERET COUNTY
P. O. DRAWER 630
BEAUFORT, N. C. 28516

Table of Contents

	Page
I. Introduction	1
II. Description of Present Conditions	4
A. Population and Economy	4
B. Analysis of Existing Land Use	14
C. Current Plans, Policies and Regulations	23
III. Public Participation Activities	28
A. Identification and Analysis of Major Land Uses	28
B. Alternatives	32
C. Objectives, Policies and Standards	32
D. Public Participation	35
IV. Constraints	40
A. Land Potential	40
B. Capacity of Community Facilities	46
V. Estimated Demand	52
A. Population and Economy	52
B. Future Land Needs	56
C. Community Facilities Demand	58
VI. Plan Description	60
A. Description of Land Classification System	60
B. Morehead City's Land Classification	63
VII. Potential Areas of Environmental Concern	66
A. Coastal Wetlands	67
B. Estuarine Waters	68
C. Areas Subject to Public Rights-Certain Public Trust Areas	69
D. Natural Hazard Areas-Coastal Floodplain	70
E. Natural Hazard Areas-Excessive Erosion Areas-Estuarine and River Erodible Areas	71
VIII. Summary	73
IX. City-County Plan Relationship	74
X. Appendices	75
A. Analysis of the Goals and Objectives of the Morehead City Zoning Ordinance	75
B. Suggested Programs for Park Development	85
C. Sketch Thoroughfare Plan	86

Introduction

The Town of Morehead City has prepared this Land Development Plan in compliance with the Coastal Area Management Act of 1974 (CAMA). Technical assistance in preparing this plan was provided by the Carteret County Planning Department, but the issues, objectives, and policies as stated in this document, represent the collective input from the citizens, elected and appointed officers and officials of Morehead City. It is hoped that this plan reflects the best needs, desires, and wishes of the citizens of Morehead City and will provide a solid foundation for proper planning in the future.

This plan has been written according to the State Guidelines for Local Planning in the Coastal Area under the Coastal Area Management Act of 1974 as adopted by the Coastal Resources Commission. The purpose of the guidelines is to assist each of the twenty coastal counties and their respective municipalities in the preparation of its own individual land use plan. Within each county, the guidelines stipulate that each municipal plan must fit in the overall county plan. Futhermore the primary objective of the Coastal Area Management Act of 1974 is the basis for a comprehensive plan for the protection, preservation, orderly development, and management of the coastal area of North Carolina.

In the development of a local land development plan, it is essential for the involved local officials and citizens to understand the legislative goals of the CAMA as stated in G.S. 113A-102(b).

1. To provide a management system capable of preserving and managing the natural ecological conditions of the estuarine system, the barrier dune system, and the beaches, so as to safeguard and perpetuate their natural productivity and their biological, economic and aesthetic values.

2. To insure that the development or preservation of the land and water resources of the coastal area proceeds in a manner consistent with the capability of the land and water for development, use, or preservation based on ecological considerations.

3. To insure the orderly and balanced use and preservation of our coastal resources on behalf of the people of North Carolina and the nation.

4. To establish policies, guidelines and standards for the conservation of resources; the economic development of the coastal area; the use of recreational lands and tourist facilities; the wise development of transportation and circulation patterns; the preservation and enhancement of historical, cultural and scientific aspects of the region; and the protection of common law and public rights in the lands and waters of the coastal area.

Over the past months, the usual data collection and analysis that are characteristic of most land development plans were followed. However, this Land Development Plan is unique from any other in several ways.

Public participation and input were given the highest priority. Through the use of extensive questionnaires mailed to residents in Morehead City, public meetings, and candid conversations with various individuals, the citizens of Morehead City have determined how their town should develop in the future. This is not only important in determining objectives for Morehead City, but also is instrumental in determining the public demand for improved community facilities.

Another factor contributing to the uniqueness of this plan is the potential Areas of Environmental Concern (AEC). The 74 Legislature realized that in many areas of coastal North Carolina, development pressures were causing adverse and irreversable effects on the natural environment. "Unless these pressures are controlled by coordinated management," the Act states, "the very features of the coast which make it economically, aesthetically, and ecologically rich will be destroyed."

The land development plan is divided into several sections. Section II, a description of present conditions, includes a brief analysis of population and economy, existing land use and the current plans, policies and regulations. The public participation activities are outlined in Section III. Section IV, Constraints, is concerned with the potential of the land and the capacity of community facilities. Section V is the estimated demand section, including the demands on population and economy, land needs and the community facilities needs. Section VI is a description

of this plan. Other sections includes summaries, the city-county plan relationship and the appendices.

The Town of Morehead City has long recognized the value and importance of proper land use planning. Many accomplishments have resulted from the planning process and it is hoped that this plan will contribute to the preservation, protection, and orderly development of Morehead City and its resources.

II. Description of Present Conditions

A. Population and Economy

1. Population:

The number of people living in a specific geographic area is one of the most important elements of man's environment and must always be evaluated prior to the formulation of any plan for the future use and managemant of our land. Population evaluation is essential in making decisions and determinations as to the capacity of land to support a given population. There are three basic questions which arise when one reviews population for analysis: (1) Why was there an increase or decrease in population? (2) Where did the increases or decreases occur? (3) What was the impact of the increases or decreases?

The following chart shows population changes for Morehead City for the 45 years between 1930 and 1975.

Chart 1

1930	1940	Percent Change	1950	Percent Change	1960	Percent Change	1970	Percent Change	1975
3,483	3,695	+6	5,144	+39	5,583	+9	5,233	-6.3	5,516

The above chart shows Morehead City gained population from 1930 to 1960. From 1960 to 1970, there was a loss of 350 people for a 6.3 percent decrease. Some of this decrease can be accounted for by the declining birth rate of the city as well as the county, state and nation; but, the major reason for the population decrease in Morehead City is due to out-migration (See Chart 2, Migration Trends and Sex-Age Distribution.) Many women of child-bearing age are leaving the city. Many males who make up the labor force are leaving to look for better employment in other places of the county or state. Many of the people leaving Morehead City are remaining within the one mile planning area. As Morehead City was losing population from 1960 to 1970, the one-mile planning area was increasing its population. Morehead City's loss was the one-mile planning area's gain.

Whatever the reason for leaving, the population within the existing city limits of Morehead City has been decreasing since the 1960's. Between 1950 and 1960, Morehead City lost 174 people because of either death or out-migration, but it gained 613 people through the annexation of land. This resulted in a net gain of 439 people. From 1960 to 1970, Morehead City lost 350 people. The 1975 estimates show that Morehead City increased its population from 5,233 in 1970 to 5,516 in 1975. This shows and increase, but, again, the increase was a result of annexation. Although Morehead City's population is not increasing without annexation, there is land available to support additional population. Presently, there are 182 vacant, platted, residential lots which cover 18 acres. These lots would allow for high density development and would provide a basis for a significant population increase.

If Morehead City hopes to continue increasing in population, it must use the land within the city, or it must annex areas in one mile planning area. The areas to the north and west of Morehead City are the areas in which Morehead City must expand. Only 16 percent or 456 acres of the land in the one mile planning area is developed. Of the developed land, 33 percent or 152 acres are covered with low to medium density residential development. There are 200 platted, vacant, residential lots which cover 60 acres. These lots offer the potential for immediate increases in population in the one mile planning area, and for possible annexation to Morehead City in the future.

An analysis of the distribution of population by age and sex helps to determine who is leaving the area and who is coming into the area. Without this information, it would be impossible to prepare for the future. It is necessary to know the number and distribution of people in order to provide for schools, recreation areas, jobs,

MIGRATION TRENDS AND AGE-SEX DISTRIBUTION

MOREHEAD CITY	MALE 1960	MALE 1970	MALE Change	FEMALE 1960	FEMALE 1970	FEMALE Change	TOTAL 1960	TOTAL 1970	Total Change	TOTAL NET CHANGE
Under 5	291	192	-99	299	215	-84	590	407	-183	
5-9	318	249	-69	296	227	-69	614	476	-138	
10-14	282	240	-42	271	244	-27	553	484	-69	
15-19	207	264	+57	231	270	+39	438	534	+96	
20-24	136	224	+88	180	177	-3	316	401	+85	
25-29	139	132	-7	157	152	-5	296	284	-12	
30-34	166	127	-39	184	131	-53	350	258	-92	
35-39	191	124	-67	222	137	-85	413	261	-152	
40-44	205	157	-48	210	159	-51	415	316	-99	
45-49	201	166	-35	201	185	-16	402	351	+32	
50-54	132	133	+1	151	182	+31	283	315	+32	
55-59	113	136	+23	114	166	+52	227	302	+75	
60-64	100	110	+10	124	140	+16	224	250	+26	
65-69	77	98	+21	102	111	+9	179	209	+30	
70-74	56	65	+9	83	120	+37	139	185	+46	
75+	59	71	+12	85	129	+44	144	200	+56	
										-350

health care facilities and commercial establishments.

Morehead City's age distribution is similar to other towns in Eastern North Carolina where out-migration is a problem. From 1960 to 1970, the population of females in Morehead City increased by 39 in the 15-19 years age group and by 189 in the 50 and above age group. The number of males increased by 57 in the 15-19 year age group; 88 in the 20-24 year age group and 76 in the 50 and above age group. With the exception of the above-mentioned age groups, all age groups lost population. The 15-19 year age groups and the 20-24 year male age group were the only groups below 50 to gain population. An examination of Chart 2 will verify this statement. Morehead City is losing its younger population and gaining population in the 50 and above age group. This is an indication that many retired people are coming to Morehead City to live. It is certain that Morehead City is becoming a town with an older population.

Another indication that Morehead City is becoming a town with an older population is indicated in Chart 3, Selected Age Group Percentages. Morehead City falls below the county and state averages in all categories except the 65 year old and older age group. These figures indicate a decline in Morehead City of women of child-bearing age and of men in the labor force. Many of the young workers are locating in the one-mile planning area. The 1975 population estimate of the one-mile planning area was 1,765. When the young people who once lived inside Morehead City, marry, they move out of town to live and make a home for themselves. This accounts for the increasing number of residential developments in the planning area but outside the city limits.

Chart 3, Selected Age Group Percentages

	Below 18	18-64	64 and over
Morehead City	32.5%	56.1%	11.4%
Carteret County	33.8%	57%	9.2%
State	34.6%	57.2%	8%

Seasonal Population

It is estimated that Morehead City's seasonal population increases by approximately 200 during the summer months. Most of the visitors to Carteret County are accommodated on Bogue Banks, due to the availability of seasonal accommodations, but visit Morehead City to take advantage of the tourist related businesses that are available.

2. Economy

Morehead City, the largest town in Carteret County, is the retail trade center for the county. A majority of retail and sales establishments in the county are located within Morehead City. It contains over 50 percent of the apparel and accessory stores; furniture; home furnishings and equipment stores; eating places; and drug stores and proprietary stores. The following chart, Gross Retail Sales for Carteret County in 1974, gives an indication of the retail sales throughout the county.

Retail Sales

	1968-1969	1973-1974
1% Retail Sales	$ 269,076	713,345
1½% Auto and Planes	5,468,523	9,154,755
Apparel	953,407	1,511,679
Automotive	9,045,120	15,470,562
Food	16,377,436	30,753,092
Furniture	2,293,852	4,684,691
General Merchandise	8,002,358	15,518,949
Building Materials	3,989,191	10,151,178
Unclassified Tax	6,309,816	14,731,531
	$52,713,779	$102,689,782

During 1963-64, retail sales in Carteret County totaled $35,584,727. By 1968-69, this total reached $52,713,799. In the next five years (1973-74) this total nearly doubled to $102,689,782. It is easy to see that the gross retail sales have grown tremendously in the county. Due to the many tourist related stores and restaurants, it is felt that a considerable amount of these expenditures take place in Morehead City.

The town serves not only as a trading center for the county residents, but also as a tourist center for the many visitors that travel to the coast each year. The following chart indicates the growing number of travel ex-

penditures in Carteret County.

Chart 5 Travel Expenditures

1969	$6,317,000
1970	7,020,000
1971	7,390,000
1972	8,050,000

An examination of the types of employment in Carteret County reveals that the number of people who work in manufacturing and agriculture has dropped in recent years. Trade, service and government are the big employers of the labor force. Morehead City and Carteret County have many government facilities, especially those involved in marine service.

Employment-Labor Force

	Total Employment	Manufacturing	Non-Manufacturing	Public Administration	Agricultural	Other	Rate of Unemployment	Avg. Wkly. Earnings Per Worker
1963	6,820	1,160	2,660	920	620	1,460	10.5%	$55.69
1964	7,070	1,140	2,930	930	500	1,570	9.7%	$59.94
1965	7,920	1,200	3,110	940	440	2,230	7.3%	$63.47
1966	8,440	1,340	3,420	990	420	2,270	7.0%	$62.88
1967	8,470	1,430	3,490	970	390	2,190	6.6%	$64.28
1968	8,840	1,440	3,680	1,150	350	2,220	6.5%	$74.02
1969	9,170	1,500	3,770	1,280	340	2,280	4.5%	$79.03
1970	11,580	1,610	3,940	1,470	330	2,330	4.7%	$83.12
1971	11,380	1,430	4,100	1,410	330	2,320	5.3%	$89.80
1972	11,880	1,580	4,410	1,370	310	2,380	5.3%	$92.43
1973	13,140	1,740	5,050	1,470	NA	NA	4.3%	$97.55

A high percentage of Morehead City's labor force works in civil service, which illustrates the importance of governmental activities on the economy. The state has many agencies with offices in Morehead City, but the primary source of civil service employment is Cherry Point Marine Base. Approximately

```
  OCLC:  5161294            Rec stat:    n
  Entered:    19790712      Replaced:    19930715      Used:    19790712
$ Type: a        Bib lvl: m        Source:   d        Lang:  eng
  Repr:          Enc lvl: I        Conf pub: 0        Ctry:  ncu
  Indx: 0        Mod rec:          Govt pub: l        Cont:
  Desc: i        Int lvl:          Festschr: 0        Illus:
                 F/B:     0        Dat tp:   s        Dates: 1976,     %
$   1  040     ERE 'c ERE %
$   2  043     n-us-nc %
$   3  090     HD211.M6 'b N6x 1976 %
$   4  090     'b  %
$   5  049     NOaM %
$   6  110 1   Morehead City (N.C.). 'b Board of Commissioners. %
$   7  245 10  Morehead City land development plan. %
$   8  260     [Morehead City, N.C. : 'b The Board], 'c 1976. %
$   9  300     86 leaves ; 'c 28 cm. %
$  10  500     Cover title. %
$  11  650  0  Land use 'x Planning 'z Morehead City (N.C.) %
$  12  650  0  City planning 'z North Carolina. %
$  13  651  0  Morehead City (N.C.) 'x City planning. %
```

forty percent of the 4,000 plus civilian work force on the base live in Carteret County.

The Morehead State Port facilities also have a profound impact on the economy. The volume of business handled by the port gives some indication of the potential value to the economy of the county. Refer to Chart 7 for specific information. Recent trends have indicated that the number of ships that use the port has fluctuated considerably, but the total amount of business has remained relatively high.

North Carolina State Ports Terminal
Morehead City, North Carolina

	General Cargo Import	General Cargo Export	Asphalt and Petroleum	Military	Grand Total
1953	21,347.80	11,299.10	404,505.22	87,954.23	525,106.35
1958	194.61	65,119.40	288,839.91	122,523.18	487,677.10
1963	16,369.56	103,975.22	171,324.86	50,480.70	342,150.34
1968	138,564.99	202,430.20	204,923.70	31,226.11	577,145.00
1973	583,895.81	435,697.04	314,788.31	10,090.45	1,029,683.30

This section concerning the economy of Morehead City is intended to indicate the relationship of Morehead City's economy to that of the county's, and the importance of the tourist industry in Morehead City. Morehead City's economy is directly proportioned to the county's economy. When tourists visit Carteret County, sales and services for Morehead City rise; more jobs are created; and the standard of living increases. The tourist industry provides for greater stability of the economic situation for Morehead City as well as other areas of the county.

MOREHEAD CITY

EXISTING LAND USE

(MAP 1)

CHART 8

EXISTING LAND USE
MOREHEAD CITY, N. C. PLANNING AREA

	IN TOWN LIMITS			ONE-MILE FRINGE			IN PLANNING AREA		
	Acres	% of Urban Land	% of Total Land	Acres	% of Urban Land	% of Total Land	Acres	% of Urban Land	% of Total Land
Residential	282	33	28	152	33	6	434	33	12
Commercial	69	8	7	13	3	---	82	6	2
Industrial-Wholesale	138	16	14	38	8	1	176	13	4
Public-Semi Public	116	13	12	91*	20	3	207	16	5
Rights-of-way, streets, railroads, utility easements, alleys	255	30	26	162	36	6	418	32	11
Total Urbanized	861	100		456	100		1317	100	34
Vacant (in town)	130		13				130		3
Farmland	-0-			269		9	269		7
Wooded & Estuarine	-0-			2197		75	2197		56
	991		100	2922		100	3913		100
	1.5 sq. mi.			4.6 sq. mi.			6.1 sq. mi.		

*Includes 87 acres for Morehead City Golf and Country Club.

B. Analysis of Existing Land Use

The existing land use of Morehead City has been classfied into generalized categories. The amount of Land by each general category is totaled and the relationship between different categories is analyzed. From this analysis, one can see that land use compatibility problems have resulted from unplanned development. The purpose of this study and the subsequent Land Development Plan is to propose solutions that will give the citizens of Morehead City a better living environment in the future. These solutions are presented to aid the Town Board of Morehead City in making land development decisions which include commercial and neighborhood renewal, public housing construction, zoning, street paving and aesthetic improvement.

The existing land uses in Morehead City have been organized into five use categories. A listing is given below of the typical uses in each of the general categories.

1. Residential - This category includes single family homes, apartments, duplexes, mobile homes, cottages and cabins.
2. Commercial - This category includes retail and service trade. A retail store is one that sells physical goods as opposed to intangible services. Such stores include clothing stores, drug stores, service stations and grocery stores. Service stores trade in intangible goods. This sub-category includes motels, banks and professional offices.
3. Industrial - This category includes all industrial uses. Unoffensive industrial uses include such operations as wholesale storage, and the production of textiles and apparels. Other industrial uses include boat manufacture, metal work and metal shops.

4. Public and Semi-Public - This category includes schools, churches, governmental facilities, recreational facilities, cemetaries, and various types of rights-of-way.

5. Undeveloped Land - This category includes land that is vacant. In the extraterritorial area, undeveloped land is often used for agriculture, woodland, and in the case of shallow estuarine areas, for replenishing the valuable fish supply.

Existing Land Use

The five land use categories noted above are treated separately in the succeeding analysis. In each discussion, primary emphasis is placed on the size, percentage, and development pattern of each category of land use. (See Existing Land Use Map, page 12).

1. Residential - Approximately 861 acres or 87 percent of the total land area in the Morehead City limits are developed. Residential development (mostly single family dwellings) occupy 282 acres or 33 percent of the developed land within the city limits (See Chart 12, Existing Land Use Planning). For the most part, high density development has occurred in town with an average density of eight dwellings per acre. There is a concentration of multi-family units north of the business area in east Morehead City. The amount of land used as multi-family units is 18 acres including ten acres for public housing. The pattern of converting older single family structures into multi-family units and the construction of apartments and duplexes will most likely continue in the area of Morehead City north of Arendell Street and east of 16th Street.

4. Public and Semi-Public - This category includes schools, churches, governmental facilities, recreational facilities, cemetaries, and various types of rights-of-way.

5. Undeveloped Land - This category includes land that is vacant. In the extraterritorial area, undeveloped land is often used for agriculture, woodland, and in the case of shallow estuarine areas, for replenishing the valuable fish supply.

A. Existing Land Use

The five land use categories noted above are treated separately in the succeeding analysis. In each discussion, primary emphasis is placed on the size, percentage, and development pattern of each category of land use. (See Existing Land Use Map, page 12).

1. Residential - Approximately 861 acres or 87 percent of the total land area in the Morehead City limits are developed. Residential development (mostly single family dwellings) occupy 282 acres or 33 percent of the developed land within the city limits (See Chart 12, Existing Land Use Planning). For the most part, high density development has occurred in town with an average density of eight dwellings per acre. There is a concentration of multi-family units north of the business area in east Morehead City. The amount of land used as multi-family units is 18 acres including ten acres for public housing. The pattern of converting older single family structures into multi-family units and the construction of apartments and duplexes will most likely continue in the area of Morehead City north of Arendell Street and east of 16th Street.

There are a number of garage apartment uses east of 24th Street and south of Arendell Street. These apartments plus a few duplexes supply some of the housing needs of military personnel who have found a tight housing situation for short term residents in the Carteret County area.

In the one-mile planning area, 456 acres or 16 percent of the land is developed. Moderate density residential development covers 152 acres or 33 percent of the land. The land in the country club area is continuing the development of moderate density subdivisions. These housing units are built on lots of 20,000 square feet or more. All of the units built in this area, according to the Carteret County Health Department, have septic tanks and water wells. This type residential development is costly if it becomes necessary to extend water services and sewer services from Morehead City into these areas. The need for these services may develop as subdivision density increases and more residential development occurs. This problem should be resolved by the planning board in the preparation of future subdivision regulations.

There are approximately 19 mobile homes in Morehead City and 212 in the one-mile planning area. The density of mobile home parks is subject to substandard living environments that should be improved. More common park space should be provided to residents of mobile home parks. Future subdivision regulations and mobile home ordinances should consider this need and provide for common open space in mobile home park development.

2. Commercial - The land devoted to commercial activities in Morehead City is 69 acres or 7 percent of the land within Morehead City. In the one mile planning area, there are 73 acres devoted

to commercial activities. The amount of land used for commercial uses is an expression of the trade position of Morehead City in the county. In June, 1973, Morehead City had almost 50 percent of the total retail and service sales in the county. In the past, it has been a community shopping place for the community of the Carteret Peninsula and its tourist guests.

The pattern of commercial land use in Morehead City is lineal. The pattern follows a line that extends along Arendell Street for four blocks from Seventh Street to Eleventh Street. Also in the downtown area is a large amount of waterfront or marine commercial along Shepard and Evans between Ninth Street and Fourth Street. These provide moorings for many of the charter boats and locations for fish houses and waterfront restaurants.

Arendell Street is becoming a commercial highway strip development which is most pronounced in two areas: (1) Between Eleventh Street and Fourteenth Street (2) The north side of Arendell Street west of 24th Street. At Bridges Street, the commercial development, which is highway oriented, developed on both sides of Arendell Street past the extraterritorial jurisdiction boundary.

Local neighborhood shopping uses and scattered shopping places are found throughout Morehead City. Most, however, exist as nonconforming uses, which reflect either a weakness in the current zoning ordinance or the desires of Morehead City to discourage use of neighborhood commercial districts. The problem of mixed commercial and residential land uses will be discussed in the following section. It was noted that proper enforcement of the zoning ordinance will prevent these nonconforming uses from expanding.

3. Industrial - Morehead City has 138 acres in industrial use. This is 14 percent of the total land in Morehead City.

The amount of industrial land used in the planning area is 176 acres. This is 13 percent of the total urban land in the planning area and 4 percent of the total land. The principal industrial uses in the area are boat and metal works, a garment factory, a roofing plant and the port activity which includes storage and bulk goods shipping. The port activity consists of nearly 150 acres on the extreme eastern tip of the peninsula on which Morehead City is located. The next largest piece of land in the industrial category are the two fish processing plants which are located on Bogue Sound adjacent to Carteret Technical Institute.

4. Public and Semi-Public - This category includes schools, churches, governmental facilities, recreational facilities, cemetaries, and various types of rights-of-way.

   a. Schools-Within the Morehead City Planning Area are one junior high school, two public elementary and one private elementary school. The present sites of these schools are inadequate when compared with North Carolina Division of School Plant Planning school site standards. According to these standards, an elementary school site should contain 10 acres plus one additional acre for each 100 pupils.

      A junior high school site should be 20 acres plus one additional acre for each 100 pupils.

      Morehead City Central, a junior high school having an enrollment capacity of 430 pupils should be located on a 25 acre site. The present site is only eight acres. This site could be expanded through landfilling of Calico Creek and park

development along Calico Creek.

The Morehead City Elementary School site is five acres and according to state standards should be 18 acres. This site is surrounded by residential development and will be difficult to expand.

Camp Glenn School is located on a ten acre site and needs six additional acres to meet state standards of site adequacy. Additional space is needed for parking and play acres.

b. Government Facilities- Government facilities in Morehead City presently occupy 20 acres or about two percent of the land with the corporate limits. The facilities includes the U.S. Post Office, numerous state installations, and various municipal offices such as water, public works, and general administration. The general administration office site is not adequate and expansion should be considered.

c. Churches - Churches in Morehead City occupy 30 acres or about three percent of the land. Church sites are generally inadequate. They fail to meet expansion needs and increased need for off-street parking space. Churches should be encouraged to acquire adequate sites when purchasing land in newly expanding residential areas.

d. Transportation, Communication, and Power - Transportation facilities include roads, alleys, highways, and railroad rights-of-way. These rights-of-way use 26 percent of the land area in Morehead City and 11 percent of the land area in the total planning area. Communications and power lines generally occupy the same rights-of-way as streets and highway

rights-of-way.

Additional right-of-way purchase and development is needed in northwest Morehead City between the country club area and Bridges Street.

The North Carolina State Highway Commission Division of Advanced Planning is developing a Thoroughfare Plan for the Morehead City-Atlantic Beach area. The two plans should be discussed and a final plan adopted by the Town Board and the State Highway Commission.

5. Undeveloped Land - Undeveloped land is placed into three categories: farmland, vacant in town, and wooded and estuarine. Land used for farming in the planning area is 269 acres. This is seven percent of the total land use in the planning area. Much of this agricultural land will probably be developed residentially as more and more people move into the Morehead City Planning Area.

Usable vacant land in Morehead City is 130 acres. This is 13 percent of the total land area in Morehead City. Vacant land in the downtown area should be used for parking, commercial, or high density apartment development with supporting community facilities such as parks. Outside of the downtown area, the best use should range from apartment to single family development. The vacant land in Morehead City is generally scattered throughout the town in small lots.

Wooded land, swamp land and spoils land consume 2,197 acres of land. This is 56 percent of the total land in the planning area. This includes a large number of tidal marsh land in the northeast section of the planning area. This land will most likely not be developed in residential use before the year 2000. The

future potential of this land for estuarine purposes should be determined before any kind of urban development is considered.

Land Use Problems and Problems from Unplanned Development -

In the past, Morehead City has had problems of mixed land uses. Such problems include small grocery stores in residential areas and service and repair shops in residential areas. Such uses are nonconforming uses and should not be allowed to expand. It is hoped that this land development plan and the proper enforcement of the zoning ordinance will prevent these situations from occuring again in Morehead City. The following paragraphs are a discussion of these problems and possible solutions to them are discussed late

In the past, small stores have located next to houses without leaving a buffer between the two. Because of their proximity, noise and dust severely limit the usefulness of the house as a place to live. There is usually a limited number of parking spaces and a danger of fire spreading easily to residential structures.

The presence of repair shops in residential areas is also deleterious to surrounding housing. Trucks parking and loading and unloading in a housing area is not a good home environment for citizens. Situations such as these are nonconforming uses and should not be permitted to happen again.

Strip commercial development along Arendell Street has resulted in inconvenient shopping service to the customers in the Morehead City trading area. Having so much of Arendell Street as strip commercial has caused an impediment of traffic with a 20 m.p.h. speed limit from 26th to Third Streets.

A second problem of strip commercial development exists along U.S. 70 and N.C. 24 to Pelletier Creek. Any further commercial development in this area should be stemmed and should be concentrated around existing commercial developments.

The lack of development along Calico Creek is a land development problem. The creek needs dredging so that oyster fishermen may have access from this side of town to the Newport River. Mosquitoes are a problem since there has been no waterfront development for beaches and boat slips.

Problems such as neighborhood stores in residential areas and strip commercial development are nonconforming uses. As has been previously stated, it is hoped that this land development plan and the proper enforcement of the zoning ordinance will prevent these situations from occurring again in Morehead City.

C. Current Plans, Policies and Regulations

1. Plans and Policies

The following is a listing of major actions, plans and policies which have currently been attempted or accepted or adopted by Morehead City.

Each document represents another step in the comprehensive planning program initiated in 1968 with the formation of the Morehead City Planning Board.

The Planning Board with technical assistance from the Department of Community Services has completed the following studies and plans:

a. Transportation Plans - A Sketch Thoroughfare Plan was included in the Land Use Survey and Analysis and Land Development Plan in April, 1970. Of course this plan is now outdated. An updated Sketch Thoroughfare Plan will be completed later during this year.

b. Community Facilities Plan - In May, 1973, an analysis was made of the facilities and services in the Community Facilities

Plan and Capital Improvements Budget. Some information in this plan is outdated. Part of this outdated information will be updated in this plan, but Morehead City should update the complete Community Facilities Plan in the near future.

c. Utilities Extension Policies - Morehead City's policy is to extend and provide services wherever new development dictates it.

d. Open Space and Recreation Policy - Morehead City has no formal open space and recreation policy, but this matter was addressed in the Land Development Plan of April 1970. Morehead City is currently updating the recommendations made in that plan.

e. Prior Land Use Plans and Policies -

1.- Land Use Survey and Analysis and Land Development Plan 1970

Its purpose was to propose solutions that will give the citizens of Morehead City a better living environment in the future. These solutions are presented to aid the Town Board of Morehead City in making land development decisions which include commercial and neighborhood renewal, public housing construction, zoning, street paving and aesthetic improvement.

2.- Annexation Study (1971)

f. Other Plans and Policies

1.- Community Appearance Program

This program is intended to promote a better community appearance through use of an appearance committee. The duties of such a committee should include:

a. to initiate, promote, and assist in the development and implementation of a community appearance program for Morehead City.

b. help formulate appearance standards; and

c. promote community interest in appearance and understanding of an overall town appearance policy.

2.- Community Development Application

The purpose of this application was to gain federal assistance in Morehead City's endeavor to upgrade the town's transportation system (in neighborhood sections), drainage problems and deteriorating housing, city wide. The application was not approved.

3.- 201 Facility Plan for Carteret County

Morehead City is one of several communities involved in the county comprehensive regional sewer plan. The plan's aim is to provide public sewer services to the general public that is cost-effective.

2. Local Regulations

a. Zoning Ordinance-1972

Zoning is simply a device in which land is classified and designated for certain broad purposes. Land uses are divided and placed in general categories such as residential, commercial, industrial, etc. The printed zoning ordinance is combined with an official map that shows the location of each zone within the city.

The zoning ordinance protects against haphazard development patterns and conserves property values. Through the use of such things as population density controls, lot

coverage limitations, and bulk and height regulations, the public welfare and private investments are safeguarded. The Planning Board and Town Board wrote and adopted the zoning ordinance, and the building inspector is the individual who administers the ordinance.

b. Subdivision Regulations-1972

Subdivision regulations provide a means of guiding new residential development. They require developers to comply with minimum design standards. The purpose of applying subdivision regulations is to establish maximum neighborhood density standards, to provide for the efficient flow of traffic, to require adequate drainage of developing areas and to construct sufficient water and sewer facilities. Additional regulations may include provisions for parks and open space.

Enforcement of the subdivision regulations is performed by the Planning Board and the Town Board.

c. Flood Plain Ordinance - Morehead City does not have a Flood Plain Ordinance at the present time.

d. Building Code - Morehead City has adopted the Southern Standard Building Code and the North Carolina Building Code. The Building Code is designed to protect the safety and welfare of the public. The building inspector enforces the building code.

e. Septic Tank Regulations - The Carteret County Health Department enforces regulations concerning septic tanks and individual wells in the areas that are not served by water and sewer. In Morehead City, municipal water and sewer serves the

f. Mobile Home Park Regulations - These regulations require developers to comply with minimum design standards. They are enforced by the Planning Board and Town Board.

g. The guidelines for local planning require that the following be listed. However, these do not pertain to Morehead City at this time.

1.- Historic District Regulations

2.- Nuisance Regulations

3.- Dune Protection Ordinance

4.- Sedimentation Codes

5.- Environmental Impact Statement Ordinances

3. There are many federal and state regulations that affect land development. All property owners should check these regulations before attempting to develop their land. A list of these regulations were not available at the time this document was written.

III. Public Participation Activities

A. Identification and Analysis of Major Land Use Issues - In order to prepare for the future, it is important that major land use issues be identified. By recognizing the issues and planning objectively to face them, the citizens and local government will become aware of the possibilities, capabilities, and limitations of the land and its resources. The following issues have been determined as a result of input received from the citizens of the Morehead City Planning Area. The public input and the method of analysis will be included later.

1. Impact of Population and Economic Trends

Population trends are important because they affect all aspects of land development in Morehead City. Until, recently, most population growth has been within the city limits of Morehead City. Now much of the growth is outside the city limits, but within the one mile planning area. As population increased in the past, it created the need for municipal services as well as private services. Past population increases led to other noticeable effects:

(1) The local schools became more crowded.

(2) Services such as water and sewer and recreation were needed.

(3) The need for land use regulations and enforcement personnel increased.

(4) Local elected and appointed boards received expanded responsibility, especially in terms of land development planning.

Future population trends will certainly have a profound effect on land development in Morehead City and its one mile planning area. If the population continues to expand as expected, additional demands will be placed on services offered by the city and will certainly cause the need for additional services. This can be readily seen when one considers there are 182 vacant residential lots in the city limits and approximately 200 vacant platted lots in the Morehead City Planning Area. In addition, there are 78 vacant residential acres in the planning area. In particular, central sewerage services will become more desirable for the planning area because individual septic tanks may become inadequate. Also, as population increases, the land will become developed and pressures for expansion of town boundaries will certainly follow. This will be one of the most important issues faced during the planning period.

Economic trends will also have an impact on land development in Morehead City. The amount of development in Morehead City and its planning area is affected by the overall economics of the county and the nation. This is particularly true because Morehead City is a tourist town and depends on the economic well-being of everyone who visits Morehead City. Many of the commercial establishments in Morehead City are dependent on these tourists for their livelihood.

Since the emergence of the Morehead Plaza Shopping Center, the downtown area of Morehead City has deteriorated. The citizens of Morehead City advised that they would like to see the downtown area revitalized. Development that can help revitalize the downtown area of Morehead City is listed in Appendix A.

Besides the tourists who visit this area, nearby military installations and the state port are two other major sources of income to this area.

They provide employment for many citizens.

In order to prepare for growth, Morehead City must constantly analyze these factors. The issues of population and economy must be addressed because they affect growth in the planning area, and growth causes pressures on services, as well as creates desires to expand.

2. Housing and Service Issue

Through public input, the citizens of Morehead City and its planning area have indicated that housing conditions are important to them. Most of the housing within Morehead City is in good condition with a neat appearance. But there is some housing that is deteriorating or dilapidated. The most dilapidated housing is located north of Arendell Street between 10th and 16th Streets.

The lack of multi-family housing units also concerns the residents of Morehead City. Based on the national trend, the demand for apartment buildings is likely to increase.

Through public input, the citizens of Morehead City and its planning area have indicated that municipal services are important to them. Because additional residential areas have developed in the one mile planning area, the need for water and sewer services, fire and police protection, rescue services, and recreational services have increased tremendously in the past few years. If Morehead City and its planning area is going to contunue to develop, the type of services provided and the level at which these services should be provided will certainly be an issue that must be addressed.

3. The Natural Resource and Natural Environment Issue

Morehead City contains many natural resources and important natural environments. This is demonstrated by the fact that it is surrounded by water on three sides. On the south, Morehead City is bordered by Bogue Sound. Calico Creek and the Newport River run through the northern part of the planning area. With this in mind, one can readily see that development in Morehead City may affect the estuarine waters and the wetlands of the area. Most residents of Morehead City value these resources highly, and feel that land development within Morehead City and its one mile planning area should consider these important areas. Not only are they productive areas, but they also add much to the natural beauty of the area. The citizens have a great desire to protect these areas. Many of the residents of Morehead City came to this area because of the natural environment which surrounds it. If this environment is destroyed, much of the natural beauty of the area will be destroyed.

If these basic issues are faced squarely at this point in the planning process, the remainder of the decision making will be made easier.

4. Cultural Issue

The citizens of Morehead City have indicated their desire to remain a relatively "small," "friendly," "tourist" oriented community. They are especially proud of the waterfront area, which tourists have been visiting for many years. They come to eat at the restaurants, visit the gift shops, charter the fishing boats, or just to look at the boats dock after a successful fishing expedition. To the citizen of Morehead City, their culture is important and should be considered in the planning process.

B. Alternatives - Morehead City has many alternative routes it can follow. One alternative that affects all the others is whether to grow in size or stay the same. The size of the population and land definitely affects all other alternatives. It is necessary to know how many people and how much land there will be before deciding how much commercial and industrial development can occur. It must then be decided if the alternatives for commercial development will be strip, scattered or nodal. There can be high density residential development or low to moderate density. The alternatives the citizens of Morehead City have are numerous. Each of these alternative routes were considered when the citizens of Morehead City identified the objectives, policies and standards.

C. Objectives, Policies, and Standards - Once the land use issues have been determined, the people must formulate a method of facing the issues as they arise. This has been done in the Morehead City Land Development Plan by the identification of land use objectives, policies, and standards. The objectives, policies, and standards have been identified through the public input process as described in this report, and should give the Planning Board and Town Board a clear indication of public desires and wishes. We must remember, however, that all land development objectives are not equally obtainable, and that "trade-offs" must be made in order to arrive at decisions that are consistent with the overall desires of the citizens.

The following objectives have been identified by the citizens of Morehead City and its one mile planning area:

1. Continue to provide for sound land development planning that reflects Morehead City's coastal nature through:

a. Continue emphasis on the goals and objectives that are the basis for the current zoning of Morehead City. Refer to Appendix A for a description of the objectives as they apply to each major classification of the zoning ordinance.*

b. Initiate actions to revitalize and unify the downtown area. This can be done through zoning and traffic circulation patterns. The goals and objectives for downtown commercial zoning are included in Appendix A.

c. Encourage industries to locate in environmentally sound areas as indicated in Appendix A.

d. Insure the coordination between all enforcement agencies.

e. Encourage the immediate dredging of Calico Creek.

f. Analyze current parking facilities and increase the number of off street parking spaces to complement other development in the downtown area.

g. Beautify public grounds through efforts of the Town Beautification Commission and civic clubs.

2. Encourage the expansion of existing services and the development of those services required to maintain the standards desired by the citizens of Morehead City through:

   a. Emphasizing the need for recreation facilities for all age groups.

      (1) Adopt a comprehensive recreation plan.

      (2) Land use regulations that preserve those areas that may be well suited for recreation. (i.e. flood prone areas)

---

* Current zoning seems to be accepted by the majority of the people. The public input has indicated that additional thought should be given to revitalizing and unifying the downtown area.

(3) Emphasizing the recreational area requirement within the subdivision regulations in the event additional land is subdivided.

(4) Initiating a study to determine the possibility of acquiring recreational areas and the possible sources of revenue that could be used to acquire these areas.

b. Providing adequate water and sewer facilities throughout Morehead City and its one mile planning area.

(1) Encourage and support plans for improved water system of Morehead City.

(2) Support the regional sewer concept encouraging the implementation of the Carteret County 201 Facilities Plan.

(3) Encourage the extension of water and sewer services in those areas of the one-mile that are in need of these services.

c. Expanding rescue, fire, police, and solid waste collection services as population increases. This should include the examination of the cost of services and an analysis of all taxes, permits, and fees to assure the citizens using the services and bearing the major cost of the services.

3. Develop land use regulations that prevent development that has a high likelihood of affecting estuarine waters and wetlands.

   a. Support and develop regional water and sewer services. The first step is to adopt the Carteret County 201 Facilities Plan.

   b. Emphasize the proper use of the Land Classification System described in this plan. The conservation classification will be particularly important to help achieve this objective.

4. Encourage and improve lines of communication between the citizens of Morehead City and the local officials, and strive to improve the lines of communication between Morehead City and Carteret County Government through:

   a. Emphasizing a plan for frequent review of the land development plan that encourages a high level of public participation during the review process.

   b. Encouraging appointed and elected officials to communicate frequently with all county elected and appointed boards.

D. Public Participation - It takes the efforts of many people to write an effective land development plan, but the most important input in formulating any plan comes from the citizens themselves. The citizens of Morehead City and the one mile extraterritorial jurisdiction provided the input for this plan. This plan is "their" plan and reflects "their" desires and needs.

Only through continued public input and participation can this plan remain viable and a true indication of the desires of the citizens of Morehead City.

Public input received during the planning process was solicited by three major methods. The first method of public input resulted from questionnaires being distributed to all property owners and residents of Morehead City. Of 2000 questionnaires distributed, 259 were returned for a total of 13 percent. The Town Board and Planning Board are confident that the consistency of responses reflected the desires and wishes of the majority of citizens in the planning area. Below is a compilation of the results of the questionnaires.

(1) Would you like to see Morehead City remain much the same as it is now?

Yes 133 No 120

(2) What do you like about Morehead City that you would prefer to see unchanged?

Friendly people
Waterfront area
Size of the town

(3) What do you dislike about the Morehead area that you would prefer to see changed? Dilapidate downtown, no waterfront development, traffic problems (railroad in middle of town), dirty alleys, and not enough doctors.

(4) If change occurs in Morehead City, where would you like to see it occur?

revitalize the downtown
development of the waterfront
further development of the port.

(5) Do you think Morehead City needs more commercial development?

Yes 157 No 70

(6) What type of commercial development, if any, do you feel Morehead City needs?

A. Tourist related 91

B. Retail 84

C. Manufacturing 123

D. Other: 39 Industry

(7) Do you feel Morehead City should encourage more residential growth within the city limits?

Yes 161 No 78

(8) How do you feel the one (1) mile extraterritorial jurisdiction should be developed over the next ten (10) years?

A. Single-family 149

B. Multi-family (ie. apartments or condominiums) 72

C. Commercial 70

D. Mobile Home Parks 5

E. Camper Trailer Parks 8

F. Combination of the above 44

Explain: _____

(9) Should Morehead City annex additional territory?

Yes 177 No 59

(10) What type development do you feel should occur in the Downtown area of Morehead City?

Comments: Retail Parks/Industry/Craft shops

(11) Do you believe the public services being offered by the City are adequate?

Yes 149 No 82

(12) Do you feel there is adequate recreational facilities for everyone?

Yes 94 No 137

A second method of public input was through public meetings. A series of four public meetings was attended by 80 citizens. These meetings were designed to explain the Coastal Area Management Act as well as to solicit public input. In addition, it should be noted that each regular Planning Board meeting throughout the past year devoted time for discussion of the development of the Morehead City Land Development Plan.

A third method of input was provided by the three member Morehead City Citizen's Advisory Committee. This committee not only added input, but helped to synthesize the input received from all citizens into a workable and understandable document.

The following is a brief summary of the input received from the questionnaires, public meetings and Citizen's Advisory Committee:

A summary of the input received during the public input process indicated the citizens of Morehead City were basically pleased with their community. They feel that the small friendly nature of Morehead City is the basic reason for this. The waterfront and the downtown area were often mentioned as important to the beauty and viability of Morehead City. There was great concern over the future of the waterfront and the downtown area. Additional concerns were over the strip development of Arendell Street, and the presence of the railroad in the middle of the town.

Most of those participating in the input system indicated a desire to develop the one mile extraterritorial area in basically a moderate density residential manner. There was also a recognized need to expand the economic base. The expansion and wise use of the port, the encouragement of non-offensive industries to locate in the area, and continued concentration on the tourist industry were also indicated as methods of expanding the economic base.

It is also recognized that Morehead City is a shopping center for the county and all retail development will have to expand with growth. Efforts should be made not to infringe on residential areas, not to slow down traffic and to supply adequate parking.

The environment of Morehead City was another important topic to the people participating in the input system. They felt planned development should always consider the effect it will have on the estuarine waters, marsh land, and the beauty of the planning area. A great deal of input indicated the need to dredge out Calico Creek in order to allow fishermen to use partions of the area and to provide a safe harbor.

All municipal services were important especially water and sewer services. Regional water and sewer was indicated as being desirable to the majority of those participating.

In conclusion, the process used to determine the objectives, policies and standards was very important to the planning process. The following is a step by step analysis of how the public input was used to determine them. The questionnaires were sent out and the public meetings were begun over a year ago. The results of the public input were reviewed at the planning board meetings, and specific public opinion trends were identified. The Citizen's Advisory Committee assisted the planning consultant in formulating these trends into a series of objectives. After several rough drafts were presented, the Planning Board made specific recommendations to the Town Board. These recommendations were accepted and are identified in this plan.

Soil Map

Submitted in November

The coastal floodplain is defined as the land areas adjacent to coastal sounds, estuaries, or the ocean which are prone to flooding from storms with an annual probability of one percent or greater (100 year storm). These lands are subject to flooding or wave action during severe storms or hurricanes and can endanger life or property if uncontrolled, incompatible or improper development occurs. A map of the Coastal Floodplain, which delineates surge from a 100 year storm, has been prepared by the Department of Housing and Urban Development and is on file at the Morehead City Town Hall.

Other natural hazard areas which are physical limitations on land are estuarine erodible areas. They are defined as the area above ordinary high water where excessive erosion has a high probability of occurring. The information necessary to identify these areas specifically will be supplied at a later date. Sound erosion seems to be in and around the shoreline that fronts on the intracoastal waterway. This area from 10th Street to 35th Street is listed as an estuarine erodible area.

b. Soil Limitations - Morehead City is a peninsula which was developed without a great deal of land fill because the majority of soil drains well and is good for construction. In the past, it has been cheaper to build further from downtown along the peninsula than to fill land near downtown. The area with better soil and drainage has been and will continue to be developed first. When the demand for more land closer to town increases, land filling may become a more common occurrance unless prohibited by state laws

protecting marshlands.

The soils capabilities map on page _____ shows areas as "good," "fair" and "poor." Areas shown as "good" are best suited for urban development. "Fair" areas can be used for urban development and "poor" areas are least suited for development. Any conflict that may have resulted because of demands of urban development on agricultural land has been resolved in the planning area by the development of nonagricultural wooded land. The wooded land is adequate for the purpose of supported buildings, filtering sanitary sewage and draining excess water.

The soils capabilities map is only one of many indicators of the location of future development. Topography and drainage are also good indicators. Drainage is generally adequate in the land areas not inundated by tidal flooding. The low lying land listed as "poor" on the soils map can only be drained by digging drainage ditches; this action, however, can destroy the estuaries valuable to Morehead City's fishing industry. Other factors which influence the urban development of a particular area are access to paved roads; nearness to places to work; neamness to schools and shopping; access to natural amenities such as Bogue Sound and the Newport River; development cost of alternative parcels of land; and the willingness of owners to sell undeveloped land.

c. Water Supply Areas

Since the Town of Morehead City uses deep wells for its water supply, the reliability of this supply can be judged only by past performance and current testing of well water levels. This will continue to be the primary test until adequate elevation of the acquifer system through pumping tests and observation wells have

been accomplished to provide data on well yields, operation and spacing.

The two deep wells provide Morehead City with an average capacity of 790,000 gallons per day. The water is pumped from the wells at a rate of 1,600 gallons per minute. If the pumps were operated a maximum capacity for a straight twenty-four hour period, it would be possible to pump a total of 1,728,000 gallons. However, this would be unlikely. Besides pumping water directly into the mains, water is also pumped into a 120,000 gallon ground level tank at the well-site on North 5th Street. Due to the high hydrogen sulfide content in the water supply, high chlorine treatment is used. The town water department furnishes the North Carolina State Health Department with samples for testing each month to insure a safe water supply. Since the State Port is served by this water, six samples instead of the normal one are forwarded to Raleigh for testing each month.

d. Steep Slopes

The guidelines indicate that areas with slopes over 12% shall be identified. Morehead City has no areas with slopes greater than 12%.

2. Fragile Areas* - Fragile areas are those which could be easily damaged or destroyed by inappropriate or poorly planned development. In the coastal zone, competition between development and environment has caused in many instances an alteration, impairment, or destruction of such fragile areas as wetlands, sand dunes, ocean beaches and shorelines, estuarine waters,

---

* Some of the fragile areas listed here have been identified by Morehead City as proposed Areas of Environmental Concern. They are coastal wetlands, estuarine waters and areas subject to public rights. They are covered in more detail in the section on proposed Areas of Environmental Concern.

public trust waters, complex natural areas, areas that sustain remnant species, areas containing unique geologic formations, registered natural landmarks, archeological and historic sites, and others.

A discussion of the presence or absence of each of the fragile areas in Morehead City will follow. A description of the location and the extent of the location will also be made.

a. Coastal Wetlands - Coastal wetlands are defined as any salt marsh or other marsh subject to regular or occasional flooding by tides, including wind tides, provided this shall not include hurricane or tropical storm tides. There are many areas in Morehead City considered as coastal wetlands. These areas include the marsh area on the north shore of Morehead City which lies on Calico Bay; the perimeter of Calico Creek; the remainder of Calico Bay and its tributaries, thus including small islands north of the state port property and most of the Newport marshes; the fringe marsh areas along the east end of 4th Street to the state port property; the marshes on Sugarloaf Island which lies south of Morehead City; and the sparsely patches section of marshes along Bogue Sound.

b. Estuarine Waters - Estuarine waters are defined as all the water of the Atlantic Ocean within the boundary of North Carolina and all the waters of the bays, sounds, rivers, and tributaries thereto seaward of the dividing line between coastal fishing waters and inland fishing waters. All the water surrounding Morehead City is included in estuarine waters.

c. Public Trust Waters - Public trust waters are defined as all natural bodies of water subject to measurable lunar tides and land thereunder to the mean high water mark. Public trust waters generally include all the waters surrounding Morehead City.

d. The state guidelines for local planning identify the following as fragile areas:

1.- Outer banks sand dunes

2.- Ocean beaches and shorelines

3.- Complex Natural Areas - These areas are defined as lands that support native plant and animal communities and provide habitat conditions or characteristics that have remained essentially unchanged by human activity.

4. Areas Sustaining Remnant Species - Areas that sustain remnant species are those places that support native plants or animals, rare or endangered, within the coastal area.

5. Areas containing Unique Geologic Formations - Areas containing unique geological formations will be identified by the State Geologist.

6. Registered Natural Landmarks

7. Archeologic and Historic Sites

These areas are not pertinent to Morehead City at this time.

3. Areas with Resource Potential of more than local significance, where uncontrolled or incompatible development could result in major or irreversible damage. Some of these areas include productive agricultural lands, potentially valuable mineral sites, publicly-owned lands and other non-intensive outdoor recreation lands, and private-owned wildlife snactuaries. None of these areas are applicable to Morehead City.

3. Capacity of Community Facilities

Another constraint placed on development is the ability of the local government to provide adequate municipal services and facilities to accommodate the additional population. Municipalities without adequate design capacities in water and sewer, schools, and transportation systems should not encourage additional growth until these problems are remedied.

Following is an inventory and community analysis of the basic facilities in Morehead City. Since these services are for the benefit of the citizens of Morehead City, the public has a right to expect that they are adequately and efficiently provided. The cost of maintaining and expanding municipal services has increased drastically over the years. It becomes imperative that all expenditures be carefully planned to insure the maximum benefit possible.

Sewer System

Until 1965, the Town of Morehead City did not treat wastewater generated by its residents. The untreated wastewater was discharged directly into Calico Creek or Bogue Sound. In 1964, the town awarded contracts to begin construction of a ten acre site on the north side of Calico Creek; for installation of interceptor lines along the sound and the creek; and for construction of lift stations to pump the wastewater to the treatment plant.

Presently, wastewater collection lines are extended only within the town's limit. The design capacity of the plant is 1.7 million gallons daily with the average amount of wastewater being between 800,000 to 1,000,000 gallons daily. This represents a utilized rate of 47 to 58 percent.

There is a problem of infiltration into the sewer system. Water enters the

facility by means of old lines which are cracked or disjointed, primarily due to the age of some of the lines. Additionally, there is sometimes an overflow at the plant due to heavy rainfall which places surface water into the facility. During the rainy seasons, the facility has experienced peak flows of 1,500,000 gpd.

Morehead's participation in Carteret County's Complex 201 Facility Plan should alleviate this problem as well as increasing the capacity of the treatment plant. Presently, the regional sewer system is in the planning stages.

Water System

Morehead City's water system is supplied and managed by the town. The distribution lines serve the entire town and cover over fifteen miles.

The water supply is obtained from two deep wells located at the corner of 24th Street and Fisher and at 105 North 5th Street. The water is pumped from these wells at a rate of 1,600 gallons per minute and stored into a 120,000 gallon elevated storage tank. Due to the high hydrogen sulfide content in the water, high chlorine treatment is used.

The average capacity of the water system is 790,000 gallons per day with the average daily use of 700,000 gpd; a utilization rate of approximately 89 percent. There are approximately 2,000 domestic, 300 commercial, and five industrial users which rely on Morehead City's water system.

A recently approved bond referendum will improve Morehead's water system tremendously. In conjunction with a new 500,000 gallon tank, additional water mains, truck lines, and fire hydrants are planned for construction.

Schools

There are four public schools in Morehead's Planning Area. All are administered by the Carteret County Board of Education. There is also a private school in Morehead City-St. Egberts School.

Camp Glenn Elementary School is located on Highway 70 west on a ten acre site. The main school building was constructed in 1954 with a two room classroom built in 1949. The elementary school offers grades kindergarten through fifth and has 30 classrooms. With a maximum capacity of 785 students, its present enrollment is 740. There are 25 teachers employed and the teacher/pupil ratio is 30 students per teacher.

Morehead City Elementary is located on a seven acre site on Bridges Street. The main classroom was constructed in 1929 with additional classrooms built in 1950 and 1957. The school offers grades kindergarten through sixth. The maximum capacity of the school is 600 pupils and the present enrollment is 546. With 24 teachers employed, the teacher/pupil ratio is 23 students per teacher.

Morehead Central School is located at Fisher Street on a ten acre site. The classroom building was constructed in 1949. There are 21 classrooms with a maximum capacity of 400 students. Presently, 453 students are enrolled at Morehead Central and 22 teachers are employed. The school offers grades six and seven and the teacher/pupil ratio is 21.

West Carteret High School is located on the Country Club Road on a fifty acre site. The high school students (grades 9 through 12) of western Carteret County attend this school which was constructed in 1965. There are 64 classrooms with a maximum capacity of 1550 students. Presently, 1481 students attend West Carteret and 63 teachers are employed. The teacher/pupil ratio is 23.

St. Egbert's School is privately administered and is located on Evans Street. Grades one through six are offered with four classrooms being utilized. Present enrollment is 88 and 13 teachers are employed.

Roads

Morehead City presently has a total of 31 miles of paved streets and five miles of unpaved. In the one mile planning area, there are 15.5 miles of paved roads; six miles of unpaved.

Besides a major interstate highway transversing through the planning area (U.S. 70), there are numerous types of roads, each having different volumes and design capacities. As a rule, every street in Morehead City has increased in daily traffic problems. Traffic counts at five key locations during a five year period (1968-1973) were analyzed to determine the increase in traffic flow. There was an average increase of 30 percent.

Currently, a thoroughfare plan for Morehead City is being prepared. This plan should help alleviate present and anticipated traffic problems and provide a much safer and efficient traffic flow through the planning area.

Recreation

The total amount of land available for active and passive recreation in Morehead City amounts to approximately 40 acres. The majority of this acreage can be attributed to Swinson Park which comprises 34 acres. Swinson Park is provided and maintained by the county and is located in the one mile planning area. Tennis courts and several ball fields comprise the majority of recreational facilities at the park.

In Morehead City a 2½ acre park is located on Evans Street where the recently burned recreation center was located. This park offers tennis and basketball courts and swings. Other small parks include a ¼ acre park on the corner of 28th Street and Bridges and a one acre park on the corner of 10th and Arendell Street.

Refuse Collection

Morehead City provides refuse collection to all areas of town. Refuse is collected twice a week in residential areas and six times a week in industrial and commercial areas.

Twenty-seven people are employed by the Sanitation Department. Equipment includes 12 vehicles, five of which are packer trucks.

Library

The Earle W. Webb, Jr. Memorial Library and Civic Center, located at 107 South Ninth Street, is furnished from the earnings of a trust fund established by the Webb family. The citizens of Morehead City are able to use this library facility in addition to the County Library located in Beaufort.

Presently, the Webb Library has 19,928 volumes. The library staff consists of one librarian and is open Monday through Friday 9:30 a.m. to 12 noon and from 2:00 to 5:00 p.m. On Saturday, the library is open from 9:30 a.m. to 1:00 p.m.

Police Department

The Morehead City Police Department is staffed with seventeen regular officers and one chief. Four policemen and one dispatcher are on each 8 hour shifts. Equipment operated by the department includes five patrol cars and one chief's car. Additionally they have one Chushman Scooter.

Fire Protection

The Morehead City Fire Department is located at two locations: the main station at 803 Evans Street and one station at 3300 Arendell Street.

The area of service provided by the fire department includes the Morehead Fire District (east of the McCabe Road to the Newport River). The department

also belongs to the eastern Carolina Firemen's Association and complies its mutual assistance codes. Last year there were approximately 155 fire alarms answered by the department.

There are thirteen full time firemen employed by the department; twelve drivers and one chief. There are also 34 volunteer firemen. Each year a portion of the volunteer staff is sent to various state recognized schools. The department also conducts home inspections on request and routine business inspections.

The Morehead City Fire Department is equipped with:

Year	Make	Pump Capacity	Water Tank Capacity
1949	Chev.	Foam Generator	100 gal.
1950	F.W.D.	500 gpm	500 gal.
1957	G.M.C.	750 gpm	300 gal.
1963	G.M.C.	1000 gpm	500 gal.
1972	Ford	1000 gpm	500 gal.
1972	Ford	350 gpm	1200 gal.
1974	Ford pick-up	Chief/utility	

Without proper planning, the preceeding community facilities represent potential constraints to future development. With the upgrading of the water system in the near future, Morehead City's participation in Carteret County's Regional Sewer System, and a thoroughfare plan for the planning area, the basic community facilities should be adequate for the expected population occurring within the next ten years.

V. Estimated Demand

After careful analysis of the land use objectives, policies, and standards as well as the present and past land use conditions and trends, the following projected conditions are expected to occur.

A. Population and Economy

1. Population

It is the desire of the people of Morehead City to remain "a relatively small," "friendly," "tourist" oriented community that reflects Morehead City's coastal nature. The future population growth patterns of Morehead City are primarily based on two factors: (1) the desires of the people and (2) the capability of the land to sustain them. Following is Chart 9, Population Projections, which shows the projected populations of Morehead City for the next fifty years.

Chart 9, Population Projections

	1975	1980	1985	2000	2025
Morehead City	5516	5800	6100	7100	9500
One Mile Area	1765	2500	3765	4200	6100

Relationship of the Population Projections to the Desires of the People

During the next ten years, the population of Morehead City is expected to increase approximately 16 percent to a total of 6100. The development of this projection was based on the desires of the people to increase residential development in the city limits. Appendix A demonstrates the technique that will be used to encourage this growth. The 16 percent growth figure was presented at public meetings and found to be consistent with those participating.

The population of the one mile area is expected to increase by over 100 percent in the next ten years to a total of 3765. This projection was based on four major factors: (1) The public input has expressed this would be a desirable growth area, (2) There is a high likelihood that central water and sewer services will be provided, (3) There have been many recent subdivision requests in this area, and (4) A total of recent building permits indicate an accelerated growth rate in this area. (50 permits for houses in 1975).

A combination of the ten year projections for the city limits and the one mile indicates within ten years the population of the Morehead City planning area will be 9865. After a review of the public input system, the Town Board and Planning Board determined this would be a desirable growth rate.

The long range population projections have been very difficult to determine. The fifty year projection of 9,500 in the city limits, and 6,000 in the one mile has been determined by the Town Board and Planning Board to be the most realistic projections at this time. As development occurs in the one mile area, it is realized this projection may have to be revised.

It is not anticipated that there will be significant seasonal population in Morehead City. The rental units in Morehead City have been used to project year around population. Most rental units in Morehead City are occupied year around.

Capability of the Land and Water to Support Projected Growth

The population projections that have been made for Morehead City are based on the assumption that the central water and sewer services of Morehead

City will be updated and extended during the planning period. The input received from many property owners in the one mile area, indicates they are willing to pay their share in order to facilitate the expansion of water and sewer services.

The availability of land will also support the growth that is projected for Morehead City and its one mile. There are approximately 182 vacant, residential lots in the one mile. Also, there are approximately 52 unplatted, vacant acres in the city, and 1500 vacant, residential acres in the one mile. that could be devoted for residential purposes. Pending subdivision requests indicate approximately 100 lots are being anticipated at the present time.

2. Economy

Economic data on a county level is very significant for Morehead City. Sometimes it is necessary to present information on a larger unit of government in order for one to realize the importance of a smaller unit within the larger unit of government. For this reason, much of the data in this section will concern Carteret County, of which Morehead City is the largest town.

As in the past, Morehead City will continue to be the retail trade center for the county. Retail sales for Carteret County have increased from 38,419,974 in 1965 to $102,689,782 in 1974. It has been estimated that Morehead City accounts for approximately 50 percent of all retail sales in Carteret County. If this trend continues, the growth of Morehead City will be facilitated. From 1963 to 1972, the number of tourist dollars spent in Carteret County increased from $4,329,000 to $8,050,000.

This rise in tourism has contributed to the construction boom in the county. Homes, apartments, condominiums and motel-hotels are being built to provide for the tourists. Restaurants are needed to provide places to eat. The rise in tourism is rapid, but it is not so rapid that the county can not provide proper planning. Most of the tourists that visit the county will visit Morehead City only to sight-see, eat, and shop. This will certainly have a significant affect on the future economy of Morehead City.

A high percentage of the labor force in Morehead City and Carteret County are civil service employees, which illustrates the importance of governmental activities on the area's economy. The State has many agencies with offices in Morehead City and Carteret County. The primary source of civil service employment is Cherry Point Marine Base. Approximately forty percent of the 4,000 plus civilian work force on the base live in Carteret County.

The Morehead State Port facilities have increased in size and activities since 1961. There are indications that the State Port facility in Morehead City will continue to expand as it did throughout the 1960's and early 1970's. Private companies, such as Texas Gulf Sulphur Company are also increasing their facilities at the State Port. Emphasis should be placed on the continued growth and development of this State facility, which would allow the port to function on an equal basis with the port at Wilmington. Speculation is present concerning the location of oil refineries and related facilities in the general location of Morehead City and Carteret County. If this occurs, there will be

tremendous economic growth within Morehead City.

B. Future Land Needs

After careful analysis of the land use objectives, policies, and standards, as well as the present and past land use conditions and trends, the following paragraphs indicate how the land is expected to develop in the future.

1. Residential - It is the wishes of the citizens of Morehead City to remain " a relatively small," "friendly," "tourist" oriented community that reflects Morehead City's coastal nature.

In order to achieve this objective, future development must be well-planned. During the next ten years, it has been estimated that the population of Morehead City will increase by 584. It is assumed that this growth will require approximately 200 additional living units. If these units are developed in accordance with the standards of residential development as stated in Appendix A the objectives for local planning will be facilitated. It is anticipated that less than 1/3 of the vacant residential area in Morehead City will be needed to accommodate this growth. (There are 180 vacant residential lots and 52 vacant residential acres).

In the next ten years, the one mile area of Morehead City is expected to incur a growth of approximately 2,000. This growth would require between 650-700 additional housing units. At a moderate density, this growth will require a little over 330 acres of land.

A review of the existing land use section would indicate the existing 200 lots and 1200 vacant residential acres should be adequate to handle this projected growth.

2. Commercial - Future commercial needs are projected by using the ratio of 142 acres of existing commercial land to the present population of 7,281 people in the planning area. In the residential section, it is estimated 8,185 people will live in the planning area in 1985. Using the ratio of 142 commercial acres for 7,281 persons, it is projected that 17 acres exclusive of off-street parking needs will be needed to serve the commercial needs in 1985. Off-street parking has not been adequate in the past and this makes the 142 to 7,281 ratio inadequate for the future. Because of the likelihood of increased automobile use and the already pressing need for additional parking, a factor of 1½ is used in estimating a future commercial need of 26 additional acres making a total estimate of 168 commercial acres for 1985.

3. Industrial - The Carteret County Chamber of Economic Development Commission has selected several sites for potential industrial development. The sites are outside the Morehead City planning area. However, there are seven significant industrial locations in the planning area that are addressed in Appendix A.

   Within the planning area 456 acres are reserved for industrial uses. This includes an estimated 375 acres for the port. Presently, 138 acres are used for industrial purposes in Morehead City, and 175 acres are used for industrial purposes in the entire planning area. Significant additional industry activity is anticipated to occur at the port.

4. Public and Semi-Public

   The major demands for public use will be in the form of recreation. There is need for additional recreation areas. The one mile area contains a large county park, but Morehead City needs to add additional

recreational sites within their planning area. Suggestions for park development have been shown in Appendix B.

C. Community Facilities Demand

An increased population usually means an increase in the demand for community facilities. The projected ten year planning area population estimate of 15,500 will certainly make significant demands on the community facilities.

Water and Sewer

By 1985, it is estimated that the population within Morhead City will be 6,100. The population in the one mile planning area is estimated to be 3,765. In order for the one mile area to grow at the projected rate, water and sewer services will have to be extended to this area by the Town of Morehead City. Current support of the regional sewer plan for Carteret County indicates the citizens of the planning area are willing to pay for these services.

If the Morehead Area 201 Regional Sewer Plan indicates a need to collect affluent from Newport at the Morehead sewer plant, the treatment facilities will have to be planned for accordingly. It is estimated this will demand treatment facilities for 2.5 mgd by 1985 and 3.5 mgd by 2000.

Currently, Morehead City's water storage facilities contain 120,000 gallons which is 580,000 gallons short for a twenty-four hour supply. The citizens have recently voted for a 500,000 gallon elevated tank. The construction of this tank will begin this fall. Also, Morehead City has received permission to use the 500,000 gallon storage tank at the state port. These two tanks will sufficiently increase the water storage capacity of Morehead City to meet the needs of the estimated 1985 population. With

these new storage tanks, Morehead City's water pressure will increase from the current 40 to 45 pounds per square inch to 75 pounds per square inch. This increased pressure will allow water to be pumped to the storage tanks. By increasing the water pressure, it will become necessary to replace the galvanized water lines with plastic lines. The galvanized water lines would not be able to withstand the pressure.

Roads - The Thoroughfare Plan for Morehead City should adequately address many of the traffic and circulation problems, present and anticipated. The plan is currently being prepared and should be completed in the near future.

Schools - It is anticipated that within ten years Morehead Central School will be relocated to a twenty acre site east of Country Club Boulevard. This relocation should enable the entire school system in the planning area to meet the needs of the expected youth population.

Recreation - In the next ten years Morehead City will be called upon by its citizens to provide a recreational program that will satisfy the needs of all the citizens. It is recommended that the town acquire land, upgrade existing facilities and focus programs towards meeting the recreational demands of all the citizens.

Other services provided by the town will need new equipment and additional manpower as present equipment becomes obsolete and as the population increases. An annual assessment by the town has and should continue in order to provide the citizens of Morehead City with the highest quality of services possible.

Land Classification Map

VI. Plan Description

A. Description of Land Classification System

The Coastal Area Management Act has required all land within the twenty coastal counties, including municipalities, be classified in one of five land classifications. This land classification is an attempt to pinpoint areas that have experienced and will experience different growth rates and patterns. Obviously, areas withdifferent growth rates and patterns should be plannned for differently. Further, this will add coordination of growth patterns throughout the entire county. All land classifications must be consistent with the overall county land classification map. This will enable all citizens in the county to become aware of the type services that may be required within different areas. The overall county land classifications will not only assure consistency, but will also provide reasonable assurance that all anticipated growth is planned for in terms of services that are required. There is a likelihood that changes will have to be made as development occurs. This system will assure that proper services are planned before the development occurs.

The five land classes that have been designated to all the land area of this county include (1) developed, (2) transitional, (3) community, (4) rural, and (5) conservation. These five classes provide a framework to be used by local governments to identify the general use of all lands within each county. It is hoped that this classification system will help coordinate and encourage consistency between all local land use

policies, and those of the state. Of the five land classifications designated, only four are pertinent to Morehead City and its planning area at this time.

1. Developed

Purpose: The Developed class identifies developed lands which are presently provided with essential public services. Consequently, it is distinguished from areas where significant growth and/or new service requirements will occur. Continued development and redevelopment should be encouraged to provide for the orderly growth in the area.

Description: Developed land are areas with a minimum gross population density of 2,000 people per square mile. At a minimum, these lands contain existing public services including water and sewer systems, educational systems, and road systems -- all of which are able to support the present population and its accompanying land uses including commercial, industrial, and institutional.

2. Transition

Purpose: The Transition class identifies lands where moderate to high density growth is to be encouraged and where any such growth that is to be encouraged and where any such growth that is permitted by local regulation will be provided with the necessary public services.

Description: The area to be designated as Transition must be no greater than that required to accommodate the estimated county population growth at a minimum gross density of 2,000 people per square mile. In addition, the minimum services which will be required are the necessary water and sewer facilities, educational services, and roads. Consider-

ation must be given to the cost of public services in the Transition area. Each local government is encouraged to estimate the approximate cost of providing public services where they do not already exist.

3. Community

Purpose: The Community class identifies existing and new clusters of low density development not requiring major public services.

Description:

1) The Community class includes existing clusters of one or more land uses such as rural residential subdivision or a church, school, general store, industry, etc. (Cluster is defined as a number of structures grouped together in association or in physical proximity - Webster's Dictionary).
2) This class will provide for all new rural growth when the lot size is ten acres or less. Such clusters of growth may occur in new areas, or within existing community lands.
3) New development in the Community class areas will be subject to subdivision regulations under the Enabling Subdivision Act (G.S. 153A-330 et. seq.)
4) In every case, the lot size must be large enough to safely accommodate on-site sewage disposal and where necessary water supply so that no public sewer services will be required now or in the future.
5) Limited public services should be provided in the Community class such as public road access and electrical power.
6) As a guide for calculating the amount of land necessary to accommodate new rural community growth, a gross population density of 640 people per square mile or one person per acre should be used.

4. Rural

Purpose: The Rural class identifies lands for long-term management for productive resource utilization, and where limited public services will be provided. Development in such areas should be compatible with resource production.

Description: The Rural class includes all lands not in the Developed, Transition, Community and Conservation classes.

5. Conservation

Purpose: The Conservation class identifies land which should be maintained essentially in its natural state and where very limited or no public services are provided.

Description: Lands to be placed in the Conservation class are the least desirable for development because:

1) They are too fragile to withstand development without losing their natural value; and/or
2) They have severe or hazardous limitation to development; and/or
3) Though they are not highly fragile or hazardous, the natural resources they represent are too valuable to endanger by development.

B. Morehead City's Land Classification

Morehead City's Land Classification has taken into account the needs of Carteret County as well as Morehead City, and is consistent with the county's classification. A reference to the Land Classification Map (Map) will familiarize the reader to the four different classifications existing in the planning area.

Developed - The area within the City limits of Morehead City has been classified as developed since water and sewer services are provided throughout the town. An estimated populational increase of 539 people is expected to occur in the developed area of Morehead City within the next ten years.

Transitional - Most of the area north and west of Morehead City in the one mile planning area has been classified as transition. It has been determined that this area will most likely receive water and sewer services and will continue its moderate density subdivision growth in the next ten years. There are presently 200 undeveloped, platted lots which cover 60 acres in this area. In addition, there are 1500 acres of unplatted land that can be used for residential development. This built-in growth factor is a strong indication that the one mile planning area of Morehead City will increase its population by approximately 2000 people by 1985. Ninety percent of this growth will occur in the transition area. It is estimated that slightly over two square miles will be classified transition. The ten year projected growth rate is lower than the 2,000 people per square mile; however, it is expected that water and sewer services will be extended to the area and that the desired growth will warrant the transition classification.

Conservation - The Conservation classification identifies land which should be maintained essentially in its natural state, and where very limited or no public services are provided. In Morehead City these include wetlands, estuarine erosion areas, and floodways as indicated on the Land Classification Map.

The importance of these areas have been discussed in the Constraints Section of this plan. Basically, improper development in these areas will cause undesirable effects. It should be noted that by classifying these areas Conservation, Morehead City is not indicating development should not occur in these areas. This classification indicates these areas are important to the town, and if development occurs it should consider the effect the development will have on the objectives for local planning, and the effect these areas may have on the development. Careful consideration of appropriate development in these areas has already begun.

Rural - The areas classified as rural are the areas in the one mile planning area which are not classified developed, transition, or conservation. These areas are generally along the one mile line where no subdivisions have begun. (See Land Classification Map). It is anticipated that these lands will basically remain farmland and will not require water and sewer. An insignificant population growth will occur in this area.

VII. Potential Areas of Environmental Concern

The Coastal Area Management Act has charged the Coastal Resources Commission with the responsibility of identifying Areas of Environmental Concern in the twenty coastal counties affected by the Act. The Coastal Resources Commission has also been instructed to determine what type of uses or development are appropriate within such areas.

Due to the importance of this responsibility, the local governments preparing land development plans in compliance with the Coastal Area Management Act have been requested to give special attention to those areas within their jurisdiction that may become Areas of Environmental Concern. The Town of Morehead City has identified the following areas as Potential Areas of Environmental Concern. These areas were defined and discussed in the State Guidelines for Local Planning in Coastal Areas Under the Coastal Area Management Act of 1974.

Coastal Wetlands - General

Coastal wetlands 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 watercourses), provided this shall not include hurricane or tropical storm tides.

Coastal Wetlands - Low Tidal Marshland

a. Description - Defined as marshland usually subject to inundation by the normal rise and fall of lunar tides.

b. Significance - Low tidal marshland serves as a critical component in the coastal ecosystem. The marsh is the basis for the high net yield system of the estuary through the production of partially decomposed plant material which is the primary input source for the food chain of the entire estuarine system.

c. Appropriate Land Uses - Appropriate land uses shall be to give the highest priority to the perservation of low tidal marshland.

Coastal Wetlands - Other Coastal Marshland

a. Description - All other marshland which is not low tidal marshland.

b. Significance - This marshalnd type contributes to the production of partially decomposed plant material. The higher marsh types offer quality wildlife and waterfowl habitat depending on the biological and physical conditions of the marsh.

c. Appropriate Land Uses - Appropriate land uses shall be to give a high priority to the preservation and management of the marsh so as to safeguard and perpetuate their biological, economic and aesthetic values.

Estuarine Waters

a. Description - Estuarine waters are defined as all the waters of the Atlantic Ocean within the boundary of North Carolina and all the waters of the bays, sounds, rivers, and tributaries thereto seaward of the dividing line between coastal fishing waters, as set forth in an agreement adopted by the Wildlife Commission and the Department of Conservation and Development.

b. Significance - Estuaries are among the most productive natural environments in North Carolina. They not only support valuable commercial and sports fisheries, but are also utilized for commercial navigation, recreation, and aesthetic purposes.

c. Appropriate Land Uses - Appropriate uses shall be to preserve and manage estuarine waters as to safeguard and perpetuate their biological, economic, and aesthetic values.

Areas Subject to Public Rights - Certain Public Trust Areas

a. Description - All waters of the Atlantic Ocean and the lands 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 water mark; all navigable natural bodies of water and lands thereunder to the mean high water mark or ordinary high water mark as the case may be, except privately owned lakes to which the public has no right of access; all waters in artificially created bodies of water in which exists significant public fishing resources or other public resources, which are accessible to the public by navigation from bodies of water in which the public has rights of navigation; all waters in artificially created bodies of water in which the public has acquired rights by prescription, custom, usage, dedication or any other means.

b. Significance - The public has rights in these waters including navigation and recreation. In addition, these waters support valuable commercial and sports fisheries, have aesthetic value, and are important potential resources for economic development.

c. Appropriate Land Uses - Appropriate land uses shall be to protect public rights for navigation and recreation and to preserve and manage the public trust waters so as to safeguard and perpetuate their biological, economic and aesthetic value.

Natural Hazard Areas-Coastal Floodplains

a. Description - Coastal floodplain is defined as the land areas adjacent to coastal sounds, estuaries or the ocean which are prone to flooding from storms with an annual probability of one percent or greater (100 year storm). These areas are analogous to the 100 year floodplain on a river. Information necessary to identify these areas will be supplied by the State Geologist.

b. Significance - Coastal floodplains are those lands subject to flooding or wave action during severe storms or hurricanes. They are lands where uncontrolled, incompatible, or improperly designed building, structures, facilities, and developments can unreasonably endanger life and property.

c. Appropriate Land Uses - Appropriate land uses shall be to insure that all buildings, structures, facilities and developments are properly designed and built to maintain their stability, integrity, and safety in the event of flood surge from a 100 year storm.

Natural Hazard Areas - Excessive Erosion Areas - Estuarine and River Erodible Areas

a. Description - Defined as the area above ordinary high water where excessive erosion has a high probability of occurring. In delineating the landward extent of this area a reasonable 25 year recession line shall be determined using the best available information. The information necessary to identify these areas will be supplied by the Stat Geologist.

b. Significance - The estuarine and sound and river erodible areas are natural hazard areas especially vulnerable to erosion.

c. Appropriate Land Uses - Appropriate land uses shall be to insure that development occurring within these areas is compatible with the dynamic nature of the erodible lands thus minimizing the likelihood of significant loss of property.

It is important that the final designation of Areas of Environmental Concern and the determination of appropriate uses within these areas, receives as much local input as possible. Proper coordination between the Coastal Resources Commission and the local governments is the key to proper management of these areas.

Once these areas are adopted as final Areas of Environmental Concern, a permit will be required before development can occur from the Coastal Resources Commission or the local government. Minor projects, defined as projects less than 20 acres or which involve construction of one or more structures having an area less than 60,000 square feet, will be process by the Town of Morehead City. Major projects, defined as projects currently needing state permits, those of greater than 20 acres in size, those that involve drilling or excavating natural resources on land or underwater, and those involving construction of one or more structures having an area in excess of 60,000 feet will require a permit from the Coastal Resources Commission.

VIII. Summary

The development of this plan has been materilizing since the Coastal Resources Commission adopted on January 27, 1975 the state guidelines for local planning in the coastal area under the Coastal Area Management Act of 1974. During this time, questionnaires were distributed, public meetings were held, and a citizen's advisory committee was formed in order to become aware of the feelings of the citizens of Morehead City. The data collected from these questionnaires, meetings and committees was consistent enough so that the Planning Board and Town Board felt that the desires of all citizens had been expressed. By using the data submitted by the people, the Carteret County Planning Department wrote this plan. After many additions, revisions, discussions and debates, the Town Board adopted this plan.

This plan generally states that the citizens of Morehead City and its planning area want the area to develop much as it has in the past. There will be some changes made as a result of the growth pressure during the planning period. It is hoped that this plan reflects the citizens' desires and needs and that the Town Board and Planning Board will refer to this plan when making decisions that affect future growth and development.

IX. City-County Plan Relationship

The Coastal Area Management Act guidelines require that all municipal plans be an integral part of the county plan. In order for the Coastal Area Management Act to be successful, it is extremely important that the municipalities and the counties are seeking the same goals. Morehead City has attempted to insure the consistency of its plan with that of Carteret County's by coordinating data with the county plan throughout the planning process. The fact that the Carteret County Planning Department added technical assistance was very helpful in insuring consistency with the county plan. Morehead City public input meetings were conducted by the Carteret County Planning Department. Many of the people who attended the Morehead City public meetings also attended the Carteret County public meetings and many of the issues discussed at both meetings were the same. The final assurance that this plan for Morehead City was consistent with the county plan was made when the Carteret County Commissioners held a public hearing to review all of the municipal plans in the county for consistency. The results of this hearing indicated that in the opinion of the Carteret County Commissioners, the county plan and the Morehead City plan are consistent.

APPENDIX A - ANALYSIS OF THE GOALS AND OBJECTIVES OF THE MOREHEAD CITY ZONING ORDINANCE

A. Residential

1. High density in city - It is recommended that high density development be confined within the existing corporate limits. A density of eight units per acre should be the maximum desnity for single family dwelling units in high density areas. This means that a minimum lot size for a single family detached dwelling unit would be 5,000 square feet. The areas designated as high density are already developed at a density of eight units per acre. Future development of single family detached dwelling units should be on larger lots so that yard space is not taken up for parking. For this reason, it is recommended that those areas not platted in 5,000 square feet lots be developed at medium densities. This means a minimum lot size of 7,000 to 8,000 square feet for each single family detached dwelling.

2. Moderate to low in the one mile - Those areas not presently served by water and sewer are generally recommended for a minimum lot size of 20,000 square feet. As water and sewer services can be extended to these areas, the density maximums should be raised from two single family detached units per acre to as many as six such units per acre or medium density.

3. Strip housing development - In the future land use regulations should prevent the development of strip housing along major arterials as much as possible. The future subdivision regulations should prevent the overcrowding of structures on small lots, the development of subdivisions with unpaved roads, and other poor practices. The

developer should be required to pave the streets of new subdivisions and should be encouraged to avoid platting lots that face on major thoroughfares like Country Club Road. Subdivisions which abut major thoroughfares should be designed so that access to the major roads would be limited to ingress and egress from secondary or collector streets. Access from the individual lots should be via interior residential streets or service roads.

4. Lot sizes and Arrangements - The size and arrangement of lots to be used for residential development should vary according to housing type (single family, duplex, attached row, or apartment), drainage and relationship to open space. Very little mixture of housing types has occurred in the Morehead City area. This has been due to a preference for single family housing, the platting, and selling of small lots making large tract assembly difficult, and the risk involved in depending on a transient rental market. Planned Unit Development with a mixture of housing types and land uses should be permitted within the zoning ordinance.

5. Street design and quality - The purpose of a residential street system is to allow free movement of vehicles to arterial streets and the drainage of run-off water to the storm sewer system. The design of streets to serve residential areas should discourage vehicle speeds over 35 miles per hour.

Improperly prepared streets are a problem throughout the planning area. The city's subdivision regulations should include provisions that will insure that new streets will not need repair soon after they are built. This means the town will require streets to be

curbed, guttered, and paved according to standards sufficient to provide good streets.

B. Commercial - Mixed land uses, such as small grocery stores next to houses, have become problems in Morehead City. The zoning ordinance should help make mixed land uses less of a problem in the future. It is recommended that paving parking areas, adding a buffer zone between stores and residential areas and having adequate parking spaces for newly constructed stores could help alleviate these problems.

Strip commercial development is also a problem. In the future, zoning should prevent strip commercial development on either side of Arendell Street between 13th and 26th and on the south side between 26th and the west town limits that cross U.S. 70. There are still some large areas of residential development that should be preserved to prevent Arendell and Bridges Streets from being choked by strip commercial development. Further strip development should not occur along U.S. 70 and N.C. 24 to Peltier Creek. The solution to these problems will be the continuation of existing zoning in these areas and the concentration of commercial uses around existing commercial development. The beginning of strip commercial development along Crab Point Road, the 20th Street extension north, should be stemmed and commercial development concentrated by the Land Development Plan and the zoning ordinance.

Stripping major thoroughfares with commercial uses will have the effects of spreading the shopping area all over town. The proposals for commercial growth propose to concentrate future commercial activities, prevent commercial land speculation in residential areas, prevent a large decrease in the traffic moving capacity of major thoroughfares, and provide more efficient and pleasing shopping places for Morehead City's

citizens.

The list below is a commercial location recommendation that will guide the improvement of thoroughfares and the improvement of thoroughfares and the improvement programs for commercial areas.

Downtown Commercial

1. Concentrate retail stores in two major centers. Downtown and the Morehead Plaza Shopping Center west of 28th Street and between Arendell and Bridges Street should become the centers of primary retail trade for the Morehead City area.
2. Discourage further commercial development along Arendell and Bridges Streets.
3. Allow tourist commercial development along the waterfront from Fourth Street to Eighth Street. Support this tourist commercial area with improvements in parks, open space and public buildings.
4. Guide future downtown business development toward the waterfront away from a strip pattern along Arendell and Bridges Street. This can be done by changing traffic flows to circulate around the proposed downtown business area, by effective zoning, off-street parking improvements, and public investment in the downtown Waterfront area. The concentration of the downtown area should be developed between 7th and 11th Streets and south and north of Arendell Street with the future major concentration to the south to complement the tourist area east to Fourth Street.

Commercial Shopping (Shopping Center)

1. The highest concentration of primary commercial activity has occurred at Morehead Plaza Shopping Center between Bridges and Arendell Streets just west of 28th Street. The site is approximately 20 acres.

Highway Commercial

1. Highway commercial establishments should be concentrated much like other businesses. A band of commercial uses along Arendell or Bridges Streets would decrease the traffic capacity of the two streets by reducing the volume and speed of the traffic flow. A commercial band along these streets would likely increase the number of traffic accidents because the number of conflict points where one flow of traffic crosses a second flow, would be increased.
2. Highway commercial uses are concentrated on the Land Development Plan Map at locations that provide reasonably safe access and are highly accessible to the traveling public. One concentration is between 28th Street and Holmes Drive north of Arendell Street. A second concentration is at the intersection of Bridges and Arendell Streets. The third concentration is between Jefferson Avenue extended and Hickory Drive. These areas of the Morehead Extension should be limited as commercial highway.

Neighborhood Commercial

1. Neighborhood commercial uses should be located adjacent to residential areas and uses to serve the purpose of selling goods needed with daily frequency such as bread and milk. Since some of these areas are separated from residential areas by Bridges Street, the location of specially marked crosswalks on Bridges Street is needed. Crosswalks should be located on Bridges Street at Ninth, 11th, 14th, and 18th Streets to allow safe pedestrian access to neighborhood shopping areas and to schools located north of Arendell Street.
2. A few small neighborhood groceries should be allowed in residential areas, especially where the pattern of small grocery stores is well

established in the areas between Arendell Street and Calico Creek. These stores should be restricted in total floor area to 2,000 square feet when allowed in a residential area.

3. Neighborhood commercial development is recommended in four areas of Morehead City. Each of these areas has already demonstrated their neighborhood attraction by the type of uses located in the respective areas. Future uses in these areas should support the neighborhood commercial character.

Marine Commercial

The waterfront commercial area adjacent to Morehead City's downtown area is the primary source of tourist income in the planning area. The industry and bulk oil storage in this area does not complement the marine atmosphere of the area. To promote the further development of tourist commercial activities, it is recommended that the area between 3rd and 7th and along Shepard Street to 8th be encouraged to develop commercially, and industrial uses should be encouraged to move to a more compatible area.

C. Industrial

Industrial Location Alternatives

There are seven significant industrial locations in the planning area that should be encouraged to expand, prevented from further expansion or encouraged to relocate.

Morehead Extension Between U.S. 70 and the Atlantic-North Carolina Railroad Recommended for Wholesale Manufacturing

The location of wholesale and other bulk-break industry is most appropriate in this area. The area is not suitable for residential

development or commercial motels because of the intense movement of vehicles and trains on either side. Consequently, it is proposed that this strip, which is 4800 feet long and 300 feet wide encompassing 30 acres, be developed for wholesale-manufacturing use such as bulk goods storage and distribution, garment manufacturing, and other types of storage and production. However, for the protection and convenience of the public, those uses locating along Morehead Extension should be limited in the number of access points to U.S. 70.

The effects of the use of this area on surrounding land uses will be softened by the highway and railroad rights-of-way of major proportions which both form barriers between highway commercial and residential land uses, respectively. The railroad and highway right-of-way are both 100 feet wide.

The expansion of wholesale industrial activities should be encouraged, and any further expansion of residential and commercial uses should be discouraged.

Menhaden Processing Plan Recommended for Port-Industrial

The location of the old Menhaden fish processing plant between Bogue Sound and U.S. 70 just west of the present Carteret Technical Institute site should remain unoffensive industrial.

Railroad "Y" Recommended for Unoffensive Manufacturing

The railroad "Y" property is vacant except for a grain storage and a moving company storage warehouse. This property is located between Arendell and Bridges Street and between 25th and 27th Streets. Storage and unoffensive manufacturing, with no exterior noise or air pollution, are appropriate uses and should be encouraged in this area. The area

north across Bridges Street is also recommended for warehouse and light manufacturing uses. This is recommended because the land use pattern has been established in this area, and Bridges Street is the best street west of 20th Street for truck traffic because of heavy tourist traffic on Arendell Street. The Railroad "Y", and the area directly north, form an appropriate area for unoffensive industrial activities and should be encouraged to expand.

Morehead City Garment Company Recommended to Remain as Unoffensive-Manufacturing

The Morehead City Garment Plant is recommended to remain unoffensive manufacturing. The appearance of the building has been improved by painting and placing planters on the grounds. Shrubs have been placed around parking areas to improve the visual character of the neighborhood and increase the potential for community pride in the neighborhood.

Marine Commercial Recommended as Future Placement for Industry on Evans Street Downtown

The present operation of bulk oil distribution plants should be discouraged and not allowed to expand in the downtown marine commercial area of Morehead City.

The fish processing activity, which is recommended as unoffensive manufacturing, could be considered an important part of a waterfront mystique. It is therefore recommended that the present fish processing operation be encouraged to remain but not expand.

Non-expansion Recommended for Bogue Sound Waterfront Boat Manufacture and Repair

Boat manufacture and repair on the northeast tip of Morehead City should be allowed some expansion if the noise, harsh light, and parking

problems are solved so as not to injure the residential value of land uses nearby. This should be done by screening, with a hedge or fence installed to protect the areas that would possibly offend those living nearby. On the Land Development Plan Map on page ___ this area is bounded by 5th Street on the west and Calico Creek on the north and east with Arendell Street forming the south boundary.

Port Recommended for Industrial Port Activity

Future port facility expansion is likely to occur north and south of the present U.S. 70 highway bridge especially where products that are not readily transported by conveyor belt are involved. In the Land Development Plan for Carteret County, Radio Island was recommended for port industrial use.

County Industrial Planning

Industrial areas planned for Carteret County's future industrial expansion are the present Beaufort-Morehead City Airport and north of that site along N.C. Highway 101 adjacent to the Intracoastal Waterway. These areas should furnish ample expansion space for industrial activity needing sites in Carteret County.*

MA Medical Arts District

The purpose of this district shall be to create and maintain areas in which hospitals and doctors' and dentists' offices and clinics may be compatibly mixed, in order that these related uses can be near each other for doctor and patient convenience, and in order that a healthful living environment in abutting residential areas will not be encroached upon.

---

* Carteret County Land Development Plan, N.C. Department of Conservation and Development, Division of Community Planning, p. 55.

O and P Office and Professional District

The purpose of this district shall be to create and maintain areas in which residential, business, and professional uses may be and are compatibly mixed, achieving a healthful living environment for the residents of the district and at the same time preventing the development of blight and slum conditions. This district is limited to those sections of the community in which the mixing of such uses has been found to be necessary and desirable for the buffering of residential, commercial, and industrial uses.

APPENDIX B: Suggested Program for Park Development

The following outline suggests the steps that should be taken to develop an adequate park system in Morehead City.

A. Morehead City Recreation Commission should continually review and update the park acquisition and development proposals in this plan and recommend to the Planning Board amendments to this proposal.

B. The Civic Clubs interested in park and open space development should be presented this proposal and encouraged to recommend amendments.

C. The Planning Board should then recommend a fianl plan to the Town Board of Commissioners with an attached program for achieving the plan.

D. The program for achieving the plan should include the following:

1.. Civic Club and private donations and support available. A determination should be made of the percent of plan achievement to be carried by civic clubs and other private groups.

2. The remaining percent of plan achievment should be carried by by the town through the following methods.

a. Development regulations encouraging the dedication of park space by developers.

b. Finance plan for site acquistion for the next five years. This plan would include estimated expenditures and sources of revenue. The location plan and finance plan will be the basis for applications under item c. below. The five year finance plan should be revised annually.

c. Federal and State open-space and park funds should be sought through the Department of Local Affairs.

APPENDIX C: Sketch Thoroughfare Plan

The purpose of a sketch thoroughfare plan is to provide town administrators and governing officials with right-of-way acquisition and street improvement proposals to guide them in budgeting and land development that will provide the town with a safe and efficient street system. The Morehead City thoroughfare system should achieve two major objectives: convenient access to shopping, work, and school facilities; and support a concentration of downtown commercial development.

Street Classifications

The Advanced Planning Department of the North Carolina State Highway Commission is presently developing a detailed Thoroughfare Plan for Morehead City. The purpose of this sketch plan is to introduce the Planning Board and citizens to a future thoroughfare system. Since the plan will be subject to acceptance by the Town Board of Commissioners and the State Highway Commission, as a mutually adopted plan, the Planning Board should be familiar with the possibilities and be prepared to advise the Advanced Planning Division and the Town Board concerning the plan alternatives.

Concept

Streets perform two primary functions - they provide traffic service and land service. These two functions, when combined, are basically incompatible. The conflict is not serious if both traffic volumes are high, conflicts created by uncontrolled and intensely used abutting property result in intolerable traffic flow, friction, and congestion.

The underlying concept of the thoroughfare plan element is that it provides a functional system of streets which permits travel from origins to destinations with directness, ease, and safety. Different streets in the system are designed to perform specific functions, thus minimizing the traffic and land service conflict. Streets can be categorized as to function and standards.