City of Southport

North Carolina

LAND USE PLAN UPDATE 1980

~~Final~~ Draft

Brunswick County Planning Department

CITY OF SOUTHPORT

North Carolina

LAND USE PLAN 1980

Final Draft

Prepared by
The Brunswick County
Planning Department

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INTRODUCTION

The Coastal Area Management Act

"In recent years the coastal area has been subjected to increasing pressures which are the result of the often conflicting needs of a society expanding in industrial development, in population, and in the recreational aspirations of its citizens. Unless these pressures are controlled by coordinated management, the very features of the coast which make it economically, esthetically, and ecologically, rich will be destroyed."

In 1974, the North Carolina General Assembly passed the Coastal Area Management Act (CAMA) in an effort to effectively manage the development of twenty coastal counties. The Act notes that, "among North Carolina's most valuable resources are its coastal lands and waters. The coastal area, and in particular the estuaries, are among the most biologically productive regions of the state and of the nation. Coastal and estuarine waters and marshlands provide almost 90 percent of the most productive sport fisheries on the east coast of the United States. North Carolina's coastal area has an extremely high recreational and esthetic value which should be preserved and enhanced."

Adoption of the CAMA empowered local governments in the twenty North Carolina coastal counties to exercise control over their future. The Act designs a state-local cooperative program in which local government shall have the initiative for planning by preparing a blueprint for their future growth and development and the State government shall establish Areas of Environmental Concern where lands are environmentally sensitive to the prospect of development. With regard to planning, State government shall have an advisory role, setting guidelines and standards, and a reviewer's role, evaluating the local land use plans. In addition, the State makes grants to finance local planning and work jointly with local governments to enforce the adopted plans.

The CAMA permit process began March 1, 1978 throughout the entire coastal area of North Carolina. After this date, any development in an Area of Environmental Concern requires a permit. The permitting process is divided into 2 classes; major permits for large scale developments, and minor permits for houses and other small structures. The major permitting process is administered by the North Carolina Department of Natural Resources and Community Development. The minor permitting process process is administered locally by the Southport Building Inspector.

The entire CAMA planning process has been oriented towards citizen participation and has continually provided mechanisms for citizen input into the preparation of the land use plan. The primary input has taken the form of future growth policiesand identification of existing problems and issues and desired future services. During the local planning process, efforts must be made to secure this public participation

The land use plans which are prepared by local govenments in the coastal area are distributed widely and have many uses. Among the users of the plans are local governments, regional councils of government, state and federal permitting agencies and public and private funding and development groups.

Local Government Uses - Counties and municipalities may use the local land use plans in their day to day business and in planning for the future. Often times, the land use plan provides guidance in local policy decisions relating to overall community development. The plans also provide the basis for development regulations and capital facility planning and budgeting. By delineating how the community wishes to grow, the land use plans help to assure the best use of tax dollars as public utilities can be extended to the best areas for growth.

Regional Uses - The regional councils of government or planning and development commissions use the local land use plans as the basis for their regional plans and in their function as regional clearinghouse for state and federal funding programs. The local plans can indicate to these regional decision makers what types of development the local community feels are important and where the development should take place.

State and Federal Government Uses - The local land use plans are used as a major component in the granting or denial of permits for various developments within the coastal area. The State and federal agencies must be sure that their decisions consider the policies which are set out by the local governments in their plans. This is also true for decisions relating to the use of federal or state funds within the coastal counties. If a local plan sets out policies relating to various types and locations of development, the funding and permit decisions must be consistent with the local policies. Projects being undertaken by State and Federal agencies themselves must also be consistent with the local plans.

1980 Southport Land Use Plan

The scope of the 1980 Southport Land Use Plan includes a community profile, land use update, land use survey and analysis, and a land classification map. Specifically, a summary of data collected and its analysis, maps of existing land use and desired land use, Areas of Environmental Concern, assessments of past and current problems, and new policy statements are presented. The 1980 Plan is an update of the 1976 Southport Land Use Plan. Much of the data presented in this document is based on previous information. For example, because the 1980 United States Census has not yet been published, population figures for 1980-on are projections based on information in the 1976 Land Use Plan. Therefore, some of the data presented needs to be updated with the publication of the Census, and it is possible that the data presented is deceptive, but is not totally unrealistic.

In preparation of the Southport Land Use Plan, several techniques were used to elicit input from the public in the planning process. These include local meetings with citizens and planners, a citizen survey, local weekly newspaper coverage, and a "dial-a-planner" service. The citizens have also been encouraged to comment on preliminary land use and land classification proposals. Significant comments have been incorporated in the final land classification map appearing in this plan. The public participation process for the city of Southport is explained in further detail in the following text.

PART 1: COMMUNITY PROFILE

COMMUNITY PROFILE

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1. Population Report

In 1970 Brunswick County's most populated municipality was Southport. In 1975, it still claimed the number one position, and currently in 1980, Southport continues to rank in the top spot. Its population represents approximately 8.24 percent of the County population. This represents a decrease of .92 percent since 1970.

Current Population Estimates

The population of Southport, as well as that of Brunswick County has experienced a period of extreme growth since 1970. The establishment of two large industrial plants near the city has been accompanied by a major influx of workers which has added significantly to the total population. The 1970 United States Census (the last official enumeration) placed the total count of persons in Southport at 2220, and that of Brunswick County at 24,223. These figures represent increases from the 1960 Census of 9.1% and 19.4% respectively. With due regard to the 1970 statistics, however, it is a generally recognized fact that a great deal of change has occurred within the last ten years which would probably render 1970 data particularly deceptive. However, because the 1980 United States Census data is not yet available, current population estimates must be based on the 1970 figures. The Southport population for 1980 was projected to be approximately 3136 in the 1976 Southport Land Use Plan, while the Brunswick County population for 1980 was projected to be 38,100 by the North Carolina Department of Administration. These figures represent increases of approximately 41.3 percent and 57.3 percent, respectively, since 1970. The vast majority of this upsurge is most likely an outgrowth of industrial expansion, particularly the Carolina Power and Light Company Nuclear Power Generating Station located just outside of town. This industry employed a large quantity of construction workers during the early part of the seventies, and has continued to provide jobs for a large number of workers on a permanent basis.

Population Change

Although County data is helpful in describing the population, township data may create a more accurate description. Southport is located in Smithville Township, which has approximately 18 percent of the total county population. During the 1960-1970 decade, the Township where the CP&L plant is located registered a gain of 29.5 percent (about 1000 persons). This indicated that some people were taking up residence near the plant, but outside the city limits of Southport. From 1970 to 1980 it is estimated that Smithville Township experienced a gain of 67.4 percent (about 2980 persons), indicating that the trend has continued.

POPULATION CHANGE 1930-1980

	Brunswick	Smithville Twp.	Southport
1930	15,818	2912	1760
1940	17,125 (+8.3%)	2936 (+0.8%)	1760 (0.0%)
1950	19,238 (+12.3%)	2873 (-2.2%)	1748 (0.7%)
1960	20,278 (+5.4%)	3355 (+16.8%)	2034 (16.4%)
1970	24,223 (+19.5)	4346 (+29.5%)	2220 (+9.1%)
1980	38,100 (+57.3%)	7274 (+67.4%)	3136 (+41.3%)

SOURCE: U.S. Census 1970, for years 1930-1970
N.C. Department of Administration, Brunswick County 1980 projection.
Brunswick County Planning Department, Smithville Twp. 1980 projection.
Southport Land Use Plan, 1976

While the total population of Brunswick County increased by 18,862 from 1950 to 1980, the non-white population increased by only 4,465. Between 1950 and 1980, the percentage of non-white population dropped from 36.7% to 30.18% in 1980.

Of the 4,465 non-white increase, 2,073 were males and 2,392 females. Percentage wise, the non-white males in relationship to the total males dropped from 35.7% in 1950 to 29% in 1980, and the non-white females declined from 37.5% to 31.2%. It would seem that slightly more males than females migrated from the County but no natural increase statistics by sex is available to confirm this.

Township statistics are available only for 1960 and 1970. Estimates for 1980 were made by the Brunswick County Planning Department 1980

Non-White Population Change by Township 1960 - 1970

	1960			1970			
	Total Pop	Non-white	% Non-white	Total Pop	Non-white	% Non-White	1960-1970 Change
Brunswick Co.	20,278	7,175	35.4	24,223	7,443	30.7	268
Smithville Twp.	3,355	1,144	34.1	4,346	1,193	24.4	49

Non-white Population Change by Township 1980

	Total Population	Non-White	% Non-White	197--1980 Change
Brunswick Co.	38,100	9,335	24.5	1,921
Smithville Twp.	7,274	1,617	23.2	445

Household Composition

Household composition was also estimated for Brunswick County and Smithville Township. Analysis shows an approximate average household size of 3.47 for the whole county. The Township white household size is higher than that average for the county, and the Township non-white household size was smaller than that average for the county.

Township Household Composition 1980

	Brunswick County	Smithville Township
Total # Households	10,980	2,096
Household Population	38,100	7,274
Population per Household	3.47	3.47
# White Households	8,359	1,596
Household Population	28,765	5,657
Population Per Household	3.44	3.52
# Non-white Households	2,621	500
Household Population	9,335	1,617
Population per Household	3.56	3.32

Population Characteristics

The median age of a population, that is, the point at which half of the people are older and half are younger, gives a description of the age composition of a given population. The forces which normally act on the median age are births, deaths, and migration, and the complex interplay of these forces can drive the age either up or down. There is presently a nationwide trend toward lower birth rates, and this has caused the median age to rise slightly, since young people became a lesser proportion of the total. From 1960 to 1970, each segment under study (male, female, black, white) grew older. The median age for all groups in Brunswick County was 26.4 in 1970 as opposed to 23.9 in 1960. Southport in 1970 stood at 32.2 and Smithville Township registered 32.4, while the North Carolina figure was 26.5. The reason for this difference appears to be that Southport contains a relatively large population of elderly people (those over 65) within its boundaries. North Carolina, for example, listed 34.6% of its people less than age 18 and Southport compared closely with 32.2%. In the over 65 category, however, Southport contrasted significantly with 12.9% versus the state average of 8.1% . . . nearly one and one half times as many. The elderly of Southport represent 12.1% of the Brunswick County population. This situation could have possibly changed since the last Census, but from these figures, it would appear that Southport is a favorable environment for the elderly, perhaps the retiree, and should take this into account when formulating policies and programs in the future.

POPULATION CHARACTERISTICS: 1970

	Total	Male	Female	White	Black	Under18	Over 65	Med.Age
Brunswick	24,223	50%	50%	69%	30%	37.4%	8.4%	26.4%
Smithville Twp	4,346	49%	51%	72%	26%	32.4%	12.1%	32.4%
Southport	2,220	47%	53%	62%	35%	32.7%	12.9%	32.4%
North Carolina	5,082,059	49%	51%	77%	22%	34.6%	8.1%	26.5%

SOURCE: U.S. Census, 1970

Estimates of population distribution by race, sex, and age groups were also made for Brunswick County and Smithville Township for 1980 by the Brunswick County Planning Department.

1980 Population Distribution by
Race, Sex, and Age Group

	Brunswick County	Smithville Township
Total Population	38,100	7,274
Male	18,959	3,548
Female	19,141	3,726
White	28,765	5,657
Non-white	9,335	1,617
Median Age	28.4	N/A
Number Under 18	13,335	2,357
Number over 65	4,191	880

Migration Rates

Recent migration rates, population characteristics, and median age figures are not yet available for Southport or the County. To create a general description of the population, 1970 Census figures are presented below as well as some analysis from the 1976 Southport Land Use Plan. It is expected that this general description will change with the analysis of 1980 Census data.

Migration rates which were calculated for Brunswick County from 1960 to 1970 reflect the assumption that more and more of the County's people are staying in the County rather than moving out. A study done in 1969, for example, compared specific age groups in 1950 with the same groups a decade later in order to measure the percentage of persons who had remained within the County during that period (e.g. ages 25-34 in 1950 compared with ages 35-44 in 1960). In every case Brunswick had shown a loss of residents, that is, less than 100% remained ten years later. From 1960 to 1970, the situation was altered significantly. Most age groups exhibited net gains (over 100%) during this span, and in each instance, the percentage of persons continuing to reside in the County was larger than during the previous enumeration. Although age breakdowns since 1970 have been unavailable, the reported substantial additions to the total population would lend support to the notion that currently, an even higher proportion of each age group is being retained. These statistics tend to indicate that Brunswick County is becoming an increasingly attractive area in which to live and work.

MIGRATION RATES: BRUNSWICK CO. 1950-60, 1960-70

	0-4	5-9	10-14	15-19	20-24	25-34	35-44	45-54
Age Groups in 1960	2441	2469	2417	1928	1125	2298	2509	2155
Same Group in 1970	2653	2320	1840	1542	1326	2634	2677	2320
Percent Remaining	109%	94	76	80	118	115	107	108
Percent Remaining 1950-1960	96%	81	54	61	81	94	92	88

SOURCE: Southport Population & Economy Study 1969 and Calculated from U.S Census 1970

Seasonal Population

The seasonal population in Southport is for below that of the neighboring beach communities. However, it is important to consider visitors because of their demand for city services and their effect on the economy. The following tables of seasonal population and visitation averages and projections were done in preparation of the Southeastern Brunswick County 201 Facilities Plan. The projections indicate that not much increase in the seasonal population is expected to the year 2000.

Peak Weakly Population

Southport	1980	1990	2000
Permanent	3,477	4,562	5,665
Seasonal	214	235	259
Total	3,691	4,797	5,924

Visitation for Southport

	Average Week	Peak Week	Peak Day	Season Total
Spring	78	160	274	785
Summer	168	214		1,036
Fall	104	160		1,246
Winter				77

2. Housing Report

Dwelling Units

The current residential dwelling count for the Southport planning area is 1069. In the following table this figure is broken down for units within the city limits and those in the extraterritorial jurisdiction.

Number of Dwelling Units

Type Dwelling	# Dwelling Units	
Within City Limits		
Permanent Single Family	850	
Permanent Multi-Family	42	
Mobile Homes	18	
Total		910
Within Extraterritorial Jurisdiction		
Permanent Single Family	112	
Permanent Multi-Family	0	
Mobile Homes	47	
Total		159
Area Total		1,069

Substandard Housing

The City of Southport contains a high number of substandard houses. Of the total 910 dwelling units, approximately 15.99% are in substandard condition. Although this figure is rather high, this housing is primarily located in the area of the Northwest quadrant in Southport, bounded by Howe, Burrington, Ninth, and Brown Streets. Here deteriorated and substandard housing is overwhelming. of the total 89 dwelling units in this area, 70 units or 78.65 percent are in failing condition. Available vacant standard housing is nonexistent in the area. There are eight vacant units which are all dilapidated beyond repair. These structures occupy unattended lots, they harbor rodents and the like, and contribute to the blight and health hazards of the community.

Because many of these units are beyond repair, and in order to prevent endangering the safety and wellfare of the citizens of Southport, they need to be demolished. The City of Southport has provided funds to be used for demolition of deteriorated houses and in actively pursuing this program by assessing the home owners. The City has also applied for a Community Development Block Grant for rehabilitation of 62 units and demolition of 8 vacant units in the neighborhood described above.

Low Income Housing

The low income residents of Southport are also provided housing assistance through the Brunswick County Public Housing Department's Section 8 existing housing program. Presently, there are 25 households in Southport receiving this rent subsidy.

Other current housing characteristics and statistics are not yet available. When the 1980 Census data is published, a more detailed housing report can be completed .

3. Economic Report

The economy of an area is constantly undergoing long term change. These changes affect the population in total numbers, in density and, therefore, the level of services required, as well as the economic well being of each person.

The destiny of an urban center is controlled by the extent and character of its productive and income - producing activity and its general vitality. That is, the urban economy conditions the amount of land development that occurs.

For these reasons, an investigation of the economy is an important part of the planning process. If the economic change is to industry, the population will normally increase with the concentration being near the major industrial area.

However, with todays means of transportation, workers commute greater distances than in past years. Too, industry normally increases the income of the area providing a higher standard of living.

The type of economy an area has also affects the tax base. Again, industrial development normally means costly plants and equipment that make a major contribution to the Ad Valorem Taxes, thus relieving the individual of some of his tax responsibility.

With so many areas being influenced by the economy, the elements of the economy must be considered as to its foundation, strength, stability and future. While the total economy of an area contributes to the total picture, certain activities are considered to be more important. These are the primary basic economic activities. The stability and growth of any area depends directly upon the stability and growth of these economic activities.

The future growth of an area can be somewhat guided through guidance of economic development. Through planned development, especially of industry, growth can be guided to areas best suited to sustain such growth.

These factors mentioned serve only as a brief and limited explanation of the importance of the economy of an area to its past, present and future and the necessity of considering the economic aspects in the planning process.

An accurate appraisal of the economy in Southport is difficult to gauge at the time of this report. The 1980 Census data has not yet been published and much has happened to influence the economy since 1970. It may be helpful to consider the Brunswick County Economic Report as a setting for Southport in creating a picture of the City's economy, as well as some very general characteristics that can be determined in the City.

Industry

As Brunswick County has shifted from an agricultural/commercial fishing economic base to a more industrial base, during the past decade the economic well being of the County's residents has improved. There are many indicators of this other than the census reports. One such indicator is per capita personal income. In 1973 the per capita Personal Income for Brunswick County was only $2,911. By 1978 it had risen to $5,071. Industrial development in Brunswick and New Hanover Counties has contributed to this increase in per capita income.

In 1979, manufacturing was the leading employer and economic contributer to the County's economy. Commercial fisheries ranked second, and transportation and tourism ranked about third as employers. Agricultural activity was the second leading economic contributer, while tourism was the third.

Southport lost its major employer in 1978 when the Brunswick County offices moved from Moore Street to near Bolivia. The County Board of Education, however, is still located there, but has future plans of moving to the complex site also.

Manufacturing

For its size, Southport has a good number of manufacturing establishments, which employ County residents as well as Southport residents. Below is a list of firms located in the Southport area. This list was compiled by the Brunswick County Resources Development Office.

Firm	Employment Range	Products	Year Established
Blake Builders Supplies Supplies., Inc.	20-49	Building Supplies, hardware, concrete	1950
Carolina Power and Light Company	250-499	Electrical power	1975
Caroons Crab Company, Inc.	20-49	fresh and frozen seafood	1965
East Coast Ice and Fisheries	20-49	Manufacture ice	1975
Pfizer, Inc.	100-249	Citric acid	1975
Sea-Way Press	1-4	Commercial printing	1967
Standard Products of North Carolina, Inc.	20-49	Fish meal, fish oil, and fish solubles	1922

State Port Pilot	1-4	Weekly newspaper	1928
Woodcraft Cabinet Shop	1-4	Custom- made cabinets, misc. woodwork	1974

It is important to note that no new industries or firms have located in the Southport area since 1975, when Carolina Power and Light and Pfizer companies located there. Both are major employers in the Southport area as well as the County.

Fishing

Fsihing is a major industry in the Southport area. Southport is the commercial and sport fishing center of the county, with largest amount of registered/licensed fishing boats. This is significant since Brunswick County is one of the leading seafood producers in the State.

Southport has a state owned boat harbor which was recently leased to a private operate It is reported that the harbor is now doing much better and producing more revenue since the leasing. There is an adjoining harbor, the Old Boat Harbor, which is run down and dilapidated. It is being considered for rehabiliation and historic preservation, but could also contribute more to the fishing industry providing better access and facilities. In the present state, it is definitely not producing or promoting as much revenue as it could be if it was in better condition.

Agriculture

Agriculture activity in the Southport area is almost non-existent. In the 1976 Land Use Plan, it was reported that Smithville Township had so little agricultural activity, that all acres in agricultural use would be included in the Towncreek Township reports.

- Tourism

Although tourism is the third largest contributor to the economy of Brunswick County, its contribution to Southport's economy is relatively low. Besides tourists filtering over from Oak Island, or passing through in route to Bald Head Island or the Southport-Fort Fisher Ferry, most visitors are attracted primarily by charter and commercial fishing. Although a few Southport businesses may benefit from chance shopping and patronage at eating establishment, most tourist money is spent elsewhere.

Southport's geographical location may adversely affect its tourist business. It is in a rather out-of-the-way spot, and though this may be a charming asset to many residents, it could cause some prospective visitors to search for a more accessible place to vacation. This situation is compounded by the rising cost of gasoline which is already causing a decline in tourism throughout the entire county.

To combat this, Southport must continue to be more aggressive in attracting tourism, that being the general attitude of the public. Many Southport residents and businessmen feel that tourism should be encouraged, but in a positive way. Since there is an overall desire to maintain the "fishing village" atmosphere, the City should take advantage of those assets, possibly by rehabilitation of historic sites, cleaning up the downtown and waterfront area, and publicizing these historic assets to draw tourists to the City.

Commerce

The fourth largest occupation of Brunswick County residents is that of trade which includes all persons engaged in the sales of merchandise. Gross retail sales has risen steadily since 1973 for the County, with the greatest growth occurring since 1978. The annual increase, from 1978 to 1979 was as large as the total increase for the three-year period from 1973 to 1976.

Although recent retail figures for Southport are not available, it is probable that Southport merchants have not received their proportional share of the County increases due most probably to their failure to compete with other districts within the Southport market area.

Central Business District

In the past decade, the economic viability of the downtown and waterfront areas of Southport has been jeopardized. To arrest any negative trends in the commercial areas, city officials adopted a Downtown and Waterfront Revitalization Plan in September 1979. Studies done in preparation of this plan by the Brunswick County Planning Department indicated an extreme problem of vacant buildings, due largely to the move of Brunswick County Government offices, and vacant lots, due to lack of demand for floor space in the Central Business District (CBD). In addition, a large number of buildings in the area housed professional offices, primarily attorney. It was also found that large portions of the land in the CBD and along the waterfront was owned by a few people, rather than a large number of individuals. A market analysis for the plan concluded that the CBD has been negatively affected also by the competition of shopping centers in the area. Southport has experienced reduced sales margins, vacancies and lack of capital for improvements. It has obvious from the analysis of goods and services offered in the CBD that business volume has decreased. (For a more detailed analysis, see, City of Southport Downtown and Waterfront Revitalization Plan, 1979.)

The significance of the trends mentioned above is that the Southport central commercial areas are showing definite sign of decline. The movement of the County offices to Bolivia has not only caused vacant buildings, it has also caused a decrease of pedestrian traffic. The professional offices draw some people into the CBD, but not enough to make a real difference. The nearby shopping centers draw people away who would have otherwise shopped in the CBD. It seems obvious that the Southport CBD must become an active competitor, in the market area in order to draw people back to the central commercial areas. To do this, changes in its physical appearance are being planned according to the revitalization plan. This will not be enough, however. Changes must be made in the ownership patterns and marketing techniques of establishments to make revitalization a success. Having a small number of people owning most of the commercial property stifles competition within the commercial areas. Competition between business establishments is a very important factor in the viability of a commercial area. Obsolete marketing techniques should be replaced by more contemporary techniques, taking the lead from the successful shopping center.

Steps to limit commercial development in outlying areas could also be taken in an effort to encourage new business to locate in the downtown areas. Currently, the Zoning Ordinance sanctions strip commercial development along North Howe Street, NC 133 and 211. This is a major threat to economic stability and revitalization of the CBD.

In the past five years various retail establishments have located in the CBD, however, most have not survived longer than six months. Offers to buy certain downtown properties have been made, but outrageous and prohibitive price tags have been attached to the deteriorating properties. Toursim, so far, has had little effect on the economy of Southport. Most tourists are headed for the surrounding beaches, just driving through, shopping by chance, or patronizing the eating establishments within Southport, and spending most of their money elsewhere.

Other Commercial Areas

Commercial development outside the downtown area along North Howe Street, NC 133 and 211 may act to mitigate the effect of the declining downtown. Southport intends to continue to develop these outlying areas. Many of establishments there benefit from the tourist traffic along these roads.

Four major restaurants and four motels are supported in Southport. These establsihments do not depend solely on tourist traffic since they are open year round.

The marinas' are also commercial enterprices which do well in Southport, although, marina - type activities do not employ a large amount of people.

Finance and Real Estate

Activities of financial institutions, banks, and savings and loan associations have increased significantly in the past decade in the County.

Southport, at present, contains three banks, the largest of which has two branches. A savings and loan is also located there.

Real estate activities has also shown significant increases in the County, and Southport has a good share of real state establishments.

Fiscal Year 1981 Revenue

Each of the foregoing economic activities contributes to the general wealth and health of the City of Southport. Recently, the fiscal year 1981 operating budget was approved by Southport officials. An itemized list of revenues and revenue sources may help to create a more detailed picture of the economic health of the City. Below is a summary of the expected revenues in the approved budget. A copy of the FY 81 approved budget revenues and expenditures can be found in the appendix to this text. Note that the largest sources of revenue are received in electricity sales and general funds. Of the general fund revenues, property taxes and sales taxes comprise the major portion. ABC revenues contribute a substantial portion also to this general fund.

City of Southport
FY 81 Budget - Revenues

TOTAL REVENUE

General Gov't	$515,847
Powell Bill	40,000
Electric	1,270,151
Water & Sewer	190,510
Revenue Sharing	7,250
Total	2,023,758

GENERAL FUND REVENUE

Tax Current Year	193,804
Tax Prior Year	7,000
Penalities & Interest	2,000
Motor Ven. Lic.	700
Priviledge Lic.	1,400
Dog Tags	200
Beer Lic.	300
Build Permits	1,000
Franchise Tax	30,000
Intangible Tax	3,500
Beer and Wine	10,700
Local Options Sales	25,000
Refund of Tax (sales)	6,500
Refund of Tax (gas)	1,500
Cable TV	5,000
Cemetery Lot Sales	3,000
Traffic Fines	50
ABC Police Fund	1,200
ABC Distribution	13,000
Interest Income	300
Miscellaneous	12,500
Sale of Misc. & Junk	2,500
Boat Slip Rent	4,500
From Powell Bill	31,000
From Electric Bill	159,193
Total	$ 515,847

Powell Bill Revenue

	Est. FY 80	Est. FY 81
State of North Carolina	$43,000	$40,000

Electric Revenue

Sale of Electricity	$ 1,268,551
Service Charge	1,600
Total	$ 1,270,151

Water and Sewer Revenue

Water & Sewer Collection	$ 180,010
Water & Sewer TAP FEE	8,000
MISC. (int. Etc.)	1,500
TOTAL	$ 190,510

Revenue Sharing Revenue

	FY 80	FY 81
Federal Grant	$29,000	$ 7,250

PART 2: MAJOR ISSUES, PROBLEMS, AND POLICIES

MAJOR ISSUES, PROBLEMS, AND POLICIES

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MAJOR ISSUES, PROBLEMS, AND POLICIES

The identification of major issues and problems in a community is an important part of the land use planning process. It involves listing problems/issues; identifying associated conditions, and specifying likely causes of these conditions. From such analysis, goals and objectives can be stated which address the specific problems/issues. And, from stated goals and objectives, land use policies and plans for achieving the goals and objectives can be established. Implementation of the policies and plans will depend on the means which the community possesses. The means include a zoning ordinance, subdivision regulations, and a capital improvements budget.

In doing an update of a previous land use plan, it is necessary to assess and analyse past problems/issues, goals, objectives, and policies. In such analysis, problems/issues which no longer exist can be identified and eliminated from the updated plan. Achievement of goals and objectives is noted and the update is modified. Any items which have not been eliminated or achieved can be assessed for any progress or reasons why the problems/issues still exist or the goals have not been achieved. An assessment and analysis of past problems/issues and the Land Use Plan for Southport is included in the following text.

Identification of new problems/issues which have developed since the previous plan was written was done with the help of the community's citizens. The entire CAMA planning process have been oriented towards public participation. The primary citizen input has taken the form of identification of existing problems and issues and the establishment of future growth policies. The public participation process is also described in the following text.

An analysis of the relationship between problems/issues and policies helps to develop new policy statements for the updated land use plan which apply to current problems. New policy statements have been established for the City of Southport and are included in the following text, as well as the existing implementation tools in the community.

1. Assessment of Past Land Use Plan

In 1976, the Board of Aldermen of the City of Southport adopted a land use plan to guide the growth and development of the city in the years to come. A major objective of this update plan is the assessment of that previous plan's effectiveness and implementation.

The following is a list of major issues for which goal and objective statements were made in the plan. In the text which follows each issue is discussed in terms of its existing conditions, changes since 1976 and future outlook.

I. City Administration
   - A. Full time management
   - B. Recreation Director
   - C. Dog Ordinance

II. Natural Resources
   - A. CAMA Enforcement
   - B. A. E. C.'s
   - C. Flood Insurance

III. Growth and Development
   - A. Condensed Growth
   - B. Recreation
   - C. Services and Facilities
     1. Boat Access
     2. Dosher Hospital
     3. Capital Improvement Plan
     4. Programs for the Elderly
     5. Fire Protection
   - D. Industrial Development

IV. Housing
   - A. Rehabilitation
   - B. Assisted Housing
   - C. Mobile Home Zoning

V. Transportation
   - A. Thoroughfare Plan
   - B. Residential Development Plans

VI. Character Preservation
   - A. Appearance Commission
   - B. Information Center - Museum
   - C. Southport - Brunswick County Historic District Commission
   - D. Harbor Preservation

I. CITY ADMINISTRATION

A. Full Time Management

An objective of the 1976 Land Use Plan was to "employ full-time qualified personnel in order to improve the city's management capability". This objective has been fulfilled by the employment of a city manager since 1976.

B. Recreation Director

In the 1976 Southport Land Use Plan, one administration objective was to employ a full-time recreational director. A full-time director was appointed in 1976. The full-time status of a recreational director has been of great benefit to Southport's recreational program. Since that time there has been significant progress in Southport's recreational facilities and programs.

C. Dog Ordinances

Southport has experienced over the past years some problems with dogs. Untethered dogs are a problem to the City of Southport. They provide a means for the transmission of rabies and other canine transferable diseases.

In 1977, in recognition of this problem, the Southport Board of Aldermen passed a dog ordinance. It requires that all dogs be licensed and that no dog be permitted to run loose within the city.

Unfortunately, this ordinance has done little to correct the situation for two reasons. First, Southport has no programs to enforce this ordinance. Due to lack of money the city has relied on the county dog control program to capture loose animals. The County program has very little personnel or equipment and cannot provide adequate service for the entire county. The second reason for the ordinance's failure is the Southport residents' attitude towards dog treatment. Apparently most residents feel it is improper and unkind to tether their dogs.

II. NATURAL RESOURCES

A. Coastal Area Management Act Enforcement

The CAMA permit process began March 1, 1978, throughout the entire coastal area of North Carolina. After this date, any development in an area of environmental concern requires a permit. The permitting process is divided into two classes; major permits for large-scale developments, and minor permits for houses and other small structures. The major permitting process is administered by the North Carolina Department of Natural Resources and Community Development. The minor permitting process is adminstered locally by the Southport Building Inspector.

B. Areas of Environmental Concern

The Coastal Resources Commission established fragile areas along the North Carolina Coast called Areas of Environmental Concern. It is in the AEC's that CAMA permits are necessary in order to construct or build. Areas of Environmental Concern in Southport include coastal wetlands, estaurine and river erodible areas, and areas subject to public rights.

C. Federal Flood Insurance Program

Southport adopted a Flood Plain Protection and Management Ordinance in 1976 as part of the requirements for residents to qualify for federally subsidized Flood Insurance. Southport is covered under the regular program as opposed to the emergency program which has higher policy rates.

III. GROWTH AND DEVELOPMENT

A. Condensed Growth

Another objective of the 1976 Southport Land Use Plan was to encourage development within the existing corporate limits and avoid "urban sprawl".

This objective was addressed by the 1973 Southport Zoning Ordinance with the establishment and positioning of the RA-20, R-1, and R-2 zones. RA-20 is defined as a low-density residential and agricultural district. The R-1 District is defined as single-family and two-family residential. The R-2 District permits the development of multi-family dwellings.

It was hoped that a percentage of the new growth would occur in the developed land class (where water and sewer service is, and the density is already 4.5 persons per acre). In 1975 undeveloped land within the city limits accounted for 120 acres. It was suggested that fifty percent of this land should be used for new growth.

The Southport Zoning Ordinance designated these areas within the city limits as R-1 and R-2 Districts. Zoning the land within the city at these higher densities promotes the development of land within the city limits first.

The RA-20 District, the Transition land class was allocated to the 109 acres beyond the city limits near areas already developed, principally along N. Howe Street where a two-inch water line was placed in the early 70's. The regulation of this district is intended (1) to insure that residential developments not having access to public water supplies and dependent upon septic tanks for sewage disposal will occur at sufficiently low densities to insure a healthful environment and (2) to protect agricultural and residential areas from an influx of incompatible uses which would render such areas undesirable for farms and future development. The minimum required lot areas for this district are 20,000 sq. ft. (without public water and sewer) or 15,000 sq. ft. (with either public water or public sewer).

The Southport Land Use Plan Update is another tool which will guide the growth patterns of the city. Included in the Update is a detailed Land Classification System. It will designate industrial, commercial, residential, and recreational areas in an effort to guide development patterns.

B. Recreation

Since 1976, Southport has added a great deal to its recreation facilities. Since that time a little league field, a multi-use basketball court, a mini-park, and two tennis courts have been developed.

An objective of the past plan was to acquire property for a waterfront park. This has been done and a grant for the park's development has been secured from the North Carolina Department of Community Development and Natural Resources.

C. Services and Facilities

1. Boat Access

Boat access has been a major issue in the Southport area for a number of years.

The new harbor facility constructed by the State contains two boat ramps which have been an issue of concern because of the fee charged for their use. These are the only boat ramps presently in Southport. Since the harbor facilities were built with State tax money, the fee for use of the ramps has been vigorously protested.

2. Dosher Hospital

In 1975, many citizens of Southport were concerned about the possible loss of Dosher Hospital. In was feared that the development of a County hospital in Supply would force the closing of Dosher Hospital.

In 1977, County funds were withdrawn from Dosher to support the new County hospital. Dosher Hospital remained operating only through a special assessment in Smithville Township of an extra 4 cents per $100 valuation. This revenue also allowed the new addition to be constructed. This new addition will not increase the capacity of Dosher but merely provide more modern facilities.

Because of the support of the people of Southport and surrounding Smithville Township, Dosher will remain an integral part of the Southport economy.

3. Capital Improvements

Another objective of the 1976 Southport Land Use Plan was to implement the recommendations of Community Facilities Plan, Public Improvement Program, and Capital Improvement Budget, Southport, NC 1974.

The following is a list of those Capital Improvements proposed and those actually implemented during the fiscal year 1978-79.

Table II

BRUNSWICK COUNTY
NEEDS ASSESSMENT: Age 60 and Over, December 15, 1975

NEED	TOTAL	SEX		RACE		AGE GROUPS			
		M	F	White	Non-White	60-64	65-69	70-74	75 & Over
1. Information & Referral	45	46	45	53	39	40	43	33	50
2. Transportation & Escort Ser.	52	54	48	56	48	33	52	56	75
3. Counseling	11	13	10	3	16	13	14	11	0
4. Legal Services	19	19	18	13	21	20	29	22	0
5. In-Home Services	44	31	58	50	39	33	43	33	25
6. Recreation Services	26	15	18	31	20	33	24	11	0
7. Continuing Adult Education	13	17	10	6	16	27	10	22	25
8. Employment Services	6	10	0	3	7	27	0	0	0
9. Outreach Services	20	13	30	25	18	27	14	0	25
10. Housing Assistance	24	23	25	6	34	20	33	78	25
11. Health Services	27	27	28	38	21	7	19	11	25
12. Nutrition Services	18	25	13	16	18	20	19	22	50

All numbers are percentages based upon the frequency the need was identified as one of the three greatest individual needs.

Proposed	Implemented
Fire Department	
. 10 Horse Power Fire Siren	. 10 Horse Power Fire Siren
. 1,000 ft. Double-Jacket 2 1/2" Fire Hose	. 2,500 ft. Double-Jacket 2 1/2" Fire Hose
. Rescue Equipment	. Rescue Equipment
. Utility Truck	. Utility Truck
Police Department	
. 7 New Automobiles (Normal Replacement)	. 1 State Automobile and 1 Other Automobile
City Administration	
. City Hall Remodeling	. Some Remodeling (Moved to New Building)
Water System	
. Water Line Extension	. Water Line Extension to All Areas

4. Programs for the Elderly

The 1976 Southport Land Use Plan addressed the issue of programs for the elderly. In the over-65 population category, Southport averaged 12.9% versus the State average of 8.1%. The predominant factor for the higher percentage in Southport is the attractiveness of Southport as a retirement community. For this reason, it was felt that future policies and programs should increasingly take the elderly into account.

There is a Senior Citizens Center in Southport which is located in the old marineology building. It offers a common meeting place for socializing as well as free meals, movies, various table games, and table tennis. A bowling team has also been organized for Southport's senior citizens and is just now getting started.

A second Senior Citizens Center which is available to the elderly of Southport is the center recently opened in Shallotte. It offers free meals as well, a wide variety of recreational opportunities and transportation services to the center. It is hoped that the center will eventually provide information and guidance services as well.

The elderly of Southport represents 12.1% of the Brunswick County population. Using this percentage, the following is a list of estimated needs assessment for the elderly of Southport based upon a needs assessment of Brunswick County elderly, December 1975. The study was done for the State 201 Facilities Plan, 1975.

The elderly of Southport are also included in an in-home services program, because the County finds an increasing need for human-related services. These needs are not always being provided through institutional type care. In an effort to meet these needs, the County, State, and local service organizations have in the past implemented in-home services. An inventory report for fiscal year 1979-80 documented the need for continuing these services and projected the in-home services to be provided and the number of people to be served during fiscal years '81, '82, and '83. The in-home services to be provided are included in the following list. The number of people over 60 years of age who will be in need throughout the next three years is projected to be 386 in 1981, 403 in 1982, and 420 in 1983.

In-Home Services

- Adult day care, transportation
- Chore services
- Homemaker, adjustment training service
- Housing and home improvements
- Casework, counseling
- Provide basic appliance
- Labor or material
- Preparation and delivery of meals
- Home delivery - congregate
- Home health - nursing, aide
- Physical therapy
- Speech therapy
- Occupational therapy
- Medical
- Social Work
- Nutrition

8. Fire Protection

Another objective of the 1976 Southport Land Use Plan was to improve fire protection service by acquiring a Class 7 rating, which would require the employment of a full-time fireman.

To date, Southport has not acquired a Class 7 rating. This is mainly because they still have a completely volunteer fire department. At present Southport has a Class 8 rating.

Interest still continues in the Class 7 rating because of the improvement in fire protection services necessary to obtain the rating and because of the reduction in fire insurance rates it brings.

The rating system is not entirely based on specific requirements, but rather on subjective scales of improvement

within the city's fire protection services. It would seem that Southport would need to outlay significant capital funds for improvement in their fire protection services according to local priorities, standards, and requirements for a Class 7 rating.

D. Industrial Development

The jobs and tax base provided by business and industry are essential for the viability of any city. Southport has benefited in the last several years from the location of Pfizer and CP&L near the city. Unfortunately neither pay taxes to Southport because they are outside the city limits. Southport lost its major employer in 1978 when the Brunswick County offices moved from Moore Street to the Brunswick County Government Center near Bolivia.

Southport could benefit from additional small industrial and commercial development. The city needs a larger tax base in order to keep the tax rate low and provide essential services to its citizens. Jobs are also needed to retain and attract the younger generations, so that Southport's young do not have to leave Southport to find work.

One major possibility for Southport is the development of a seafood industrial park. The North Carolina Department of Natural Resources and Community Development has conducted a study to determine the feasibility of a seafood industrial park in Brunswick County. Three locations within the County have been evaluated for this industrial park. The best location was determined to be the area near the State Boat Harbor. In addition to ample land there are existing water and sewer services. The study determined that presently not enough fish are landed within the County to make the seafood industrial park profitable, but within 5 to 8 years there could be. Also the study did not calculate the amount of fish that might be brought to the industrial park from outside Brunswick County. The establishment of a large scale stable purchaser of seafood within the County would attract more fishermen to the area and thereby increase the catches.

The County or City could develop and operate the industrial park and subsidize its operation for the early years. Building space would be rented or leased to seafood processing companies. Once the seafood industrial park had operated for several years it should become self-sufficient.

The seafood industrial park would benefit the City and County in several ways. First, it would expand the commercial fishing industry in Brunswick County with its main base in Southport. Secondly, it would provide jobs, especially for low-skilled persons which make up the vase majority of the County's unemployed. The seafood industrial park would also be a revitalization force in Southport.

The 1975 Southport Land Use Plan suggested that the area just northeast of the City limits would provide an excellent development site for future industrial activity. A portion of this area has been proposed for the site of the Southeast Regional sewer plant. The location of wastewater treatment facilities is governed by many facturs, but those considered most important in the Southport situation are proximity to wastewater source, size and nature of potential receiving stream, and availability of a suitable site. Industry and business are likely to be attracted to the area once sewage treatment capacity is available via a new wastewater treatment facility.

IV. HOUSING

A. Rehabilitation

Southport contains a high number of substandard houses. Of the 907 dwelling units in Southport, approximately 145 or 15.99% are in substandard condition. Many of these units are beyond repair, and in order to prevent endangering the safety and welfare of the citizens of Southport, need to be demolished. The city of Southport has provided funds to be used for demolition of deteriorated houses and is actively pursuing this program by assessing the home owners. The City is also applying for a Community Development Block Grant for rehabilitation of 62 units and demolition of 8 additional units.

B. Assisted Housing

The low income residents of Southport are also provided housing assistance through the Brunswick County Public Housing Department's Section 8 exisiting housing program. Presently, there are 25 households in Southport receiving this rent subsidy.

C. Lot Zoning for Mobile Homes

New mobile homes in Southport are presently allowed only to be located in Mobile Home Parks in the RA-20 zone. The RA-20 only occurs within the extraterritorial jurisdiction outside the city limits.

There are existing mobile homes scattered within the city limits which are non-conforming uses. According to a 1978 amendment to the zoning ordinance, owners of these mobile homes are permitted to replace these with new mobile homes so long as they are no larger in size.

The objective of establishing a zone where mobile homes are permitted on an individual lot has not been fulfilled. Newly located mobiles are permitted only in parks of 3 acres or more. This has the effect of limiting mobile home development and insuring that when it occurs it is done in a well-planned manner. Article VII Mobile Home Park Regulations of the Southport Zoning Ordinance requires that mobile home parks be provided with off street parking, 200 square feet of recreation space per mobile home, interior drivers and a buffer zone.

These amenities increase the livability and acceptance of mobile homes near established neighborhoods. Allowing mobile homes to be sited on individual lots will eliminate the requirements for these amenities.

V. TRANSPORTATION

A. Thoroughfare Plan

A goal of the 1976 Southport Land Use Plan was to promote accessibility and safety in area transportation. One objective under this goal was to mutually adopt a detailed thoroughfare plan with the NC Department of Transportation, Division of Highways.

Such a plan was adopted by the County in 1978. Major roads of Southport and the Southport vicinity were included in the Thoroughfare Plan. The overall major goal of this plan was to assure that the road system was adequately developed to serve future transportation needs. The objectives under this goal were:

1. Develop short range, high priority rights-of-way
2. Develop priorities for County road improvements
3. Develop priorities for new road construction
4. Develop association between adopted land use plan and transit priorities

The improvements presented in the Thoroughfare Plan became a part of the State's Highway Improvement Program for Brunswick County, 1978-1984. Actual construction of these proposals is contingent upon the availability of funding on the State and Federal levels.

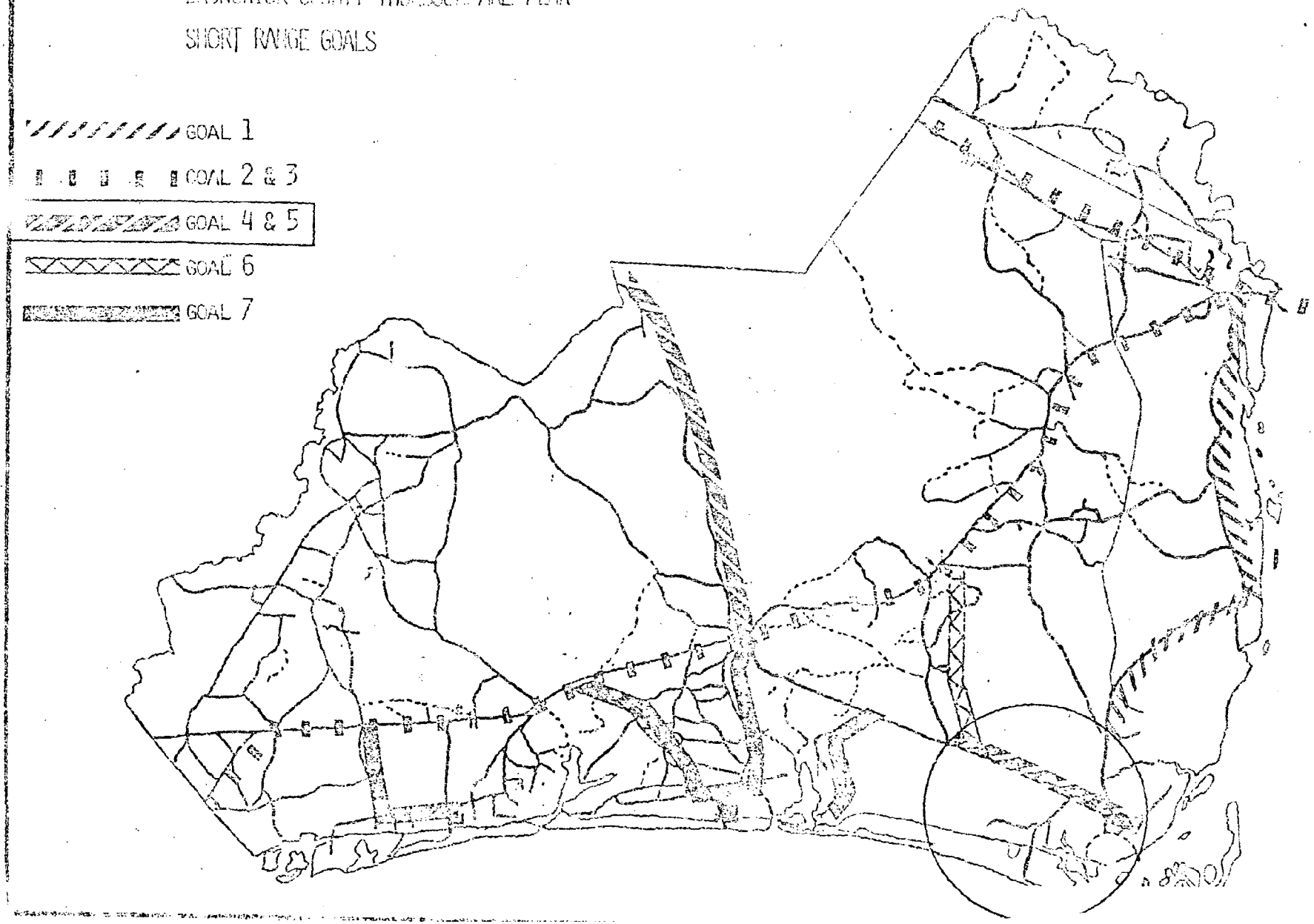
The proposed improvements in the plan in the Southport Planning area are:

SHORT RANGE--Upgrade North Carolina 211 from Southport to SR 1500 to design capacity of 3,000 vehicles per day, widen existing two-lane road, increase shoulders, and resurface.

LONG RANGE--Construct a major East-West link along Brunswick County's barrier island beaches. This proposal is parallel to the State's 1990 functional plan. The East-West link will begin at North Carolina 133 at Yaupon Beach, upgrade Oak Island Drive to a major collector to the end of Oak Island, and construct a bridge linking Long Beach with SR 1119 across Lockwoods Folly Inlet. From there continue the major collector to NC 130, follow NC 130 to SR 1139, to SR 1137, to SR 1138. At this point, construct a bridge from the end of SR 1138 to Little Beach across the Shallotte Inlet. From there continue the major collector on SR 1155 to SR 1156, to NC 904 in Gause Landing. Then follow NC 904 to SR 1163 and on to the SC state line. (See maps on following pages.)

BRUNSWICK COUNTY THOROUGHFARE PLAN

SHORT RANGE GOALS

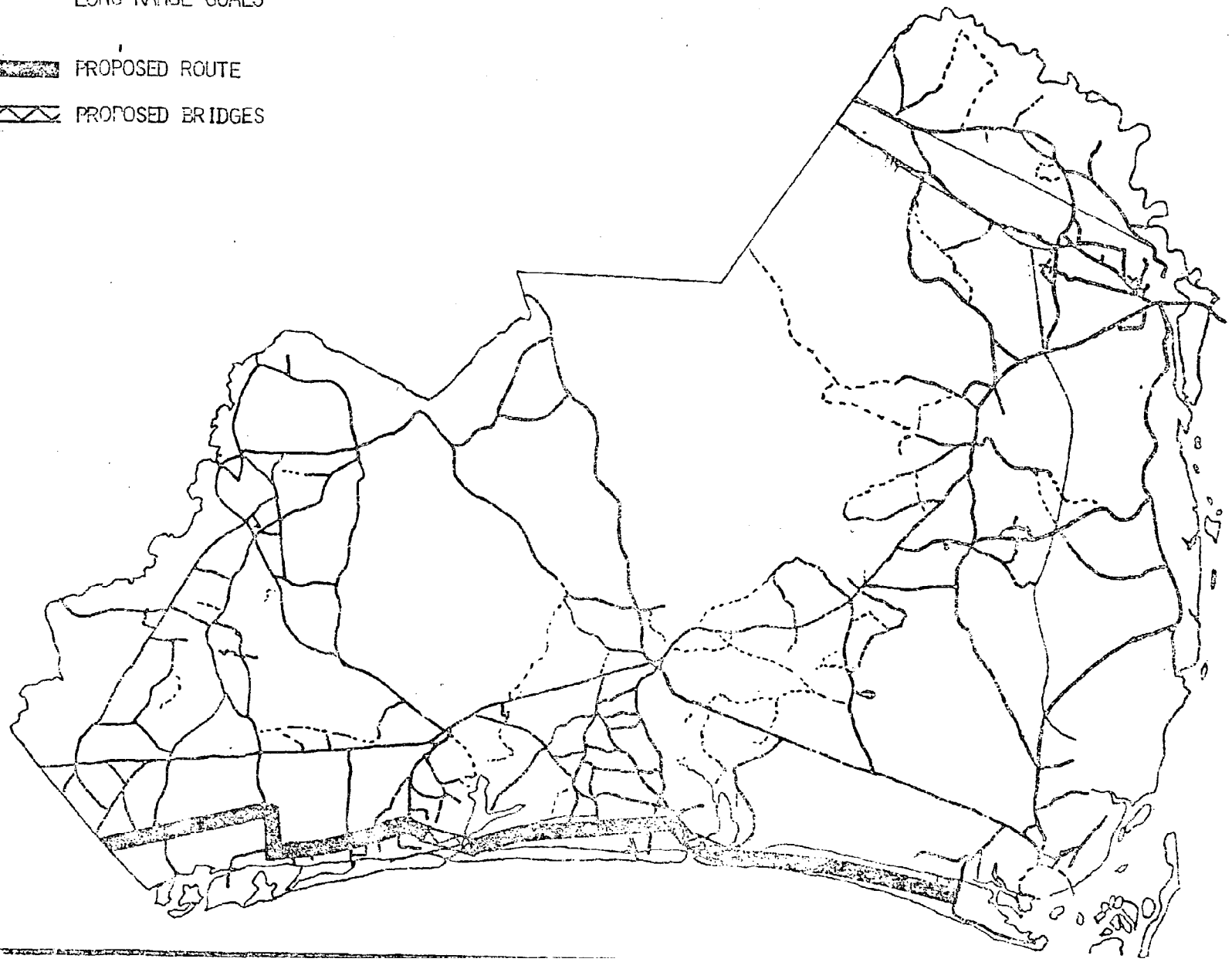


BUNSWICK COUNTY THOROUGHFARE PLAN

LONG RANGE GOALS

PROPOSED ROUTE

PROPOSED BRIDGES



B. Residential Development Plans

Brunswick County and Southport have two effective tools they can use to succesfully implement the Thoroughfare Plan.

The first tool is subdivision regulations. The Planning Board has the opportunity to insure that proposed street plans conform with the Thoroughfare Plan so that construction of Subdivision Streets meets the State's standards.

The second tool is zoning regulations. Zoning regulations, along with the adopted Land Use Plan can be used to insure appropriate development along roads and highways. The zoning ordinance can improve highway safety by requiring sufficient setbacks for buildings, to provide adequate sight distances, and to provide for off-street parking.

VI. Character Preservation

A. Appearance Commission

Another objective of the 1976 Southport Land Use Plan was to establish an Appearance Commission to preserve the community's aesthetic quality with authority to review architectural plans in accordance with GS 160A-451.

Since 1976, the Community Appearance Commission was given the power to review architectural plans. Their review power is not legally founded, however, they are recognized community-wide as having a great deal of influence. There have been a few instances of objections voiced by the Appearance Commission. In each instance the advice of the Commission was followed.

The Commission appears to have been a great influence in maintaining community aesthetics. It is hoped that they shall continue to be a great influence in future projects. There are also several sites within the community that should be rehabilitated or removed. It would be beneficial if the Appearance Commission would act to advise on this issue also.

B. Information Center

Another objective of the 1976 Southport Land Use Plan was to promote the history and heritage of the community by organizing and sponsoring an information center.

In Southport there are two centers which have served as Community Information Centers. One is the Southport Library, the other is the Southport Chamber of Commerce.

The Southport Library serves as a meeting place for many clubs and offers a variety of children's programs. In addition, they also have several display cases for local exhibits and a large section of North Carolina information.

The Southport Chamber of Commerce offers information on local businesses, institutions, recreational facilities, and specific local points of interest.

Both centers have met this objective of the Southport 1976 Land Use Plan. It is hoped that these centers will continue to expand their programs to meet Southport's growing needs.

C. Southport-Brunswick County Historic District Commission

One objective of the Southport 1976 Land Use Plan was to cooperate with the County in the establishment of a Southport-Brunswick County Historic District Commission.

Such a Commission was established in 1976. The purpose of this Commission was to designate historic sites and to protect existing historic sites. Serving on the Commission were three members from Southport and three from the County. Unfortunately, the Commission only met once and there was very little interest in attandance or purpose.

Obviously, this objective has not been met satisfactorily. This objective needs to be reviewed for current validity.

Recently published is a book entitled "The History of Brunswick County, North Carolina". The book was the project of the Brunswick County American Revolution Bicentennial Committee, of which Jack Fairley of Southport was chairman. Dr. Lawrence Lee, history professor at the Citadel, was the author of the book.

There is also a historic inventory of Southport currently underway for the nomination of a National Register Historic District. The establishment of Southport as a National Register Historic District would be an important commercial asset for the city. A list of locally recognized historic sites is provided in the Plan text under Fragile Areas.

D. Waterfront Preservation

The waterfront adds much to the character and appeal of Southport. The townspeople recognized this fact and in the 1976 Land Use Plan stated as one of their goals the preservation of the existing character of a "small fishing village". Besides preserving the waterfront, clean-up and development is needed to keep the area attractive and productive. The development of business is the key to preservation and redevelopment of the waterfront. It will product jobs and strengthen the economy of the Southport area.

Over the past several years, Southport has begun the tasks necessary to preserve and redevelop the waterfront. In September, 1979, the Board of Aldermen adopted the Southport Downtown and Waterfront Revitalization Plan. This plan suggested basic steps that might improve the visual appearance of the waterfront. What is needed now are means to carry out the improvements, such as public funding, regulation, and private investment.

The City is also in the process of improving the City pier in the Old Boat Harbor. This will attract additional seasonal visitors, thus strengthening the economy. The Waterfront Park is another step Southport is taking to implement the goal of Waterfront preservation and improvement.

2. PUBLIC PARTICIPATION PROCESS

Several techiniques were used to involve residents in the land use planning process for Southport. Local meetings with county planners, City officials, and community residents were held. These meetings fostered public participation in the identification of community problems and issues and in the review of preliminary land use plans and the Policy Statement for Southport. Efforts to inform residents of local planning activities were made also in the local weekly newspaper. All planning decisions, concerns, and meetings were reported on. Also, as a convenience to the community residents having questions, concerns, and ideas about land use planning for Southport, a "dial-a-planner" service was in operation and publicized from February 1, 1980 to June 15, 1980. The service allowed those people unable to attend local meetings to talk directly with a county planner. Finally, a survey was conducted by the Brunswick County Planning Department. The survey, a questionnaire to be completed by residents, sought opinions and attitudes that Southport residents hold on issues regarding local land use and development, service provision, and capital improvements.

Citizen Questionnaire Report

Initially, the questionnaire was put in the local weekly paper, The State Port Pilot, with a full-page layout. It was requested that residents answer the questions and either send the page to the Brunswick County Planning Department or take it to the Town Hall, where it would be picked up by the Planning Department. To encourage greater participation the questionnaires were also put in local grocery stores and banks and the Town Hall. A special effort to bring to attention the importance of the survey was made in regular notices in The State Port Pilot, and the Southport telephone number of a planner was publicized in order that people could call in their responses. Regardless of these efforts, after a two month period, the response was sparse. Thirty one responses were received by the Planning Department in total. The following represents analysis of the opinions and concerns of 31 people who responded. It is significant to note that about 68 percent of those who responded were 61 years of age or over (21 responses). This is not representative of the community, since the median age of Southport's population in 1970 was 32 years of age.

Resident Type

All of the respondents classified themselves as permanent residents of Southport. There are one to five people per house, with a figure of two people per house having the highest response rate (17 responses). The average household size then indicated by the survey is 2.5, which is somewhat lower than the more accurate average of 2.9.

The age and sex distribution in the residences of the respondents is as follows.

Population (Age in Years)	Male	Female
0-25	9	7
26-40	6	5
41-60	2	7
61+	9	12

Work Place

The responses indicated that about 58 percent of the residents are employed in the immediate area of Southport, while about 32 percent are employed outside the immediate area. The remaining 10 percent are either retired or did not answer the question.

Major Problems Facing Southport

Residents were asked to list the problems they felt were facing Southport currently. Their answers varied widely. Answers with the highest response rate (4 responses each) included litter, government integrity, and poor public facilities. These comprise 52 percent of the total 23 answers to the question. Answers with a lower response rate (2 responses each) included over taxation, erosion, poor business, and population increase. Problems of streets, zoning, and utilities costs were also noted (1 response each).

Characteristics of Southport - Desirable and Undesirable

When asked what characteristics made the City of Southport a desirable place to live, residents indicated its friendly people, climate, small quiet nature, and lack of crime. The beach location, beautiful scenery, and churches were also mentioned frequently. Other comments included "uncongested, good retirement place, public services, fishing and boating."

As for undesirable conditions in Southport, a wide range of items were listed. Poor public facilities, over taxation, and litter seem to be the most undesirable characteristics. Other items listed included the light ship, erosion, vacant lots, and expensive utilities. Items noted by one respondent each include mistrust of officials, smell from the fish factory, non-aggressive business, lack of night life for teens, and crime.

Public Facilities and Services

Residents were also asked to respond to several questions evaluating facilities and services in the community and financing mechanisms for future facilities and services. Specifically, they were asked to rate ten service/facility related items on a scale of one to five. One was the lowest or worst rating while five was the highest or best. In general, town management, building inspection, zoning administration, planning, and streets were all rated low to moderate. Water service and recreation were rated near moderate. Only the refuse service, fire and police protection were rated higher. Below is a tabulated summary of the responses.

Item	Rating 1	2	3	4	5
Town Management	8	6	6	5	1
Water Service - price	3	4	8	5	1
- quality	1	2	0	2	3
Refuse service	3	3	3	6	12
Recreation	6	2	10	6	2
Building Inspection	6	5	11	0	2
Zoning Administration	7	7	9	2	0
Planning	5	10	6	0	1
Fire Protection	1	1	2	6	17
Police Protection	2	4	8	4	8
Streets	5	4	15	3	0

Asked about additional or improved services they would like to see, a few residents responded with senior citizen activities, better roads, improved library, garbage clean up, and bus service.

In a separate question regarding how new public facilities (to accommodate future population increases) should be financed, approximately 20 percent chose assessment of property owners, 37 percent chose taxes, and 53 percent chose user charges/bond financing.

Future Development

Southport residents were asked what types of development should be discouraged or encouraged in their city. Permanent residential, single family dwellings came out on top of the types to be encouraged, followed closely by commercial and tourist-related business development. Mutli-family dwellings were primarily to be discouraged. Responses as to encourage or discourage development were less divided for seasonal residential, duplex, and industrial development. The following is a list of the different development types with the percentage of responses for encouragement or discouragement. Any percentages not accounted for in the table are due to "no response."

Type	Encourage	Discourage
Permanent Residential	97%	0%
Seasonal Residential	32	36
Single Family Dwellings	81	0
Duplexes	39	23
Multi-Family	19	45
Commercial	61	13
Industrial	23	32
Tourist-Related Business	81	10

Polluted Shellfish Areas

In reference to shellfish areas adjacent to Southport which were closed to harvesting because of pollution, the residents were asked what methods, if any, they would support to clean up these areas and permit harvesting. A total of 37 responses were given. Of these responses, "construction of sewage treatment facilities" received 41 percent, "prevention of building near wetlands (within 75 feet)" received 41 percent, and "increase lot size requirements for building homes" received 18 percent.

Downtown Revitalization

The downtown area of Southport has declined in recent years. Regarding this decline, the questionnaire asked residents what means they would support to revitalize the area. Twenty six percent of the respondents chose restricting commercial development outside the downtown area, 26 percent chose creating a special taxing district downtown to finance improvements, 19 percent chose recruiting a major employer to locate in the city, and 16 percent had various other suggestions. About 13 percent chose not to answer the question.

Fisheries Industry

Residents were asked what means they would support for preserving and expanding the fisheries industry which has played an important role throughout the history of Southport. The question received 29 responses. These responses were distributed as follows: 26 percent for a seafood processing plant proposed by the State of North Carolina, 66 percent for waterfront clean up and redevelopment, and eight percent for other (various) suggestions.

Substandard Housing

Regarding a current problem of 130 substandard houses in Southport, the questionnaire asked residents what means they would support to eliminate the problem. Southport citizens agreed for the most part that enforcement of a strict building code was a primary solution. There were 28 responses to the question, and these were distributed as follows: 65 percent support enforcement of a strict building code, 21 percent support construction of public housing, and 14 percent had other (various) suggestions.

This issue was discussed with town officials and they felt that the problem was already being addressed through their building code.

CP&L Canal

Residents were asked what should be done about the negative appearance of the canal used by the CP&L Nuclear Plant, since the cooling water canal may be discontinued in favor of cooling towers in the near future. Answers to the question indicated that residents would like to see the canals landscaped at road intersections to make them more attractive. They would also like to see continued use of the canals as they are rather than the construction of cooling towers.

Oil Refinery

An oil refinery has been proposed to locate on the Cape Fear River. It was recognized that there are dangers of oil spills and severe erosion of the shoreline in Southport; however, the refinery will help the economy of Brunswick County. Southport Citizens were asked what they favored in regard to the refinery. Responses were approximately divided equally on whether or not the refinery should be allowed to locate in Brunswick County. There was agreement, however, that any damages as a result of oil spoils and/or erosion should be paid for by the refinery company.

Annexation

When asked about lands presently in the one-mile extraterritorial jurisdiction of Southport, 71 percent of the respondents favored annexation of these lands, while 23 percent did not. Six percent chose not to answer the question.

Abandoned Vehicle Ordinance

When asked whether or not they would favor the adoption of an ordinance that limits abandoned unregistered vehicles which are allowed to remain on public streets and in front years, Southport residents overwhelmingly favored such an ordinance.

Emergency Preparedness

Citizens who answered this last question felt, for the most part, that Southport was not well-enough prepared for hurricane and flood evacuation (55 percent). About 26 percent felt the city was well-enough prepared, and the remainder did not know or did not respond.

3. SUMMARY OF MAJOR ISSUES AND PROBLEMS

The following list is a summary of current issues and problems facing Southport as indicated in the Citizen Questionnaire report and by City officials.

Issues
Downtown and Waterfront Revitalization
CP&L Canal
Proposed Oil Refinery
Muti-family Residential Development

Problems
Substandard Housing
Sewage Facilities
Litter
Poor Business
Abandoned Unregistered Vehicles
Erosion
Deteriorating Downtown and Waterfront
Commercial Strip Development

Areas Where Improvement is Needed
Town Management
Planning
Zoning Administration
Emergency Preparedness
Senior Citizen Activities
Streets

4. GOALS AND OBJECTIVES

Once problems and issues have been identified it is important to establish what ends are to be sought in dealing with problems and needs. This leads to the specification of goals and objectives. Goals are ends toward which actions should be directed; and, objectives are intermediate ends instrumental to achievement of a goal, they are target statements achievable in the scope of the Land Use Plan.

The overall appearance of Southport shows signs of change and will no doubt continue to do so. The amount of change tolerated depends upon the citizens of the community. From all available information (surveys, interviews, public meetings), people in the Southport planning area want a viable community, yet they do not want to lose the assets which the community presently enjoys. Thus, it is imperative that the City's elected and appointed officials and citizens vigorously support the goals and objectives enumerated herein. Only when these goals and objectives are adopted and adhered to as the City's policies for land development and future growth, will the community retain the pleasant characteristics it has today.

In the broadest sense, the goal of Southport planning area is to improve the social, economic, and physical environment of the community as economically as possible. Within this broadly stated goal, several specific goals and objectives relating to the physical development of the area can be stated.

I. Goal: Provide a management system capable of preserving and managing the natural resources in the Southport planning area.

Objectives:

- Support the findings of fact and recommendations of appointed boards, commissions and professional staff.
- Continue to prohibit development in any Area of Environmental Concern which would have a detrimental affect on public trust waters to the extent that such waters would be closed to shellfish harvesting under standards set by the Commission for Health Services pursuant to G.S. 130-169. 01 or violate any rules, regulations, or laws of the State of North Carolina or the City of Southport and its extraterritorial jurisdiction in which development takes place.

II. Goal: Provide safe, decent, and a variety of housing for all citizens.

Objectives:

- Aid property owners in the demolition of dwelling units unfit for human habitation.
- Seek, encourage and support the development of publicly assisted housing projects available from Federal agencies such as the Farmer's Home Administration 502 Program and Community Development Act 1974.
- Promote rehabilitation of substandard houses with grants received through the Community Development Act 1974.

III. Goal: Promote accessibility and safety in area transportation.

Objectives:

- Emphasize safety and a continuous street improvement and construction program.
- Review new residential development plans and insure that they comply with Subdivision Regulations.

IV. Goal: Preserve the existing character of a "small fishing village."

Objectives:

- Promote the re-enactment of The Southport - Brunswick County Historic District Commission.
- Develop and promote a Harbor Preservation Program utilizing recommendations from The Southport Revitalization Plan, 1979.
- Develop strategy for obtaining public funding and private investment, and develop regulations for the implementation of a Waterfront Preservation Program.
- Promote the redevelopment of the downtown area through the recommendations in the Southport Downtown and Waterfront Revitalization Plan.

V. Goal:

Develop adequate and efficient public utilities, community facilities, services, and programs

Objectives:

- Encourage development within the existing corporate limits and avoid "urban sprawl" and commercial strip development.
- Provide service and facilities to all areas within the corporate limits before annexing new areas.
- Implement the recommendations of the Public Improvements Program 1979-1984.
- Improve fire protection service by acquiring a class 7 rating.
- Continue to promote and expand programs, facilities, and services for the elderly.
- Expand the City's wastewater treatment facilities to meet future projected demands.
- Extend the City's water and sewer lines within the city limits to meet future projected needs.
- Develop a program for the enforcement of Southport's Dog Ordinance.
- Improve collection and storage of municipal records and information to improve efficiency in providing and planning for facilities, services, and programs.
- Adoption of an ordinance that limits abandoned unregistered vehicles which are allowed to remain on public streets and in front yards.
- Strictly enforce City litter regulations to combat the increasing litter problems.

5. POLICY STATEMENTS

The Southport Board of Aldermen have adopted the following policies for dealing with land use planning issues which will affect the community within the next ten years. These policies establish a systematic basis by which proposed developments are to be judged. If a proposed project or development would violate the intent of these policies, action to prevent it's construction would be taken by local, state and federal government agencies.

These policies are to be used by local officials in their decision making process to increase the consistency and quality of their decisions.

Southport policy statements

I Resource Protection

1. Southport will support and enforce through its CAMA Minor Permitting capacity the State policies and permitted uses in the Areas of Environmental Concern. The State policy statements for AECs offer protection for Southport fragile and significant environmental resources through the CAMA permitting procedures. In addition to those policies set forth in Subchapter 7H of the State CAMA regulations, Southport adopts the following policies concerning (AECs):

A. Coastal Wetlands. Activities in coastal wetland areas shall be restricted to those which do not significantly effect the unique and delicate balance of this resource. Construction in the coastal wetland will be permitted only as is necessary to provide access, easements for those types of development activities that are water dependent. Such uses as docking facilities, fishing piers and utility easements will be permitted so long as they fulfill the requirements of other applicable laws. Substantial effort must be provided by the developer to disturb as little coastal wetland areas as possible in the design construction and operation of any facility placed in a coastal wetland AEC.

B. Estuarine Waters. Southport, in recognition of the importance of estuarine water for the fisheries industries, shall promote the conservation and quality of this resource. Suitable uses of this land/water area are those which do not permanently or significantly effect the function, cleanliness, salinity, and circulation of estuarine waters. Permitted use in estuarine waters shall include access and navigation channels. Southport will also support projects in estuarine water areas which aim to increase the productivity of these waters. Such projects include oyster reseeding programs, and inlet channeling and dredging operations for the purpose of increasing the flushing action of tidal movement.

C. Public Trust areas. Southport supports the N.C. State policies concerning public trust areas as it is set forth in Subchapter 7H .0207.

D. Estuarine Shoreline. (75 ft. landward of Estuarine Waters). Southport realizes the dynamic nature of estuarine system and continual interaction of estuarine waters and estuarine shoreline. The natural process of erosion transforms shoreline areas into public trust areas. It shall be the policy of Southport to allow this natural process to occur if life or structures are not in jeopardy. On-shore development also has a profound effect on adjacent estuarine waters. Effluent from poorly placed or poorly functioning septic systems can pollute shellfish areas which represent much greater economic benefits to the County's citizens than do the residential use of estuarine shoreline areas. In recognition of this fact, Southport discourages the use of estuarine shoreline areas for residential purposes where there is a substantial chance of pollution occuring.

E. Ocean Hazard Areas. Southport supports the state policies for ocean hazard areas as outlined in Subchapter 7H .0304. However, Southport has no dune or beach area under its jurisdiction.

2. Physical Constraints to Development. Southport adopts the following policies relative to physical constraints to development

A. Growth and development will be discouraged in areas where septic tanks will not function and sewer services are not available.

Most areas within the city limits of Southport have sewage services. Further development is encouraged where these services are already provided.

B. Growth and development will be discouraged in areas where soils will not support buildings.

Where suitable alternative locations exist for a particular development project, Southport will discourage its location in an area where soils will not adequately support buildings. If no alternative sites exists, the project may be constructed if corrective measures to stabilizing the building foundation are incorporated into the project design.

II. Resource Production Management

Southports natural resources play a vital role in its economy. Southport's extraterritorial land is heavily utilized for forestry. Its waters are important not only for the fisheries industry, but for recreation as well. Protection of these resources is a prime concern of Brunswick County. To deal with issues that involve resource production and management, Southport adopts the following policies:

A. Productive Forest Lands

Growth and development will be discouraged in productive forest lands when such growth is not in accordance with the Compact and Corridor Growth Policies.

Land which is presently in productive forestry use will be encouraged to continue in that use. Development other than low density residential will be encouraged to locate in non-resource productive areas. Only if no other suitable location exists for a particular development project either because of locational, resource, or transportation needs should it be placed on productive agricultural or forest lands. Development projects which require state or federal permits, licenses or funds must meet this policy criteria.

B. Commercial and Recreational Fisheries

Southport will encourage preservation and expansion of its fisheries industry, both sports and commercial. Protection of coastal and estuarine waters is a prime prerequisite of this policy objective. Habitats for shellfish and finfish in all portions of their life cycle must be preserved in order to maintain fishing as a viable economic and recreational activity.

Therefore, any development which will profoundly adversely affect coastal and estuarine water will be discouraged. Only those developments which are water dependent, such as docking facilities, treatment plants, and marinas shall be allowed to be placed near and to effect coastal and estuarine water habitats. In the design, construction and operation of water dependent developments, every effort must be made to mitigate negative effects on water quality and fish habitat. These efforts will be at the owners or operators own expense.

In order to expand Southport's sport and commercial fisheries industry, Southport will support private and public projects which will positively affect those industries. Southport supports channel and inlet dredging and stabilization projects which will increase the water access for fishing boats.

It is recognized that in dredging and stabilization operations, some fish habitat damage may occur. Only those projects which have a reasonable likelihood of providing greater benefit than damage to the fisheries industry will be supported. All dredging and stabilization operations must be performed so as to minimize any unavoidable damage to fish habitat.

Southport supports projects which increase the productivity of coastal and estuarine waters. Projects such as oyster reseeding programs and artifical reef construction have proved successful in the past and, therefore, will be supported in the future.

Southport recognizes the importance of boat building, ship maintainance and repair, docking and harbor facilities, and seafood processing industries as supportive and necessary for the fisheries industry. These industries will be supported and allowed to locate on and near coastal and estuarine waters if they do not prove to injure fish habitat more than they support and provide services for the fisheries industry. All developments which require State or Federal permits, license or funds must meet this policy criteria.

Southport, in recognition that the fisheries industry has played an important role in the City of Southport since its beginning, supports waterfront redevelopment to preserve and expand this industry.

C. Existing and Potential Mineral Production Areas

Southport contains very little known mineral deposits, none of which are being mined or have the likelihood of being mined in the next ten years. Therefore, no policy statement concerning this issue will be made.

III. Economic and Community Development

I. The citizens of Southport believe that there is a place for selected types of development in Southport provided that proper and adequate measures are incorporated into the design, construction and operation of the development to eliminate substantial negative impacts of the development on neighboring uses of land and the environment. Existing development and industry must be conserved and protected. Selected types of development as rated above will be encouraged and provided with the necessary public services. In order to bring about this policy objective, Southport adopts the following policies in regard to economic and community development.

A. Industry

1. Southport will continue to encourage desirable industrial development and maintain a favorable climate for existing and new industry. Suitable industries are defined as those which do not have the potential of destroying the small village atmosphere of Southport.

2. Southport encourages measures to be taken to stop air pollution from existing industries.

3. Southport will work to reduce possible health hazards from industry through required improvements and emergency plans.

4. Southport will discourage the location of any industry within their planning jurisdiction which may pose substantial environmental or health hazards.

If an industry which is potentially environmentally or health hazardous can prove corrective measures have been incorporated into the design, construction, and operation of the facility to eliminate the substantial hazards, then it may be permitted to locate within Southport. The specific site of the proposed facility must be one which will not cause undue interference with or reduce the quality of existing neighboring land uses. In assessing whether or not an industry should be permitted to locate within Southport, consideration will be given to the economic impacts of the proposed facility. Should a proposed industry prove to damage the viability of an existing industry more than it would increase the economic base of Southport, it will not be permitted to locate within Southport.

B. Southport, recognizing that their downtown area has declined in recent years, would support any of the following efforts to revitalize the area:

1. Commercial development in Southport will be encouraged to locate downtown and existing commercial zoned areas. This could be done through a revised zoning ordinance.

2. Help recruit a major employer such as a seafood processing plant to locate in the city here or around the new boat harbor.

C. Airports

No land within Southport is used or will be used as an airport. However, Southport is near the County Airport Approach Zones. Airport approach zones should be kept well away from residential development and "runner" areas because of:

A. Noise
B. Crash hazards
C. Likelihood of industrial growth hear the airport.

Heliports are excluded from the above since all three are likely to exert a detrimental effect on residences, the Federal Housing Administration will not insure home mortgages within defined areas around airports where these factors are present.

D. Southport supports the continuation of the cooling canal use by CP&A Nuclear Plant and discourages the construction of cooling towers.

E. Provision of Services to Development

1. Southport presently provides sources of water for most of its residential, commercial and industrial users.

Water is necessary for all forms of development. It is Southport's responsibility to secure the sources of water for the public water supply. The cost of securing this supply, whether it be ground or surface water will be borne by the users.

Southport uses some county water, so therefore, Southport supports the development of the County's Phase II Water System.

2. Southport will promote public water systems where needed. Public water systems provide safer water and in some circumstances more cost efficient water than do individual wells. Public water systems are not feasible for very low density areas. Where the population density has reached the point where the installation of water lines is not an unreasonable cost in relation to number of people served, public water systems will be encouraged where health problems or salt water intrusion is occuring in private wells.

Southport commits itself to providing major trunk lines throughout Southport where public water is feasible and needed. Individual connections will be done at the user or property owners expense. Developers of new subdivisions will be encouraged to install water lines if the subdivision is located near existing or future main trunk lines.

3. Southport supports cleansing of polluted waters through the expansion of sewage treatment facilities.

Poorly functioning septic tanks threaten to pollute estuarine and coastal waters. This in turn renders shellfish areas unfit for harvest. To avoid future pollution problems, Southport will work to expand sewage treatment facilities as they are currently nearing peak flow capacity.

Southport intends to finance these facilities through grants, taxation, and bond referendums. Any future development that will substantially harm or pollute estuarine or coastal waters using septic systems will not be permitted. If the developer will provide a sewage collection and treatment system the development may be permitted.

4. Southport will provide solid waste disposal for its citizens by the County landfill system.

Southport recognizes its role as the provider of solid waste disposal service for Southport's residences and businesses. In order to carry out this role, adequate means of final disposition must always be available. This may take the form of land application, incineration, resource recovery, or landfills. Since Southport is presently using a County landfill as its means of solid waste disposal and will do so in the foreseeable future, adequate landfill sites need to be retained for Southport by the County at all times.

Southport supports the participation of the County in regional landfill projects so long as the County always retains, maintains, and guarantees suitable landfill sites for Southport.

G. Growth Patterns

1. Southport will follow a "Compact Growth Policy." This policy will allow existing areas under development to develop fully before expansion into new areas. New development will occur as an expansion of existing fully developed areas.

2. Southport will also follow, where applicable, a policy of "Compact Growth within existing service corridors." This policy will allow existing areas under development and areas in existing service corridors to fully develop before expanding into new areas and new development will occur as an expansion from these fully developed areas.

3. Urban growth and development will be programmed to occur where adequate services are available or planned.

4. Southport's policy will be to discourage a large amount of growth and development or large increase in population.

5. Spatial separation of conflicting land uses will be encouraged.

6. Southport will work to provide low income persons with safe, decent and sanitary housing by taking advantage of all federal subsidy programs and County instigated programs.

7. Southport will encourage a variety of housing types including single family, duplex, and low profile apartments. Apartments will be restricted to appropriate zoning districts. Apartments will be permitted only where the full range of urban services are provided or will be made available.

8. Southport will work to provide neighborhood recreation areas.

9. Southport acknowledges that there are approximately 130 substandard houses in Southport. The City will continue strict enforcement of the existing building code.

IV. Continuing Public Participation

A. Southport will encourage its citizens to become involved in the land use planning process.

Southport realizes an important part of any planning program is citizen involvement. In order to provide for this public participation, Southport adopts the following public involvement policy.

(1) All land use plan and updates will be done with public participation.

Citizen participation in the land use planning process will be accomplished by utilizing the following plan:

Time Use of One Year Planning Period

1/3 I. Education
- A. Newspaper
  - 1. News releases
  - 2. Letters to editors
- B. Pamphlets
- C. Public meetings

1/3 II. Input
- A. Public meetings
- B. Surveys
  - 1. Mail
  - 2. Door to door
  - 3. Telephone
- C. Review and comments
  - 1. Newspaper spread of plan summary
  - 2. Public review meeting

1/3 III. Support
- A. Use of education and input properly
- B. Public hearing (formal)

6. IMPLEMENTATION STRATEGIES

In order to carry out the policies and goals which have been adopted by the City of Southport, implementation strategies are needed. Strategies are specific tools such as systems of taxation, public expenditures, regulations and ordinances. These tools can be used to promote the policies of the City as well as bring it closer to its desired end state.

These strategies must be realistic in terms of the context in which they operate. To be appropriate, they must be politically viable and enforceable.

In Southport there are two local units of government which provide services to the City and have authority to levy taxes. These two units are: the City of Southport and the County of Brunswick. Historically, counties have been responsible for software services (i. e., health, education and welfare) while municipalities were responsible for hardware services (i. e., water, sewer, streets and sanitation). However, with a changing demographic picture, both cities and counties have initiated services of both types. Coordination of services between Southport and Brunswick County are very few. However, agreements in several areas should be explored. Possible areas for joint services include recreation, waste water treatment, historic district commission, water service, and housing rehabilitation. The degree to which any of these service agreements can be achieved will be determined by the cost involved. The cost in turn can be held to a minimum by land use control. Only Southport has authority to regulate the use of land outside AECs and within its jurisdiction.

Southport has several implementation tools, which include a Zoning Ordinance, Subdivision Regulations, County Health Department Regulations, Building Codes, Land Classification Plan, and Capital Improvements Program. Other tools such as grant offerings and business recruiting could be employed also. The following is a list of existing and possible strategies for Southport. There is a brief description of each strategy and an explanation of how the strategy will operate to implement policies and goals.

I. ZONING

Zoning is the enactment of a law by public authority that controls and regulates private property. Zoning consists of dividing the community into districts or zones and regulating within such districts the use of land and the use, height and area of buildings for the purpose of conserving and promoting the health, safety, morals, convenience, and general welfare of the people of the community. A county or town can be divided into any number of districts. Each district will have its own permitted uses, yard size, lot size and height requirements. All pieces of property within one district must be treated and regulated equally.

A zoning ordinance consists of two things: (1) The Text which contains definitions, descriptions of the districts in terms of permitted uses, lot size, yard requirements, etc. Also the text contains information about procedures to get a building permit, a variance or special exception to amend the zoning ordinance. (2) The Zoning Map which shows how the community is divided into districts.

Special Use or Special Exception

Within one district, certain uses may be permitted with special requirements attached. For example, within a residential zone, houses are permitted and must only meet the standard requirements of that residential zone. They must have a minimum lot size, yard dimensions and building requirements. A convenience store may be permitted in that residential district only if certain other requirements are met as well. This special use might require that the convenience store provide landscape buffer strips, a parking lot, a larger lot, etc.

Using the special use approach, certain possibly conflicting uses may be permitted within districts so that their negative impacts are reduced.

Variance

A variance is a permit which allows a property owner to use property in a way that the zoning ordinance restricts. A variance is a provision to insure that persons are not seriously injured by the use of the Zoning Ordinance. It is a recognition that no law is perfect and thereby provides a means to reduce injustice. The Board of adjustment can grant a variance if three findings can be made:

1. There is a practical difficulty in complying with the ordinance or that strict adherence to the ordinance would cause undue hardship. Five things must be proved by the applicant to show practical difficulty.

    A. If the property owner does comply with the ordinance, he can make no reasonable return on his property.

    B. The hardship results from the ordinance itself.

    C. The hardship must be suffered by the lot and not the owner.

    D. The hardship cannot result from the property owners own action. For example if he had subdivided his lots to small to comply with the Zoning Ordinance.

    E. The hardship must be perculiar to the individual property.

2. The variance must be in harmony with the general intent of the Ordinance. If the variance would cause a significant change in the character of neighborhood, the variance should by denied.

3. The public safety and welfare must be assured. If the granting of the variance would cause a dangerous situation, such as high traffic volume on a neighborhood street, the variance should be denied.

Enforcement of the Zoning Ordinance

The enforcement of the Zoning Ordinance is the responsibility of the zoning administrator or building inspector. His duties are to issue building permits and inspect property for violations.

When a person applies to the building inspector for a permit, the inspector determines if the porposed use and site layout is in compliance with the Zoning Ordinance. If it is not, the permit is denied. The inspector also checks his jurisdiction for violations. If he finds a building is being erected without a permit, a stop-work order will be issued. A fine may then be imposed.

Importance of the Zoning Ordinance

The importance of a zoning ordinance for the City of Southport is evident. As the population of the Southport area increases, conflicts in land use begin to emerge. Factories may locate too close to neighborhoods. Mobile homes may invade a previously all single family-home neighborhood. A strip of commercial development along a major highway may cause traffic congestion and accidents. A zoning ordinance can prevent these events. It can alleviate sprawl problems by zoning areas within and immediately adjacent to developed areas at a higher density than outlying areas. The greater use to which land can be put will encourage development there. Zoning can be used to protect natural and recreational resources. The coastal and estuarine waters are a major source of recreational activity. Dense development near these areas can pollute the waters from runoff. Near these areas, zoning can prohibit high densities and industrial development which may harm the fragile environment.

II. SUBDIVISION REGULATIONS

Subdivision regulation fosters planned and orderly development of the land in the Southport planning area. It determines efficient methods for the integration of proposed subdivision streets with existing and planned streets. Provisions for the dedication of street right-of-way and utility easements and for the planned arrangement of streets and structures that will enable the City to avoid overcrowding and congestion are included in the regulation. Such an ordinance has the general purpose of regulating land within the city limits and the extraterritorial jurisdiction in order to preserve the public health, safety, and welfare.

Variance

A variance to the ordinance may be granted if strict adherence to the regulations would cause unnecessary hardships or where topographical or other conditions peculiar to the site and a departure from these regulations will not destroy their intent.

Enforcement of Subdivision Regulations

The enforcement of the Regulations is the responsibility of all permit-issuing administrative agents or departments of the City of Southport. Their duty, aside from issuing development permits, is to determine if the proposed subdivision plan is in compliance with the Subdivision Regulations Ordinance. If it is not, the permit is denied.

Enforcement is also a responsibility of the Brunswick County Register of Deeds who shall not file or record a plat of subdivision located within the territorial jurisdiction of the Cith of Southport without approval of the legislative body as required in the Ordinance. That body is to determine if the proposed subdivision plan is in compliance with the Regulations.

Importance of Subdivision Regulations

The regulations establish general requirements and design standards for development regarding suitability of the land, different types of developments , public facility/service areas, existing and planned streets, and community amenities. Standards for street design, lot size, buffer strips, and easements are also established.

The regulations are designed to insure an adequately planned street system and to avoid sharp curves, hazardous intersections; to avoid overcrowding of the land ahd extreme concentrations of the population; to secure safety from fire, panic, and other dangers; to provide for adequate water and sewage systems, schools, recreational facilities, to facilitate an orderly system for the use of land; to insure the proper legal description and monumenting of subdivided land; and to provide for the resubdivision of large land parcels.

III. FLOOD PLAIN PROTECTION AND MANAGEMENT

Southport adopted a Flood Plain Protection and Management Ordinance in 1976 as part of the requirements for residents to qualify for federally subsidized flood insurance. Land uses in flood plains must comply with development standards of the Federal Insurance Administration.

Enforcement

The building inspector has the responsibility for enforcing the Ordinance.

IV. LAND CLASSIFICATION PLAN

The general land classification system was developed by the State of North Carolina to help counties and municipalities in the implementation oftheir goals, objectives, and policies. The use of the land classification system and map is strategy which will promote the orderly use of land within the city. By delineating land classes on a map, the local government can specify those areas where certain policies will apply. Identification will be made of the future use of all land in the Southport area. The designation of land classes allows the local government to identify the use and density of each area, and hereby plan for public services to service those areas. The land classification system and map will be used as a base to formulate more formal and regulatory tools such as zoning.

The State and the Federal Government utilize the local land classification syatem and map to determine whether projects and development which requires government license, permits or funds will be permitted to locate in the Southport area. If the proposed project is inconsistent with the land classification at its proposed location, the permit, license or funds will be denied.

One of the objectives the State of North Carolina has set for local government in the land use plan update process is the further examination and refinement of the land classification system. In keeping with that objective, a land classification plan has been developed for Southport.

V. HEALTH DEPARTMENT REGULATIONS

The Brunswick County Health Department, under the authority of a resolution passed by the Brunswick County Board Health, has the responsibility of administering the rules governing the protection of private water supplies, the rules governing public water supplies, and the laws and rules for ground absorption sewage desposal systems of 3000 gallons or less design capacity, of which were enacted by the authority of the North Carolina General Statues.

VI. BUILDING CODE

A building code is a law which requires that minimum, standards, provisions, and requirements are met for safe and stable design, methods of construction and uses of materials in buildings and/or structures erected, constructed, enlarged, altered, repaved, moved, converted to other uses or demolished and to regulate the equipment, maintainance, use and occupancy of all buildings and for structures.

The general purpose of a building code is to promote the public health, safety, and welfare. The State of North Carolina provides a standardized building code which is very comprehensive and insures that all buildings are adequate and safe. All local governments in North Carolina will be required to adopt this code by 1983 and enforce it with a building inspections department. The local government code may deviate fromthe State Building Code only if a compelling need can be proved.

Southport can use the North Carolina Building Code to improve the quality of construction within the planning area. Many buildings and homes are substandard and do not provide adequate shelters for dwellings, businesses, or other uses.

VII. Capital Improvements Program

A capital improvement program (CIP) is a list of capital projects that a locality expects to undertake in the future, It is designed to be an organized guide to structure the budget properly for the next five or six years. With a fiscal year dated for each project, priorities are set in a listing of projects that range from critically needed to desirable. Using a CIP is a continuous process that must be reviewed and updated every year to be an effective tool.

As a tool for implementing goals and policies the program can include projects which will meet existing needs and trends. Examples of such budgeted projects include grants for the rehabilitation or demolition of substandard homes, new fire fighting equipment in an effort to upgrade the department for a Class 7 rating, or clean up of the old waterfront area. In this way, the CIP can be used to achieve goals and objectives stated by the Southport citizens in their current Land Use Plan.

A CIP can also be used to guide growth into desirable areas as indicated by the future land use map or land classificaiton map of the Plan. An example of such use is providing water and sewer extensions to areas not yet developed, but that are the most desired areas for future development. In this way the CIP is intended to guide the need for services, not just meet them. It is an effort to shape the conditions conducive to a desirable land use pattern.

Enforcement

The enforcement of a capital improvements program is the direct responsibility of the officials of the City of Southport. It is their duty to budget money for the projects listed in the program. In the order of the set priorities, the projects should be included in each fiscal year budget throughout the CIP period of five to six years. It is also the duty of City officials to review the CIP and to make sure that the projects are still needed and that the priorities have not changed.

A CIP can be the most effective way to meet certain goals and objectives as stated in the Land Use Plan.

7. CAPITAL IMPROVEMENTS PROGRAM

In 1974, the City of Southport adopted a ten-year public improvements program. It includes only the public improvements for which the City is directly responsible and which must be provided for in the City's Capital Imporvement Budget. The program was divided into two schedules, phase I for 1974 to 1978 and phase II for 1979 to 1984. Phase II is currently in effect. Items included in this phase and their justification are summarized below.

PUBLIC IMPROVEMENTS PROJECTS FOR FISCAL 1979-1984

Improvement Items	Justification
1. Acquire sufficient land at the end of Willis Drive to develop a riverside park.	1. This site would protect a small portion of the river-front area and provide recreational facilities to the residents of Southpor and to the many tourists tha visit the area.
2. Purchase new patrol vehicles at a two year interval.	2. This is done to insure dependable, safe and low maintenance transportation. Additionally, this would be a predictable and easily planned for expense.
3. Purchase new street, water and sewer department equipment on a staggered basis at five year intervals.	3. This heavy equipment should be replaced on a regular basis to insure low maintenance and high performance
4. Pave the parking area of the town garage and provide sufficient buffers to shield the adjoining areas.	4. This is needed for the overall protection of the stored vehicles and to shield the adjacent property from the activities and storage facilities of the area.
5. Pave the existing parking facilities adjacent to City Hall and mark off spaces.	5. This would provide an adequa parking area and would prevei haphazard parking arrangements.
6. Construct a new fire station with room for expansion and proper maintenance of equipment.	6. The present fire station has no room for expansion or for additional equipment and the present facilities are inadequate for maintenance of equipment and training.
7. Purchase foam equpiment for the Fire Department.	7. This would provide better fire protection to the City and expand their present service.

Furthermore, while it is not considered a capital improvement item, the City will have to consider the employment of a full time fireman due to projected growth. This will also permit the City to gain a lower class fire rating which will bring about a reduction in fire insurance rates.

Fiscal Year 1981 Budget Expenditures

Recently the operating budget for fiscal year 1981 was approved by officials or the City of Southport. Requested expenditures for capital outlays (improvements) were approved primarily for the fire department, health and sanitation department, and electric department. Substantial general expenditures were approved for the City library and recreation facilities and programs. The following is a summary of the approved budget expenditures. A summary of the expected revenues for FY 81 can be found in the Economic Profile of this Plan.

City of Southport
FY 81 Budget - Expenditures

	Total Expenditures
Administration	90,971
Police	150,767
Fire & Rescue	30,915
Health & Sanitation	99,355
Street	85,539
General Gov't	58,300
Total	515,847

An itemization of each department's approved expenditures can be found in the appendix to this text; however, significant expenditures for capital improvement projects are highlighted here.

The fire department will receive $1,000 for maintenance and repairs in FY 81. This represents a 42 percent increase over the past allocation for this category. A capital outlay of $1,200 was also approved, which should contribute to efforts for obtaining a class 7 rating.

Health and Sanitation expenditures for capital outlays of $39,632 was approved. This represents about 40 percent of the total allocation for health and sanitation.

Under General Government significant budget allocations were made for the library ($13,110), recreation ($16,500), and the waterfront park ($11,700). An additional $ 1,500 from revenue sharing funds has been allocated for recreation. Each of these items were mentioned by respondents to the Citizen Questionnaire as needing improvement or development.

Regarding the current problem of dilapidated structures in Southport, only $200 of the General Government expenditures has been allocated to building removal. It is possible that additional financing for building removal is included under Health and Sanitation; however, it was not included in the itemization.

A capital outlay of $36,000 was approved for the electric department, but it is not clear for what it shall be used.

It is significant to note that, although several respondents to the Citizen Questionnaire indicated some repair of streets was needed, no budget allocations were made for such repair under street expenditures. This includes resurfacing, new paving, and sidewalks. However, small allocations for paving ($3,000) and patching ($6,000) were made under the Powell Bill expenditure of State funds.

PART 3: LAND USE SURVEY AND ANALYSIS

LAND USE SURVEY AND ANALYSIS

1. Existing Land Use

   Residential
   Commercial
   Industrial
   Office
   Recreational
   Transportation, Communication, and Utilities
   Public Institution
   Private Institution
   Agriculture, Forestry, and Fisheries
   Undeveloped

2. Development Trends

   Residential
   Commercial
   Industrial
   Office
   Recreation
   Agriculture, Forestry, and Fisheries
   Transportation, Communication, and Utilities; Public Institution;
   Private Institution

3. Existing and Proposed Services and Facilities

   Water Facilities
   Sewerage Facilities
   Transportation Facilities
   Educational Facilities
   Other Services and Facilities

LAND USE SURVEY AND ANALYSIS

In accordance with the State guidelines for Local Planning in the Coastal Area under the Coastal Area Management Act of 1974, an update of the 1976 Land Use Survey was completed in 1980.

The 1980 Land Use Survey serves four major functions: First, an accurate dwelling unit count is made available. Second, existing acreages for each land use category are determined. Thirdly, the designation of each parcel of land is given. From this process land use compatability relationships are determined. Fourth, and most important, the Land Use Survey serves as the basis for an in-depth land use analysis. It will reveal, for example, the amount of unused but usable land available within Southport. This is an important consideration in shaping policies in matters of industrial, commercial and residential development, subdivision control, of facilities provision and needs assessment and in the future, the establishment of zoning districts. It will also reveal those land use changes from 1975, which in turn outline the city's development trends. The following analysis will deal primarily with the use of the land and the relationships of the various types of land uses.

1. EXISTING LAND USE

The general land use of Southport is indicated on the Existing Land Use Map and the accompanying table. The acreage figures presented were calculated from data gathered from tax records, a windshield survey, and planimeter measurements of related maps. They are broken down for acreage within the corporate limits and acreages within extra terrirorial Jurisdiction. The following discussion briefly describes the various uses and their changing acreages since the 1976 Southport Land Use Plan.

Residential

Residential use accounts for approximately 30.5 percent of the total land use in the Southport corporate limits, which is about the same percentage as that in 1976. Residential structures are almost exclusively single family dwelling units; however, since 1976, there have been some increases in the acreages for multi family dwellings and mobile homes, 63.5 percent and 18.5 percent respectively. Single family residential land use in acres has increased only 4.2 percent since 1976.

The areas of extraterritorial jurisdiction experienced a decrease in acreages of residential land use, approximately 45.1 percent. This is due to large purchases of land for industrial purposes by local industries. There are no multi-family dwelling units in the jurisdiction, but mobile home developments have increased. In acres for mobile homes, there was an increase of approximately 109% land use since 1976.

Commercial

Approximately 6.2 percent of the total land use in the Southport planning area is devoted to commercial uses. Within the corporate limits there has been an increase of acres in commercial use of 23.3 percent, while the extraterritorial jurisdiction has experienced an increase of 447.8 percent. This extreme difference or increase, in relation to figures from the privious land use plan, reflects the fact that large tracts of land are owned, but are yet undeveloped, by commercial entities.

Areas of commercial concentration include the downtown, the community shopping center at the intersection of North Howe Street and N.C. 87, and the areas adjacent to the small boat harbor marina and the Old Yacht Basin.

Industry

Since the 1976 Land Use Plan, the percentage of total land use in acres for the Southport Planning Area has increased tremendously (1267 percent). This large increase is due to substantial purchases of land throughout the extra-territorial jurisdiction (over 600 acres) by both CP&L and Pfizer companies. Within the corporate limits of Southport, the land use acreage has increased by approximately 19 acres. It should be noted that all land classified industrial is not developed and may not be for many years to come. It is also true that CP&L is classified a utility, but its land in the Southport area has been classified industrial.

Office

Lands occupied by office uses comprise about .43 percent of the land in the total planning area - approximately .61 percent within the corporate limits and .34 in the extraterritorial jurisdiction. This 1980 classification cannot be

compared with that of the 1976 Land Use Plan because it was previously not as well defined. However, it must be noted that Southport did lose a large number of offices in 1978 when the Brunswick County Offices moved from downtown Southport to the Brunswick County Government Center near Bolivia.

Recreation

Since 1976, Southport has greatly increased its amount of land in recreational uses. A total increase for the planning area, for acres of recreational land use, was about 150 percent. A little league field of three acres, a multi-use basketball court of ½ acre, a mini park of ½ acre,and two tennis courts of ½ acre have been developed. A waterfront park of one acre is being planned also, and property has currently been aquired for the project. Other recreational areas in Southport include historic sites, fishing pier, boat harbor marina, school athletic fields, neighborhood parks, and a community meeting center for local civic groups. The Frying Pan Lightship on the waterfront is also open to the public. Even with the 150 percent improvement, recreational land use comprises the smallest percentage of the total land use in the corporate limits of Southport.

Transportation, Communication, and Utilities

Transportation, Communication, and Utilities represent the third largest land use within the corporate limits with approximately 15.2 percent of the total land. The bulk of this consists of street rights-of-ways, which are in many instances 99 feet in width. Other uses within this categroy include the sewage treatment plant on West Street and water pumping stations on Howe , Leonard, and Moore Streets.

Outside Southport in the extraterritorial planning areas,close to 14 percent of the total land use is in this category. Included in the classification are street rights-of-way, water stations, and the CP&L nuclear power plant.

Public Institution

Lands occupied by public institutions in Southport comprise about 1.6 percent of all land in the corporate limits. In the outside planning area they comprise about .21 percent. The category of public institutions includes entities such as the police and fire station, town hall buildings,public schools, city garage, and the library. A comparison of the acres of land in this use between 1975 and 1980 figures cannot be made because the category in the previous plan was not well defined. This is true for the following category also.

Private Institution Land Use

Private institution use of land includes such entities as the Dosher Memorial Hospital, Moose Club building, Masonic Lodge, churches, and the convalescent home. Approximately .74 percent of the total land use in the Southport corporate limits is devoted to this type. There is no private institution land use in the extraterritorial jurisdiction area.

Agriculture, Forestry and Fisheries

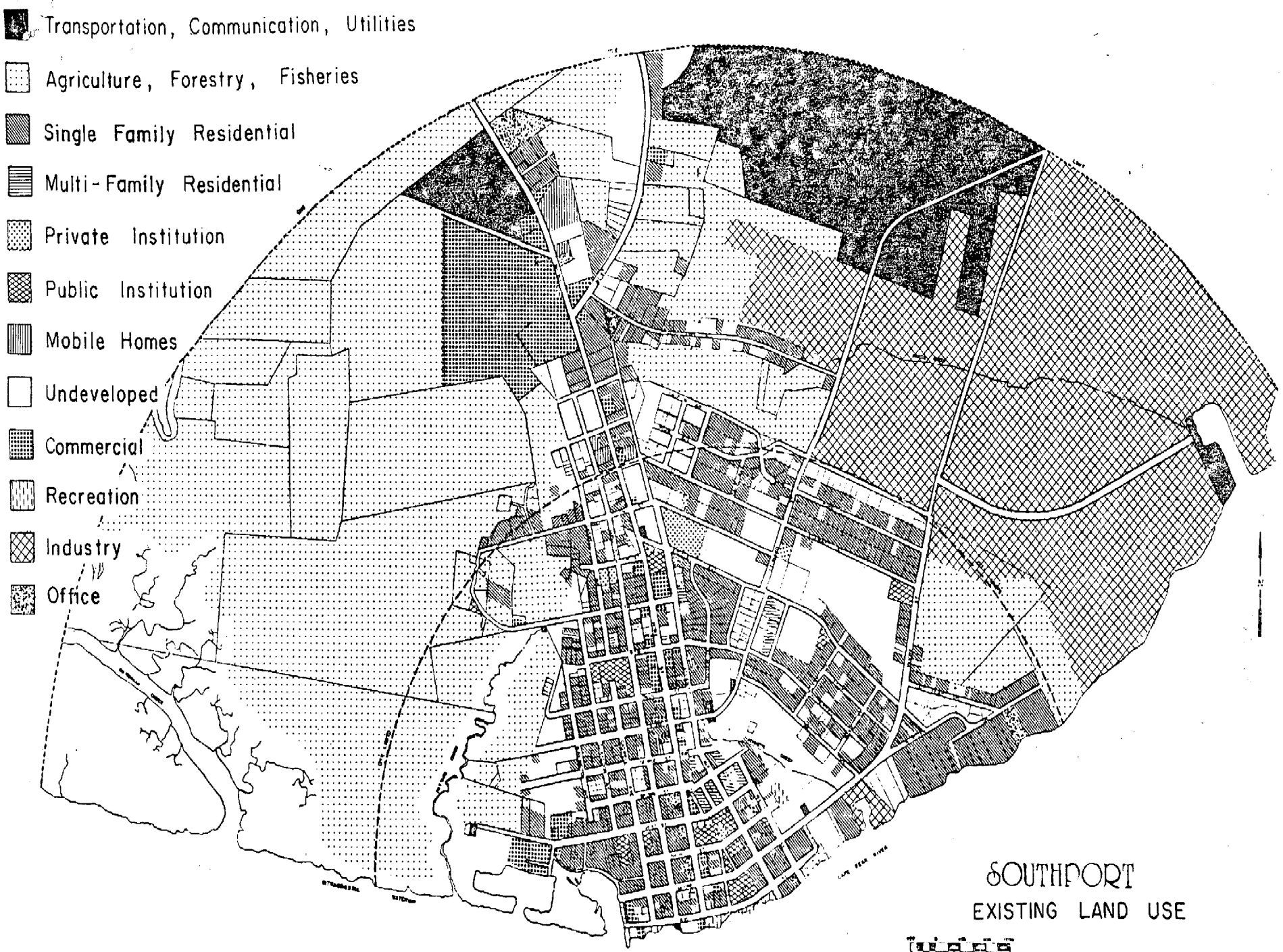
Use of land for agriculture, forestry, and fisheries has declined in acreage since 1976. The total decline was about 9.1 percent within the Southport corporate limits and 54.4 percent in the extraterritorial jurisdiction. For the whole planning area, this land use type comprises the largest percent(29.4) of all land use. The decrease in acreages are due to urban land use development.

Undeveloped

Undeveloped land is vacant, unimproved land without agriculture or forest use. For the Southport Land Use Plan, wetlands have been included in the acreage data. This category occupies approximately 29.8 percent of the total land use within the corporate limits and 14 percent within the area of extraterritorial jurisdiction. Of the total land use in the Southport Planning Area, undeveloped land comprises approximately 19.3 percent.

SOUTHPORT EXISTING LAND USE

Land Use	Within Corporate Limits Approximate				Extraterritorial Jurisdiction Approximate				Total Acreage			
	Number of Units	Average Acreage Per Unit	Total Acreage	Percentage	Number of Units	Average Acreage Per Unit	Total Acreage	Percentage	Number of Units	Average Acreage Per Units	Total Acreage	Percentag
Permanent Single Family Residential	850	.43	365.71	29.44	112	.65	72.54	3.02	962	.46	438.25	12.04
Permanent Multi Family Residential	42	.20	8.34	.69	0	0	0	0	42	.20	8.34	.23
Mobile Homes	18	.26	4.62	.37	47	.21	10.03	.42	65	.23	14.65	.40
Commercial	76	.36	27.62	2.22	9	10.53	94.76	3.95	85	1.44	122.38	3.36
Industry	1	20.09	20.09	1.62	1	685.38	685.38	28.58	2	352.74	705.47	19.38
Office	22	.35	7.60	.61	3	2.71	8.12	.34	25	.63	15.72	.43
Recreation	6	1.15	6.88	.55	1	1.02	1.02	.04	7	1.13	7.90	.22
Trans.,Commun. & Utilities	8	23.58	188.61	15.18	4	82.38	329.51	13.74	12	43.18	518.12	14.23
Public Institution	28	.70	19.50	1.57	1	5.14	5.14	.21	29	.85	24.64	.68
Private Institu.	4	2.31	9.22	.74	0	0	0	0	4	2.31	9.22	.25
Agric.,Forestry, & Fisheries	6	35.70	214.17	17.24	1	857.44	857.44	35.75	7	153.09	1071.61	29.43
SUBTOTAL	1061	.82	872.36	70.25%	178	11.60	2063.94	86.05%	1240	2.37	2936.30	80.65
Undeveloped	NA	NA	369.84	29.75%	NA	NA	334.46	13.95%	NA	NA	704.30	19.35
TOTAL	1061	1.17	1242.20	100.00%	178	13.47	2398.40	100.00%	1240	2.94	3640.60	100.00



SOUTHPORT

EXISTING LAND USE

Prepared by the Brunswick County Planning Office, 1980 cpb

Development Trends

The population and economic trends from 1976 to 1980 appear to be much the same as those from 1970 to 1975. The Southport area has experienced unparalelled population and economic growth, but it is difficult to measure the long-term impacts of the development which have occurred. Benefits have accrued, including increased tax base to support governmental services. However, this growth can cause unmanageable consequences in terms of increased school enrollments, unmet health care needs, traffic congestion, spiraling demand for police and fire protection, increased social services demand, unavailable recreation facilities, and continued demand for water and sewer services.

The following briefly discusses development and trends in each land use sector and some potential impacts of the trends.

Residential

Population growth in the Southport area has increased community demand for "low density sprawl." Low density sprawl is defined as the entire community consisting of single family homes, 75 percent sited in a traditional grid pattern and the rest clustered. Neighborhoods are in a leap frog pattern with little continuity. As indicated by the land use survey, Southport clearly exemplifies the pattern. The pattern not only appears in the city, but is also occurring out in the extraterritorial planning area with continued single family dwelling development in random areas. When compared to other patterns such as multi-family or mixed developments, sprawl has proven to be less efficient. The overall cost to the neighborhood or community is significantly more for operating and maintenance costs, water pollution generation, energy consumption, land utilization, water consumption, and capital costs. The existing Southport sewage treatment services will be particularly affected by continued growth and service demands since the plant is presently operating at near full capacity. It is essential that Southport begin to make decisions on how best to provide such service for the projected population growth. It is also important for Southport to guide the growth and development into areas where services are already provided or planned for reasons of efficiency and economy.

A factor in sprawl patterns, strip development is also cocurring along the major thoroughfares, particularly in the extraterritorial area. This threatens to "land lock" quantities of desirable land located behind the roads and increases the possibility of future blight of houses presently being built along these roads. Another consequence of strip development is the necessity of connecting driveways along major thoroughfares. Numerous individual driveways decrease the utility of the road and increase the danger to residents and motoring public. In particular, along Jabbertown Road and Moore Street extension, residential development has occurred as opposed to the development of available residentially zoned land located within the city limits. The aging solution to this trend--annexation--only perpetuates the problem.

New mobile homes in Southport are presently allowed only to locate in mobile home parks outside the city limits within the extraterritorial jurisdiction. There are existing mobile homes scattered within the city limits which are non-conforming

uses. These homes can be replaced so long as the new home is not larger in size. Mobile home development has continued in the extraterritorial jurisdiction. The amount of land occupied by them has more than doubled since 1976.

The companies of CP&L and Pfizer have also increased their land holdings in the Southport area. A loss of land classified residential since 1976 can be attributed to this action, and it will be a significant factor in limiting future residential development to certain areas throughout the planning jurisdiction.

Commercial

The commercial land use in the Southport planning area has doubled to about 6 percent since 1976. It is still a small percentage of the total land use--primarily a result of the retail marketing influence of Wilmington. Nevertheless, the expanding economic development in Smithville Township has helped to spur commercial trade and service development.

Economic trends in the commercial community, however, indicate that growth has not taken place in the Central Business District (CBD). A land use analysis also shows this negative trend. An extreme problem of vacant buildings and vacant lots exists due to lack of demand for floor space in the CBD.

Strip commercial development outside the CBD helps to stifle growth and redevelopment in the CBD. Currently, strip commercial development along North Howe Street, N.C. 133 and 211 is permitted by the Zoning Ordinance. Commercial development has taken place along North Howe Street and N.C. 133.

Industrial

There has not been any additional industrial location since 1976 in the Southport planning area. As noted earlier, however, the two largest companies, CP&L and Pfizer, have aquired a great deal of additional land in the area, which has been classified industrial.

Another important industry in the area is fishing. Southport remains the commercial and sport fishing center of the county.

Office

There has been a trend in Southport to office development since 1976. The move of the County offices actually made a large amount of office space available; however, most of those offices remain vacant today, indicating a lack of demand.

Recreation

As a result of public demand for increased recreation facilities and programs, Southport has added significantly to its recreation facilities and programs. This demand only exemplifies the national trends toward spending more leisure time in various recreational activities, and the consequent demand for such.

There is also increasing concern for the preservation of historic and archeological sites in the Southport area. Such preservation accompanied by national recognition is believed to be an important commercial aspect for the city

Agriculture, Forestry, Fisheries

The loss of land in this category to urban land use development is a predominent trend throughout the country. Since extreme losses are concerns nationwide, Southport should monitor closely any changing land uses in its jurisdiction.

Owing to recent economic development pressure and urban sprawl, this category is likely to experience the greatest transformation in the future. Land that is owned by individual property owners but not forest product companies is more susceptible to this pressure. Thus, it is important that agricultural and forestland conversion to urban land be given careful review so that new uses will be compatible. An example is best illustrated by the construction of the Pfizer plant which was previously an area of agriculture and forestry. These "pressures" will be exerted to develop lands between pfizer and Southport, thereby contributing to further urban sprawl and inefficient utility service.

Transportation, Communication and Utilities; Public Institution; Private Institution

The substantial population growth in the Southport area during the past decade has increased demand for public and private facilities and services. More demands are made of the government institutions, schools, organizations, churches nursing and health care centers. As residential and commercial development continues, police and fire protection must increase as well as water and sewage facilities.

Currently, the most pressing problem Southport will face with population growth is and overload for the existing sewage treatment facility. It is currently operating at near full capacity. The sewage system operating in Southport will have to be improved upon with the prospect of increased demand.

Other facilities and services are discussed in the Assessment of Southport's Past Land Use Plan.

3. EXISTING AND PROPOSED SERVICES AND FACILITIES

Water Facilities

Water System

The water supply for Southport consists of three wells which tap the Tertiary System Aquifer. The wells are about 175 feet in total depth and collectively yield 700 gallons per minute. On a 12-hour demand schedule, this system could provide 504,000 gallons per day (pumping capacity). According to the Southport Land Use Plan prepared in 1976, the water system was operating at 43 percent capacity, using an average of approximately 218,206 gallons per day.

In preparation of the Southeastern Brunswick County 201 Facilities Plan, 1977 water use records for the City of Southport were reviewed. A summary of the water consumption records for the city is presented in the following table. It shows that residential and commercial customers were using an approximate average of 264,055 gallons per day, or 55 gallons per day per capita. The water system was operating at 52.4 percent capacity.

Southport Water Use Records

1977 Water Use	Gallons	Rate (per day)	Per Capita
Residential and Commercial	96,380,125	264,055	55 gpd
Industrial	0	0	0
Total	96,380,125	264,055	55 gpd

Based on 1510 connections at 3.2 persons/connections

A review of the 1979 Southport water consumption records indicates that residential and commercial customers were using an approximate average of 291,550 gallons per day. The water system was operating at about 58 percent capacity in 1979.

Water Supply-Hydrogeology

An understanding of the hydrogeology of the area is the first step toward evaluating the availability, occurrence, and chemical quality of the groundwater supply in the planning area. The void spaces between the rock materials that underlie Southport constitute the reservoir in which the water is stored and the conduits through which the water moves. While a thorough examination of the geology and groundwater has not been completed at this time, there are pertinent facts that have been identified by the Regional Hydrologist with the North Carolina Department of Natural and Economic Resources. Rick Shiver, in a memorandum, reported the following analysis (September 1975).

"Although located in the Lower Cape Fear River Basin , Southport is not in a designated public water supply watershed since surface waters do not supply the city; class A2 surface waters are unavailable for use and hence groundwater resources supply all water needs.

Hydrogeologically, Southport is complex. A post-miocene aquifer exists between land surface and approximately 40 feet below land surface; this aquifer consists of sand and contains potable water under water table conditions. Below the post-miocene is the tertiary system aquifer, the primary source of Southport's water supply. Porus and permeable limestone provides the geologic framework in which excellent quality groundwater is stored under artesian or near conditions. The tertiary system aquifer is approximately 140 feet thick and extends from 40 feet below land surface and 200 feet below land surface. Probably, the post-miocene aquifer and tertiary system aquifer are hydraulically connected.

Between 200 feet below land surface and 1550 feet below land surface is the upper, middle, and low cretaceous system aquifer. Brackish groundwater is contained within unconsolidated sands under artesian and flowing artesian conditions. Basement hard rock is encountered at 1150 feet below land surface.

Groundwater recharge to the post-miocene aquifer by direct infiltration of rainfall is active in Southport. As the post-miocene aquifer is hydraulically connected to the tertiary system aquifer, recharge to the post-miocene aquifer results in effective recharge to the tertiary system aquifer.

Groundwater from the post-miocene aquifer is of potable quality and exists in significant quantity. Groundwater from the tertiary system aquifer is of excellent potable quality and is available in large quantities. However, it is suspected that the quality and quantity of groundwater from both aquifers is in jeopardy. It is suspected (but not yet substantiated) that Brunswick Steam Electric Plant CP&L canal, the inland waterway, and the dredge Cape Fear River are man-made activities which have allowed brackish water to enter the post-miocene aquifer and tertiary system aquifer.

Therefore, these suspected sources are responsible for initiating/ accentuating a salt water encroachment problem. To preclude further quantity and quality problems, man-made activities which would have detrimental effects on the aquifers should be avoided.

Southport is served by three wells which tap the tertiary system aquifer. The wells are nearly 175 feet in total depth and collectively yield 700 GPM. It is suspected that these wells are now beginning to exhibit a quality problem related to salt water encroachment; and, hence, deserve close quality monitoring. To date, quantity of water is not a problem and with future reasonable use should not present a problem.

In summary, the aquifers of significance are the post-miocene and tertiary system aquifer. Past man-made activities are suspected to have resulted in quality problems in both aquifers. It is vital that future activities avoid additional quality impairment. Quantity of groundwater is not now a problem and future quantity problems are not anticipated, assuming reasonable use. Southport's impending use of central supplies precludes a lengthy discussion on future water planning."

Sewage-Facilities

Southport is the only area served by a municipal wastewater collection and treatment system within Southeastern Brunswick County. Constructed between 1965 and 1974, the existing system serves most of the presently developed area within the city limits.

The collection system consists of approximately 96,000 feet of eight inch gravity sewer of both concrete and clay construction with a total of about 275 manholes. A total of seven pumping facilities operate prior to final discharge into the wastewater treatment plant located on West Street. An infiltration/inflow analysis, conducted as part of the preparation of the Southeastern Brunswick County 201 Facilities Plan (1978), indicated a maximum infiltration rate of approximately 637 gallons per day, per inch-mile of pipe, and an inflow rate of 48,000 gpd/mile. According to Environmental Protection Agency guidelines and professional engineering standards, these infiltration/inflow rates are not considered excessive. It was noted during this rate analysis that a standby source of power is needed at several pumping stations, particularly at the facility on Bay Street which carries flow from a large portion of the city to the treatment plant.

The existing wastewater treatment plant serving Southport was constructed in 1965. It has a design capacity of 300,000 gallons per day, or 0.30 mgd, and employs a contact stabilization process of biological treatment. The chlorinated effluent is discharged to Cottage Creek, a tributary of the Intercoastal Waterway. Sludge disposal is accomplished by aerobic digestion and on-site drying beds.

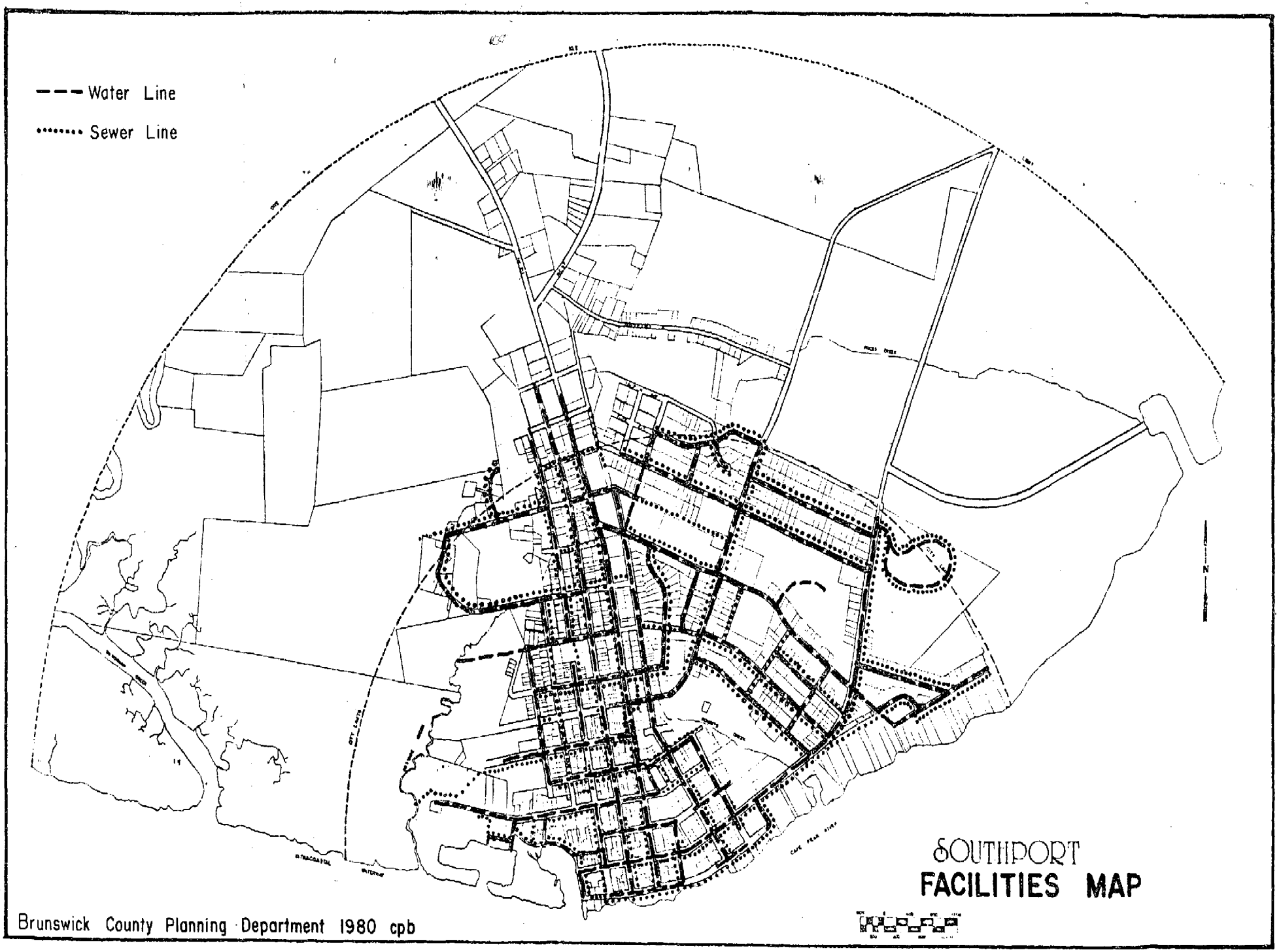
All waste treated at the plant is either residential or commercial. There are no industrial discharges to the system. A population of 3,136 people is being served According to a study in preparation for the Southeastern Brunswick County 210 Facilities Plan, the treatment plant achieves acceptable secondary treatment of a flow of approximately 0.28 mgd. These figures indicate that the sewage system is currently operating at 94 percent capacity.

Major industries in the area, including Pfizer and Standard Products, provide their own wastewater treatment capable of meeting effluent criteria.

It should be noted that the ratio of the water supply pumping capacity (504,000 gallons per day) to the treatment facility capacity (3000,000 gallons per day) is below the norm. (The capacity figures were taken from the 1975 Southport Land use Plan.) The ratio for Southport is about 0.6 or 60 percent, while the norm is about 85 percent in a range from 70 to 95 percent. This difference may be due to an extraordinary loss of water that does not flow to the treatment plant.

The City of Southport is included in the planning area for the joint treatment facility being designed for Southeastern Brunswick County. It is anticipated that the Southport population will be served 100 percent (summer and winter season) during both Phase I and II of the treatment and transmission facility construction period.

Forecasts of wastewater flows were calculated for Southport in preparation of the 201 Facilities Plan. The following tables show predicted flow levels for 1990 and 2000.


Water Line
Sewer Line
N
SOUTHPORT
FACILITIES MAP
Brunswick County Planning Department 1980 cpb

1990 Forecast of Flow

	Population Total	Population #Served	Flow 60 gpd	Non-Excessive Extraneous Flow (gpd)	Non-commited Industrial flow (gpd)	Total Flow (gpd)
Summer	4863	4863	291,780	130,000	42,178	463,958
Winter	4562	4562	273,720	130,000		445,898

2000 Forecast of Flow

	Population Total	Population #Served	Flow 60gpd	Non-Excessive Extraneous Flow (gpd)	Non-committed Industrial Flow (gpd)	Total Flow(gpd)
Summer	5996	5996	389,740	149,900	53,964	593,604
Winter	5665	5665	368,225	149,900		572,089

Federal level budget problems and restraints, however, are holding up funding for the start of this construction, at the present time. This may prove to be a problem for Southport, since its existing sewage treatment facility is operating at 94 percent capacity. If the construction of the county project is delayed for an additional two to three years, the City of Southport may consider the option of with drawing from the Southeastern Brunswick County 201 Facilities Plan in order to expand its own treatment facilities to accomodate growth.

At this time, it is not clear which option the City of Southport may choose. Since any projection of expansion requirements amy depend on the option chosen, the Brunswick County Planning Department has not been able to determine expansion projections for the present planning period.

Transportation Facilities

According to the Highway Capacity Manual the practical capacity for two lanes plus parking for two way traffic is 5,700-8,200 vehicles per day. Capacity is defined as the maximum number of vehicles which has a reasonable expectation of passing over a given section of a lane or a roadway in both directions during a given time period under prevailing roadway and traffic conditions. Based on this standard, the only thoroughfare in the Southport Planning area which warrants improvement is North Howe Street at the city limits. This street is on the State Highway System (G.S. 136 - Article 3A) and in 1974 had an average daily traffic count of 8850 vehicles per day. However, there are other factors (i.e., design, cost, traffic generators, accident frequency, origin-destination studies, etc.) besides capacity analysis which must be considered before alterations are made.

Brunswick County adopted a detailed thoroughfare plan prepared by the N.C. Department of Transportation, Division of Highways in 1978. Major roads of Southport and the vicinity were included in the Thoroughfare Plan. For a summary of how the plan affects Southport, see the Assessment of Past Land Use Plan previously in this text.

Educational Facilities

There are three educational facilities administered by the Brunswick County Board of Education which serve the Southport Planning area. The City of Southport actually has little or no authority with regard to school policies. There are two schools within the city limits of Southport: Southport Primary School located on West George Street and Southport Middle School located on 8th Street. South Brunswick High School is located near Boiling Springs Lakes.

The three facilities are:

Southport Primary K-4
Design Capacity: 600 pupils
1979-80 Enrollment: 336

Southport Middle School 5-8
Design Capacity: 500 pupils
1979-80 Enrollment: 762

South Brunswick High School 9-12
Design Capacity: 750 pupils
1979-80 Enrollment: 735

Note: Design capacities were taken from the 1976 Southport Land Use Plan. Enrollment figures were reported by the Brunswick County Board of Education.

At present, a new middle school is being constructed near the South Brunswick High School location. No additional plans have been made for the existing Southport Middle School facility when the new school is completed.

Other Services and Facilities

The City of Southport provides the following services and facilities to its residents: City Hall, police and fire protection, public library, water and sewer service, electric distribution service, recreation, refuse collection and disposal, streets, city garbage, cemeteries, street lighting and signs. Of those services and facilities, the following were recommended for major improvement in 1976: fire protection improvement by obtaining a class 7 rating; water and sewer service capacity and extension improvement; acquiring adequate and highly desirable recreational areas.

To date, Southport has not acquired a class 7 rating. This is mainly because they still have a completely volunteer fire department. At present, Southport has a class 8 rating. Interest still continues in the class 7 rating because of the improvement in fire protection services necessary to obtain the rating and also because of the reduction in fire insurance rates it brings.

Since 1976, Southport has added a great deal to its recreation facilities. Since that time a little league field, a multi-use basketball court, a mini park, and two tennis courts have been developed. Property for a waterfront park has also been acquired. A grant for development of the park was secured from the North Caroli Department of Community Development and Natural Resources, and it is planned to be completed by 1981.

Residents of Southport are served by two hospitals for health care. In 1978 the Brunswick County Hospital located in Supply was completed to serve all county residents. During its construction, many Southport citizens were concerned that its development would force the closing of Dosher Hospital located in the City. The hospital, however, remained operating despite the loss of county funds in 1977. Revenue for its operation is obtained through a special assessment in Smithville Township of an extra 4 cents per $100 valuation. This revenue also allowed the new addition to be constructed which will provide more modern facilities, rather than increase capacity. Because of the support of the people of Southport and surrounding Smithville Township, Dosher Hosiital will remain an intrical part of the community.

Southport also has services and facilities to benefit the large portion of elderly in it community. There is a senior citizens center in Southport which is located in the old marineology building. It offers a common meeting place for socializing as well as free meals, movies, various table games, and table tennis. A bowling team has also been organized for Southport's senior citizens and is just now getting started.

A second senior citizens center which is available to the elderly of Southport is the center which recently opened in Shallotte. This center is located in the old health building in Shallotte. It offers free meals as well as a wide variety of recreational opportunities and transportation services to the center. It is hoped that the center will eventually provide information and guidance services as well. Transportation services to the center are provided to senior citizens in out lying areas where there is a lack of facilities for the elderly.

The elderly of Southport are also eligible for in-home services provided by the County.

PART 4: LAND CLASSIFICATION DEVELOPMENT

SOUTHPORT

CONSTRAINTS ON DEVELOPMENT

II. SOIL SUITABILITY ANALYSIS

Introduction

This is an analysis of the general suitability of Southport soils for use as future sites for development. All of the Town's soils are classified as having some degree of physical limitations for future development. This analysis uses a general site map of the City and locates those soil associations with natural properties that are not well suited for development. The analysis discusses each soil and its interpretation. This analysis is essentially a guide and aid in the preparation of a land classification map. The maps and analysis are useful guides in planning residential growth, engineering works, recreational facilities and community projects. This is not a suitable analysis for planning and management of a specifiec residence or lot, or for selecting exact locations for building roads, etc., because the soils in any one association ordinarily differ in slope, drainage, depth and other characteristics that could affect their management.

The Outer Banks S.C.S. Soil Survey was used to develop the soil analysis sections for each association. The soil productive areas were identified by following certain established criteria. Agricultural lands were mapped according to capability class ratings from the S.C.S. which is explained in the text. Productive forest lands were separated according to the site index of the associations with only those of high value being mapped. Loblolly pine was used as the reference species.

Soil Conditions

This section of the report groups together various soils associations having similar soil properties and thus interpretes their natural soil condition as having either resource potential or specific development limitation. The soil ratings are determined on this basis. Such interpretations encompass certain established tests to each soils physical and chemical properties. They are as follows:

1) Soil Horizons- depth in inches of the major soil strata from surface to subsurface soils. This is used to determine relative depth to water table and the soils chemical properties.

2) Texture- based on the relative amounts of sand, silt, and clay in a soil, giving rise to testured classes such as sand, sandy loam, loam, clay loam, and clay.

3) Particle Size- based on the single soil unit and relates to shrink-swell potential, plasticity, and bearing capacity.

4) Permeability- that quality of a soil that permits the movement of water and air. Estimates of the range of permeability is the rate of time it takes for downward movement of water in the major soil layers when saturated, but allowed to drain freely.

5) Soil Structure- the arrangement and compaction of individual soil particles into the basic soil building blocks.

6) Available Water Capacity- the ability of soils to retain water for plant use.

7) Soil Reaction or ph- the degree of acidity or alkalinity of a soil.

Suitability Map Key

Southport

Sources: Soil Survey of the Outer Banks, North Carolina, Part I.

United States Department of Agriculture Soil Conservation Service in cooperation with North Carolina Department of Natural and Economic Resources and North Carolina State University Soil Science Department, June 1977.

Federal Insurance Administration, flood zone designation.

The soil types indicated on the soil map were rated for bearing capacity and septic tank filter field capacity. Bearing capacity is a soil limitation rating for dwellings based on soil properties that affect foundations. Considerations are also made of slope, susceptibility to flooding, seasonal high water table, and other hydrologic conditions in rating the soils. Septic tank filter field capacity is a rating based on soil properties that limit the absorption or treatment of effluent. These properties include: slope, susceptibility to flooding, presence of a seasonal high water table, and permeability of the subsoil and underlying material. Past performance of existing filter fields is also important in determining the suitability of a site for the installation and design of a ground absorption sewage disposal system.

Each rating has a different meaning. These are indicated below.

Slight: Soil properties are generally favorable for the stated use, or limitations are minor and can be easily overcome.

Moderate: Some soil properties are unfavorable, but limitations resulting from the properties can be overcome or modified by special planning, good design and careful management.

Severe: Soil properties are unfavorable and resulting limitations are too difficult to correct or overcome. Soil will require major soil reclamation or special design for stated uses. This rating, however, does not imply the land cannot be used.

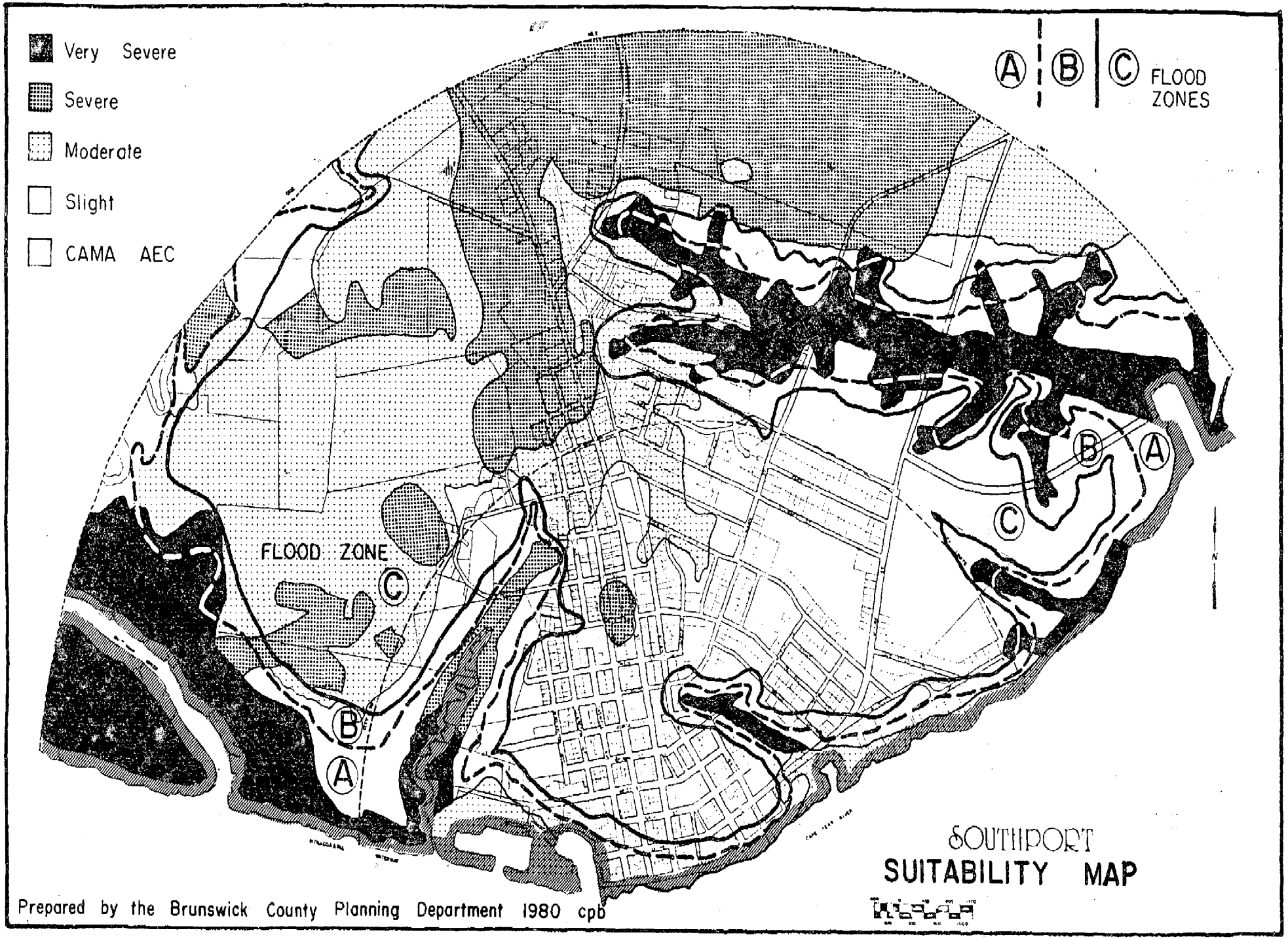
Very Severe: This rating is a subdivision of the severe rating and has one or more features so unfavorable for the stated use that the limitation is very difficult and expensive to overcome. Reclamation would be very difficult, requiring the soil material to be removed, replaced, or completely modified. This rating is confined to soils that require extreme alteration and, generally, are not used for dwellings and septic tank fields.

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-yr. flood). Land uses must comply with standards of the Federal Insurance Administration.

The flood zone designations used on the suitability maps are those accepted by the Federal Insurance Administration. Flood zone A includes areas between the limits of the 100-year flood and 500-year flood boundaries.

The CAMA Areas of Environmental Concern for Southport include Estuarine Waters, Estuarine and River Erodible Areas, and Coastal Marshland. Estuarine Waters are formally defined as,"all the water of the Atlantic Ocean within the boundary of North Carolina and all waters of the bays, sounds, rivers, and tributaries there to seaward." Estuarine and River Erodible Areas are areas subject to excessive erosion. They are defined as the areas above ordinary high water where excessive erosion has a high probability of occurring. In determining the landward extent of this area, a reasonable 25-year recession line is established using the best available information. Appropriate uses for this land include recreation, conservation, and easements for access. Land Uses that are not appropriate include permanent or substantial residential, commercial, institutional, or industrial structures. These uses should be discouraged in future development.

The Coastal Marshland area in Southport is marshland which is not low tidal marshland. Appropriate land uses for this area are those which will not alter natural functions. Examples of acceptable land use may include utility easements, fishing piers, and docks.


Very Severe
Severe
Moderate
Slight
CAMA AEC
A B C FLOOD ZONES
FLOOD ZONE
C
B
A
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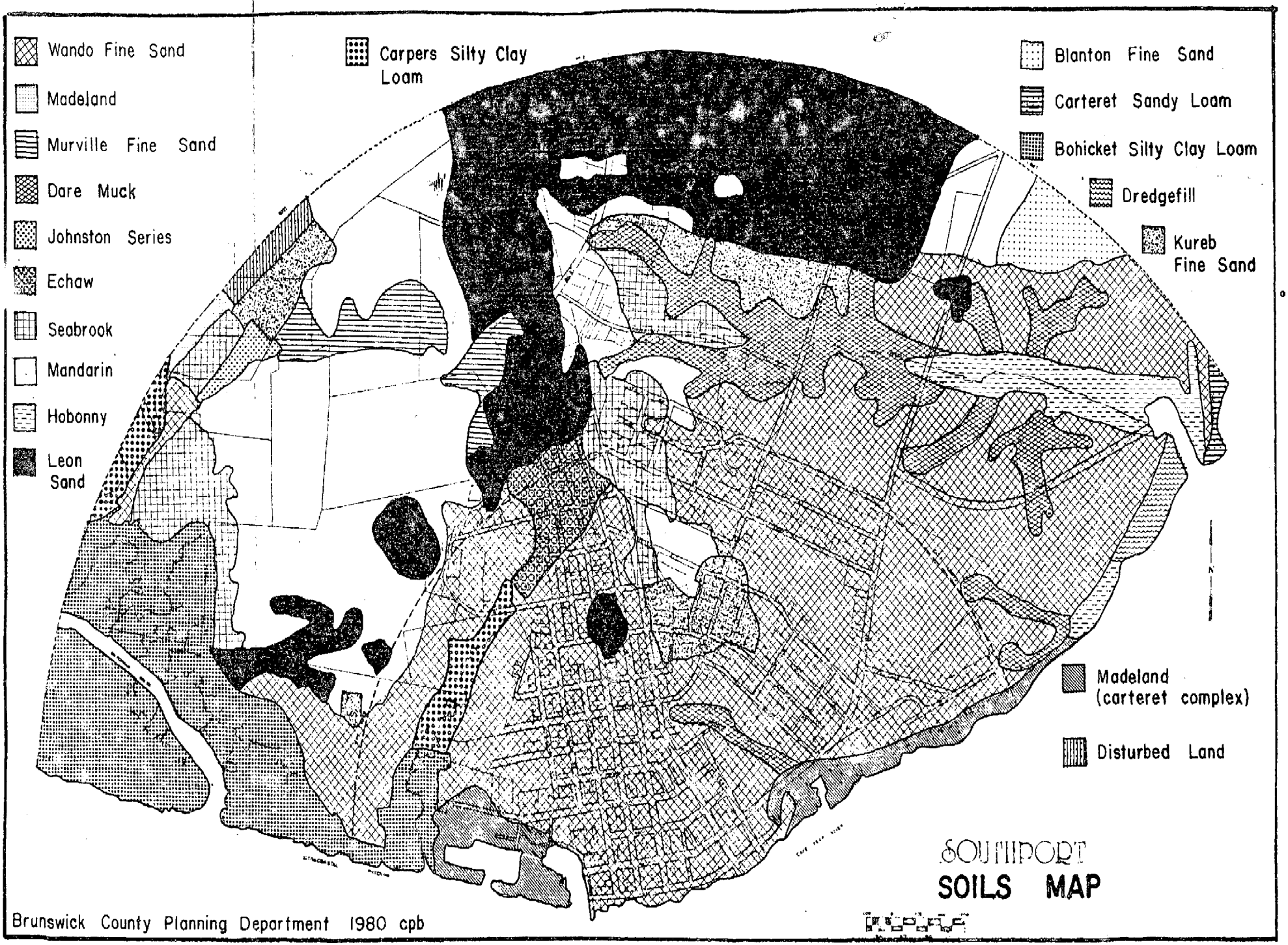
A
C
SOUTHPORT
SUITABILITY MAP
Prepared by the Brunswick County Planning Department 1980 cpb


Wando Fine Sand
Madeland
Murville Fine Sand
Dare Muck
Johnston Series
Echaw
Seabrook
Mandarin
Hobonny
Leon Sand
Carpers Silty Clay Loam
Blanton Fine Sand
Carteret Sandy Loam
Bohicket Silty Clay Loam
Dredgefill
Kureb Fine Sand
Madeland (carteret complex)
Disturbed Land
SOUTHPORT
SOILS MAP
Brunswick County Planning Department 1980 cpb

Soils in the Slight Category:

Wando fine sand

The soils are sandy and excessively drained. Rapid permeability is characteristic, as are drought conditions. Depth to high water table is greater than six feet. There is no flooding of the soils. In a representative profile, the surface layer is dark brown loamy fine sand eight inches thick. Slopes range from zero to six percent and the soils are found on the lower coastal plains.

Kureb fine

The soils are sandy and excessively drained. Permeability is rapid and depth to high water table is over six feet. There is no flooding. A sample profile shows a surface layer of dark gray sand, three inches thick. The soils are found on broad undulating ridges and short side slopes of the tower coastal plains.

Soils in the Moderate Category:

Johnston series

The soils are very poorly drained and consist of extremely fine sand with excess organic materials. Typically, the surface layer is black mucky loam, 30 inches thick. Permeability is moderate to rapid. Depth to high water table is about one foot and flooding is frequent. The soils are found on nearly level flood plains of the coastal plain with slopes ranging from zero to two percent.

Echaw

The soils are sandy throughout and permeability is rapid. Depth to high water ranges from two and one half to five feet. There is no flooding and the soils are droughty during dry periods. The surface layer is composed of gray fine sand. Level to gently sloping, the soils are on low ridges and islands.

Blanton fine sand

The soils are sandy and moderately well drained. Permeability is rapid. Depth to the high water table is greater than six feet. In a representative profile, the surface layer is gray fine sand about nine inches thick. There is no flooding. With slopes ranging from zero to twelve percent, the soils are generally found in the coastal plain.

Madeland(Carteret complex)

See Madeland soil above for a general description. These soils are primarily of the Carteret variety and are characterized by poorly drained sandy soils, very rapid permeability, and frequent flooding (if located in tidal marshes). The sand is typically gray in color.

Dredgefill

These soils are the result of dredging maintenance of the Intercoastal Waterway. Most areas are composed of sand and shells. The soils are generally droughty because of the coarse texture.

Mandarin

The soils are sandy and somewhat poorly drained. Permeability is rapid and depth to high water table is one and one half to three and one half feet. Typically, these soils have gray fine sand surface layers with slopes from zero to two percent. The soils are found on areas slightly higher than the adjacent flatwoods and do not experience flooding.

Seabrook

Thi soils are sandy and moderately well drained. Permeability is rapid and depth to high water table ranges from two to four feet. The surface layer is a dark grayish brown loamy fine sand about nine inches thick. There is no flooding, and slopes are less than two percent. The soils can be found on the lower coastal plain.

Soils in the Severe Catogory:

Madeland

These soils have been pumped up or dredged during construction of canals and has been deposited between the canals for building site use. Essentially, it has been deposited over marsh. Average soil thickness is from three to six feet and water table fluctuates with changes in the tide level. It is mainly sandy with varying amounts of shell fragments.

Murville fine sand

The soils are sandy and very poorly drained. Permeability is rapid. Wetness is characteristic of the soil and depth to high water table ranges from zero to one foot. The surface layer is black fine sand about eight inches thick. Flooding is rare since the soils are located on flats or in slight depressions on coastal plain uplands. Slopes are generally less than two percent.

Leon sand

The soils are sandy and poorly drained. Permeability is rapid to moderate and the depth to high water table ranges from ten to forty inches. The surface layer is composed of partly decomposed organic materials and light gray sand. The soils are nearly level to gently sloping and occur in the lower coastal plain. Depressional areas are ponded.

Carpers Silty Clay loam

The soils consist of very poorly drained soils having a dark brown silty clay surface layer about 16 inches thick. Permeability is slow and depth to high water table is near or at the surface. The soils contain decomposed organic matter and characteristically wet. Flooding is frequent. With slopes of less than one percent, the soils are found in the tidal marshes.

Soils in the Very Severe Catogory:

Carteret sandy loam

The soils are sandy and very poorly drained. Permeability is moderate to slow and depth to high water table is one to over three feet. Flooding is frequent. In a typical profile, the surface layer is dark grayish-brown and dark gray loamy sand to a depth of ten inches. With slopes of zero to two percent the soils are found in the tidal marshes.

Dare Muck

The soils consist of extremely acid organic soils and are characteristically wet. They contain black, dark reddish brown, and very dark brown highly decomposed organic materials. Permeability is slow to moderate and flooding is frequent. High water table is near the surface, generally. The swampy soils are found in the lower coastal plain and have slopes less than one percent.

Bohicket silty clay loam

The soils consist of very poorly drained soils with a surface layer of dark gray silty clay loam. Permeability is slow and depth to high water table ranges from zero to over three feet. The soils are characteristically wet and experience frequent flooding by sea water, being located in the tidal marshes.

Hobonny

The soils consist of very fine sand and organic materials. They are poorly drained and experience frequent flooding. Depth to high water table is near or at the surface. Permeability is slow. In a representative profile, beneath about two inches of silty clay loam material, it is dark reddish brown organic materials that are highly decomposed to a depth of 90 inches. Found on the lower coastal plain, the soils have slopes less than on percent.

Southport Soil Suitability Acreage

Soil Rating	Total Acreage In Town	Percentage	Total Acreage Exterritorial	Percentage	Combined Total	Percentage
Slight	707.1	56.9	98.5	4.1	805.6	22.1
Slight	127.7	10.3	170.3	7.1	298.0	8.2
Flood Zone A Slight	143.9	11.6	143.1	6.0	287.0	7.9
Flood Zone B Moderate	170.5	13.7	570.4	23.8	740.9	20.4
Severe	40.2	3.2	741.7	30.9	781.9	21.5
Very Severe	52.8	4.3	674.4	28.1	727.2	19.9
Total	1242.2	100.0%	2398.4	100.0%	3640.6	100.0%

Fragile Areas

In addition to items included on the Southport Soil and Suitability Maps, items on the Southport Fragile Areas Map were considered in determining the physical suitability for development and land use. Included on the map are environmentally fragile areas, public trust areas, cemeteries, and areas of historic and archeologic significance.

Environmentally fragile areas are known as Areas of Environmental Concern (AECs). These areas need protection, and CAMA permits are required in order to construct or build in the AEC. In Southport the AECs are classified as Coastal Wetlands, Estuarine Waters, Estuarine and River Erodible Areas, Areas Subject to Public Rights.

Coastal Wetlands

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. (Soil Conservation Service An Appraisal of Potentials for Outdoor Recreational Development). Coastal Wetlands may be subdivided into two categories: low tidal marshland and all other coastal marshland. Low tidal marshland is defined to consist primarily of Spartina Alterniflora and to be subject to inundation by the normal rise and fall of lunar tides.

The marsh is the basis for the high yeild system of the estuary through the production of organ detritus (partially decomposed plant material) which is the prime input source for the food chain of the entire estuarine system. In addition, the roots and rhizomes of the Spartina alterniflora serve as waterfowl food and the stems as wildlife nesting material. Low tidal marsh also serves as the first line of defense in retarding shoreline erosion. Other coastal marshland contributes to the detritus supply and provides quality wildlife and waterfowl habitat depending on the biological and physical conditions of the marsh. (Coastal Resources Commission, "State Guidelines for Local Planning . . ." January 27, 1975 page 51.)

Appropriate land uses are those which do not significantly alter the natural functions of the marsh. Inappropriate land use include, but are not limited to the following examples: restaurants and businesses; residences, apartments, motels, hotels, and trailer parks; parking lots and offices; spoil and dump sites; wastewater lagoons; public and private roads and highways; and factories. Examples of acceptable land uses may include utility easements, fishing piers, docks, certain agricultural uses except when excavation or filling affecting estuarine or navigable waters is involved, and such other uses which do not significantly alter the natural functions of the marsh.

The higher marsh types offer quality wildlife and waterfowl habitat depending on the biological and physical conditions of the marsh. The vegetation diversity in the higher marshes usually supports a greater diversity of wildlife types than the limited habitat of the low tidal marsh. This marshland type also serves as an important deterrent to shoreline erosion especially in those marshes containing heavily rooted species. The dense system of rhizomes and roots of Juncus roemerianus are highly resistant to erosion. In addition, the higher marshes are effective sediment traps.

Appropriate land uses are those which function to preserve and manage the marsh, so as to safeguard and perpetuate their biological, economic, and aesthetic values. Highest priority shall be allocated to the conservation of existing marshlands. Second priority for land uses allocation of this type shall be given to development which requires water access and cannot function anywhere else, such as prots, docks and marinas, provided that the actual location of such facilities within the marsh considered coastal, physical and biological systems and further provided that feasible alternatives regarding location and design have been adequately considered and need for such development can be demonstrated. Such allocation may only be justified by the projected land use demands and by community development objectives, but in no case shall the allocation exceed the capacity of the marshland system to sustain losses without harm to the estuarine ecosystem unless the losses would be offset by a clear and substantial benefit to the public.

The marsh near Southport provides good clapper rail shooting but public hunting opportunities for waterfowl in general are poor. Most waterfowl hunting is done on private property along the Cape Fear River. Except for a few marsh areas along the Cape Fear River and the coast and some swamp in the Waccamaw and Cape Fear River basins, the development potential for waterfowl in the county is poor.

Estuarine Waters

Estuarine waters are defined in G.S. 113-229 (n)(2) as, "all the waters of the Atlantic Ocean within the boundary of North Carolina and all the waters of the sounds, rivers, and tributaries thereto seaward of the dividing line between coastal fishing waters and inland fishing waters, as set forth in an agreement adopted by the Wildlife Resources Commission and the Department of Conservation and Development filed with the Secretary of State entitled "Boundary Lines, North Carolina Commercial Fishing - Inland Fishing Waters, revised March 1, 1965."

Estuaries are among the most productive natural environments of North Carolina. They not only support valuable commercial and sports fisheries, but are also utilized for commercial navigation, recreation, and aesthetic purposes. Species dependent upon estuaries such as menhaden, shrimp, flounder, oysters and crabs make up over 90% of the total value of North Carolina's commercial catch. These species must spend all or some part of their life cycle in the estuary. The high level of commercial and sport fisheries and the aesthetic appeal of coastal North Carolina is dependent upon the protection and sustained quality of our estaurine areas.

Appropriate uses are those which preserve and manage estuarine waters so as to safeguard and perpetuate their biological, economic, and aethetic values. Highest priority shall be allocated to the conservation of estuarine waters. The development of navigational channels, the use of bulkheads to prevent erosion, and the building of piers or wharfs where no other feasible alternative exists are examples of land uses appropriate within estuarine waters, provided that such land uses will not be detrimental to the biological and physical estuarine functions and public trust rights. Projects which would directly or indirectly block or impair existing naviation channels, increase shoreline erosion, deposit spoils below mean high tide, cause adverse water circulation patterns, violate water quality standards or cause degradation of shellfish waters are generally considered incompatible with the management of estuarine waters.

Estuarine and River Erodible Areas

Estuarine and river erodible areas are natural hazard areas. They are 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 is determine using the best available information.

Appropriate land uses for this land include recreation, conservation, and easements for access. Land uses that are not appropriate include permanent or substantial residential, commercial, institutional, or industrial structures. These uses should be discouraged in future development.

Areas Subject to Public Rights

Areas subject to public rights are defined as areas such as waterways and lands uner or flowed by tidal waters or navigable waters, to which the public may have rights of access or public trust rights and areas which the State of North Carolina may be authorized to preserve, conserve, or portect under Article XIV, Section 5, of the North Carolina Constitution. Appropriate land uses for these areas are those which do not interfere with public rights of navigation. The development of navigational channels, drainage ditches, the use of bulkheads to prevent erosion, and the building of piers or wharfs are examples of land uses appropriate within public trust waters provided that such land uses will not be detrimental to the biological and physical functions and public trust rights. Projects which would directly or indirectly block or impair existing navigation channels, increase shoreline erosion, deposit spoils below mean high tide, cause adverse water circulation patterns, violate water quality standards, or cause degradation of shellfish waters are generally considered incompatible with the management of public trust waters.

Southport recognizes other environmentally fragile areas such as wooded swamps and prime wildlife habitats particularly along Dutchman Creek and Price's Creek. One notable scenic area is along the Cape Fear River west bank.

Development Standards Applicable to all AECs

No development should be allowed in any AEC which would result in a contravention or violation of any rules, regulations, or laws of the State of North Carolina or of local government in which the development takes place.

No development should be allowed in any AEC which would have a substantial likelihood of causing pollution of the waters of the State to the extent that such waters would be closed to the taking of shellfish under standards set by the Commission of Health Services pursuant to G.S. 130-169.01.

Archeological Sites

The Southport area also contains one known archeological site, and it is important to take note of its location in the planning process to insure it is not adversely affected by new development.

Archeological resources are objects and/or areas made or modified by man and the data-associated with these artifacts and features. These resources rest in or on the ground. Any alteration of the land destroys the associated information and endangers the artifacts themselves. Although most of the known archeological sites in Brunswick County have not been evaluated for their significance, a majority are suspected to have been temporary camp locations used by early Indians for the purpose of shellfish harvesting. But until these sites can be properly evaluated by a competent archeologist, care should be taken to preserve them. However, archeological sites need not be a deterrent to development. The significance of their location in the planning process is to encourage their evaluation before any development is allowed to occur which might harm or destroy them. The government requires all known archeological sites to be evaluated before construction begins on any project financed in whole or part with State or Federal money. Ideally, all sites should be evaluated before construction begins, regardless of the source of funding.

Historical sites

Historical sites and areas are abundant in the Southport area. They too need to be included in the planning process to avoid adverse effects of development which may destroy the site or the significance of the site. Historical sites can be an important asset in the community, especially for its tourist industry.

It is therefore recommended that the joint Southport - Brunswick County Historic Preservation Commission renew their activity to develop the means necessary to protect these important historical resources.

Historic Sites are unique and non-renewable educational resources which owe their importance to associations with American history, archeology, architecture and culture of the past. These valuable resources constitute an integral part of the human environment by showing the integrity of past generations which in turn develops a special character for Southport and Brunswick County.

The following list of historic places in the Southport area corresponds to places designated on the Southport Fragile Areas map. The information was compiled from these sources: North Carolina Division of Archives and History, County Historic Site Inventory; Brunswick County Historic Society; The Bald Head Island Gazette, M.A. Page, "Southport Scenic Driving Town," 1975; and Brunswick Town Historic Site Manager, 1972.

Southport Historic Sites

Fort Johnston - The Garrison
location - Bay Street
description - The Garrison housed his majesty's troops from 1745-1764; burned by Whigs 1775, rebuilt in 1794-1809
present use - residence of commanding officer of Sunny Point

St. Phillips Episcopal Church

location - Courthouse Square
description - first established in Brunswick Town in 1754; present structure was erected in 1851; original furnishings are in evidence

Old Southport Cemetery

location - Moore Street
description - dates from 1760
present use - Southport landmark

Frying Pan Lightship

location - foot of Howe Street
description - ship guarded Fry Pan Shoals; built in 1929, replaced in 1964 by light tower, given to Southport by United States Coast Guard.
present use - Southport landmark

Brunswick County Courthouse

location - Courthouse Square on Moore Street
description - third location but not the last, erected in 1842

Whittler's Bench

location - foot of Howe Street
description - orginally a Lombardy Poplar and two ancient gnarled cedars formed popular shady spot for sailors and townspeople to congregate.

Old Thompson House

location - Bay Street
description - example of widow's watch used to scan horizon for returning ships or planning voyages; once owned by Captain Thomas M. Thompson, who collected treasures from over the world; he was also famous Civil War blockage runner
present use - private residence

Franklin Square - "The Grove"

location - Howe Street
description - land bequeathed to town by Governor Benjamin Smith for educational, fraternal, religious, and recreational purposes; contains an old hand water pump

City Hall

description - stately colonial structure looks out upon Franklin Square; built in 1904 by Masonic Lodge; it has functioned as a school, American Legion Hut, community center and now seat of Town Government

"Four Sisters"

description - a rare arrangement of canopying giant live oaks hundreds of years old, directly behind City Hall

Prices Creek Lighthouse

location - 2 miles north of Southport on Cape Fear River
description - brick runins largely intact built in 1849 as a range light, taken over by South in 1861 used as telegraph signal station; after Civil War abandoned; Pfizer, Inc. plans to restore

Price-Davis Family Cemetery

location - West Street behind First Apostolic Church
description - secluded old burying ground

Indian Trial Tree - Keziah Park

location - corner of Moore and Lord Streets
description - ancient and gnarled live oak is estimated to be over 800 years old; Belieyed that Indians bent this tree marking route to fishing grounds reported in Ripley's Believe It or Not; Named in honor of W. B. Keziah known as "Mr. Chamber of Commerce"

Old Southport Hospital

location - Atlantic Avenue and West Street
description - moved from North Bay Street sometime after Civil War; used as first real hospital reported to be the oldest remaining building in Southport prior to 1790's
present use - private residence

Bonnet's Creek

location - East Moore Street
description - Stede Bonnet, supposedly "Gentleman Private" hid his vessel The Royal James, here; Bonnet's lady love lived in Southport; she reportedly buried her diary here; this controversial pirate was captured November 8, 1718 by Colonel William Rhett, and died on the gallows with a handful of followers in Charleston, South Carolina

Old Brunswick County Jail

location - S W corner Moore and Rheit streets
description - second oldest jail in the state
built in 1865

Old Brunswick Inn (Arrington House)

location - Atlantic Avenue and Bay Street
description - two story framehouse, dating from 1830, with Greek Revival exterior and interior details, considered haunted
present use - private residence

Harper House

location - north corner of Bay and How streets
description - two story frame house, with square pillars extending the full height of the first and second floors

House - - - 111 Bay Street

location - Bay street
description - one story frame cottage with low hip roof pierced with two interior chimneys

House - - - 115 Bay Street

location - West corner of Bay and Davis Streets
description - two story frame house with pedimented roof

Art Newton House (Bellamy Summer House)

location - west corner of Bay and Atlantic streets
description - two-and-one-half story frame house, dating from about 1790, reportedly one of the oldest houses in Southport.

Southport Baptist Church

location - corner of Howe and Nash streets
description - brick church built in 1871, contains original furnishings

Annie May Woodside House

location - East Bay Street
description - two story frame house with Greek Revival interiors, mid-nineteenth century.

Ruark House

location - corner of Nash and Lord streets
description - home of Robert Ruark author of The Old Man and the Boy, a nostalgic account of his own boyhood in this house of his paternal grandparents.

Southport - Brunswick County Library

description - in early 1900's members of Southport woman's club establsihed a reading room that was to become the nucleus of the present day public library, completed in 1968.

Southport Boat Harbor

description - facility of State Ports Authority
present use - operates year-round to provide marine services and supplies to the public

The water front area of Southport is also known to contain structures of historic interest, which have not been specifically identified.

PRINCIPLES AND STANDARDS FOR FUTURE DEVELOPMENT

Depending on where a particular type of land use locates, it has economic, environmental, safety, and convenience affects on the surrounding land and society. For example, some locations are better for industrial uses than others. In order to provide for the most efficient and beneficial effect of a particular development, principles and standards can be used to guide it's location.

A principle is a general idealized relationship between a land use and the surrounding land and people. General principles relating to the location of land uses customarily identify three major functional areas in the urban complex: the work areas, the living areas, and the leisure time areas. Principles for each of the above areas are outlined in the following pages.

Standards are specific measurement units used to quantify the terms appearing in the statement of principles.

Standards are not absolute, but rather guides to be followed under average circumstances. For each of the three principle categories (work, living, & leisure time areas), standards are provided in several classes: environment; convenience; security; and performance.

In order to consistently and rationally review development proposals in and around Southport, the Board of Aldermen will use the following principles and standards. These principles and standards will form the basis of land use regulations and suggested amendments to existing regulations will be judged in relation with these statements.

In the case that a proposed development or some aspect of a proposed development is not covered by a law or ordinance, these principles and standards can be used by city elected and appointed officials as a foundation for negotiation with developers.

LIVING AREA - GENERAL CONSIDERATIONS

Residences are normally the largest users of land in the urban community. Most urban areas range from two-thirds to three-quarters developed for residential purposes. In a few cases, the proportion may run to 90 percent or more.

In designating areas for residential development, it is desirable to think in terms of whole neighborhoods and communities from the earliest stages of planning as opposed to individual subdivisions and apartment developments. By so doing, we can assure the proper relationship of residences to non-residential uses, and an efficient street and utility network, minimizing the possibility of later disruption of the residential environment for such things as major new roadways or unwarranted changes of land use.

Neighborhoods are primarily devoted to homes--single-family and multi-family-- and residentially oriented uses such as churches, elementary schools, neighborhood parks, and neighborhood shopping facilities. In their design, emphasis should be placed on tying these elements together by a system of collector streets

and pedestrian ways. Neighborhoods should be bounded but not crossed by major traffic arteries. Where possible, neighborhoods should be structured and linked to each other by permanent open spaces - stream valley parks, sharp topography, etc. The same general principles are true for the community: an indentifiable system of neighborhoods linked to each other by the transportation system and focused on the community center; bounded by major highways, landforms, institutional uses. etc.

LIVING AREA PRINCIPLES

1. Residential communities should be located in areas that are not extremely low, or poorly drained.

2. Where applicable, residential communities should locate in close proximity to major thoroughfares and the transit system with direct connections to work and leisure time areas. They should be bounded but not penetrated by major streets and internally served by a system of collector and service streets fitted to the terrain with due consideration of drainage, sunlight, and scenic views.

3. Local shopping facilities should locate on sites adequate for shops, accessory off-street parking and loading, and landscaping; convenient to specific local tributary trade areas and accessible for receiving goods.

    A. Neighborhood-serving stores should locate within convenient walking distance or driving distance (in low density areas), with due consideration for pedestrian access and the amenity of surrounding areas.

    B. Community-serving shopping centers should locate on major thoroughfares, at the intersection of a major crosstown street, or toward the edge of tributary trade area, with consideration for intergrated design of the center and amenities of surrounding areas.

4. Schools should locate on reasonably level sites, adequate for buildings, recreation facilities, and landscaping, and with due consideration of the safety of children as well as the amenity of surroundings.

    A. Upper-level schools should be within a convenient community range.

    B. Lower-level schools should be within walking distance of the age groups served, except in low density areas where convenient driving range rather than walking distance becomes crucial consideration.

5. Churches should locate on reasonably level sites, adequate for parking and landscaping, convenient to potential membership.

    A. For neighborhood-serving churches, walking distance is important.

    B. For community -serving churches, accessibility to major street systems is important.

6. Playground and park areas should be located on reasonably level sites, possibly in conjunction with schools, within easy walking distance of age groups served (or within convenient driving range for low density areas), and adequate for appropriate active recreation facilities and for surrounding planted strips. Quiet parks should locate on steep, level, or low sites and fingers of open space along water courses and in low areas, intergrated with active and passive recreation areas and the larger open space system of the city according to the opportunities offered by the topography of the locale.

7. A range of choice in residential densities should exist, with high densities in close proximity to permanent open space and nearest to the thoroughfare and transit systems and community shopping centers.

8. Different housing types and densities should be located with consideration of the potential for degredation of the environmentally sensitive areas and areas of high natural value.

9. Low cost housing should be located throughout the city, with various density levels available to low income persons in proximity to employment centers.

10. Residential development should be kept well away from airport approach zones and "runup" areas because of:

    A. Noise
    B. Crash hazards
    C. Likelihood of industrial growth near the airport.

    Since all three of these are likely to exert a detrimental effect on residences, the Federal Housing Administration will not insure home mortgages within defined areas around airports where these factors are present. Many conventional lending institutions now follow similar practices. Because locations near airports are extremely attractive to many industries, there is no real problem in finding alternatives to residential use.

LIVING AREA STANDARDS

Definitions:

1. High Density Residential = 8 Dwelling units or above per acre.
2. Middle Density Residential = 2 to 7 Dwelling Units per acre.
3. Low Density Residential = 1 Dwelling Unit per acre or less.
4. Low-Low Density Residential = 1 Dwelling Unit per 2-5 acres.

Environmental Location Standards

1. Areas that are wooded and have interesting topography and views should be utilized for residential purposes.

2. Low-Low Density Residential should be the only density development in headwater areas of the water supply reservoirs.

3. All housing with a density greater than 1 dwelling per acre should be served by a public sewerage system.

4. Low density housing utilizing on-site disposal methods for sewage (septic systems) shall be located in areas with soils that have a minimum percolation rate of 1" per hour and of generally well established good permeability.

5. Construction of new housing with density great enough to require sewer line extensions shall be located in areas where the stormwater run-off will not cause pollution of the water supply and the extension of line shall not cause an undue burden of public expenditures.

Environmental Performance Standards

1. Maximum percentage of lot covered by imprevious surface is to be as follows:

   a. Low-low Density Residential - 10%
   b. Low Density Residential - 20%
   c. Middle Density Residential -30%
   d. High Density Residential - 30%

2. In construction of new housing, only those trees which are necessary to remove for construction, should be removed.

Safety Standards

1. No housing should be located below a 100-year flood plain. Housing which is located on a flood prone area shall be built on stilts so that all habital space is above the 100 year flood elevation.

2. All housing should be located within four miles of a fire station.

3. Roads in middle density or greater residential areas longer than 800 feet should have at least two access points.

Convenience Standards

The table below indicates standards for the desirable time-distances from residential areas to locations of various facilities.

Facility	High	Middle	Low
Employment Centers	20 min.	30 min.	45 min.
Central Business District	25 min.	40 min.	60 min
Local Shopping Center	10 min.	15 min.	20 min
Elementary School	½ mile	1½ miles	5 miles
Junior High School	1 mile	3 miles	10 miles
Senior High School	1 mile	4 miles	15 miles
Playgrounds and Local Parks	10 min	20 min.	*

SUPPORT STABILITY - POPULATION REQUIRED

The figures below represent the number of people required to support each type of shopping facility for it to be viable in the community. These should be taken into account when planning commercial development.

Local family shopping	1000-2500 people
Convenience Items	2500-3000 people
Neighborhood Shopping Center	7500-20,000 people
Community Shopping Center	20,000-100,000 people
Regional Shopping Center	100,000-250,000 people

STABILITY - LOCATION REINFORCEMENT

1. NEIGHBORHOOD SHOPPING CENTER OR STORE:

   Stores or neighborhood shopping centers should locate in a non-competitive position at least a 2 - mile distance from any competing center. Any condition promoting further commercial strip development should be eliminated.

2. COMMUNITY SHOPPING CENTER:
   Community Shopping Centers should locate such that no competing center is within 5 - 10 miles that draws on the same market population.

3. REGIONAL SHOPPING CENTER:

   Regional Shopping Centers should locate such that no competing center is within 10 - 25 miles that draws on same market population.

BASIC CONSIDERATIONS - REASONABLE SIZE

Local Family Shopping	5 - 10,000 sq. ft. with 30-50% in storage
Neighborhood Shopping Center	5 acres for 7500 pop.; 20 acres for 20,000 pop.
Community Shopping Center	20 acres for 20,000 pop.
Regional Shopping Center	40 acres for 100,000 pop. 60 acres for 25,000 pop.

Definitions

Neighborhood Center	40,000 sq. ft. selling area
Community Center	100,000 to 300,000 sq. ft.
Regional Center	One to Four major department stores.

REGIONAL SERVING BUSINESS AREA PRINCIPLES

1. In general, regional serving business areas should locate near adjoining traffic flows, central to their tributary trade areas.

2. The central business district should be located close to the peak flow of vehicular and pedestrian traffic. Retail, professional, financial, and related services should be conveniently accomodated and made easily accessible to adequate parking, transit, and regional transportation services for clientel and employee groups patronizing or working in the CBD.

Facility	High	Middle	Low
Playfields and Recreation Centers	10 min*	20 min*	*
Public Park or Reservation	45 min.	45 min.	*
Regional Shopping Center	20 min.	30 min.	40 min.
Transit System Shop	5 min.	20 min.	*
Major Thoroughfare	5 min.	5 min.	20 min.

*It is assumed that because of the nature of the life style and private amenities of low density housing-public parks, playgrounds, recreation centers and public transits need not be provided by the government.

EDUCATION PLANNING STANDARDS

1. SIZE OF SCHOOL ENROLLMENT

$$\#\text{rooms needed} = \frac{\text{Ultimate enrollment projected}}{\text{average class size}}$$

Average class size = pupils/room for grades 1-6 (Set by N.C. Department of Public Instruction):

Elementary	400-700
Junior High School	500-1,200; optimum 700-1,000
Senior High School	500-1,800; optimum 700-1,500

2. Size of School Site

   a. Elementary: (min) 20 acres and one additional acre/100 pupils
   b. Junior High School: (min) 20 acres and one additional acre/100 pupils
   c. Senior High School: (min0 30 acres and one additional acre/100 pupils

3. Travel Distances - Service Radius

	Vehicle(miles)	Walking (miles)
Elementary	½ - 3/4	3/4
Junior High School	1 - 1½	1½
Senior High School	1½ - 2	2

4. Senior High Schools are best placed near major thoroughfares because they generate their own traffic and are accessible to the public for auditoriums, stadiums, etc.

   SOURCE: N.C. Department of Instruction

COMMERCIAL STANDARDS

TRANSPORTATION STANDARDS

1. Commercial areas should be located at the intersection of arterial streets, with limited access, that is no less than 1300' from the intersection. Additional lanes for access and egress traffic should be provided.

2. A 3/1 to 6/1 parking / sales area ratio should exist, with all parking within 400' maximum of magnet uses .

3. Regional Business Centers:

   A. Regional shopping centers should be located in two major arterials in tributary trade area (50 - 100,000 families). The site should be adequate to accomodate peak parking needs and a complete line of shop and store types, eating and entertainment facilities, and branch business and financial services sufficient fill several of a shopper's time (30 to 150 acres).

   B. Satellite CBD centers (office parks, automobile sales and service centers, Appliance centers, farmers market, service centers, etc.) should be located on intersections or radial and circumferential arteries and on one or more major transit routes with adequate parking and service areas.

   C. Highway Service Centers should be located in outlying areas on major highway approaches to urban areas. Sites should be adequate for integrated design of drive-in services and motel accomodations. Proper consideration is given to highway safety, roadside beauty, and the general amenity of adjoining uses.

4. The site must be physically suitable for development as one center internally arranged or , where appropriate, in an integrated series of sub centers, with consideration given to parks and other open spaces, approaches and general amenity within the area and in adjoining use areas.

MANUFACTURING, WHOLESALE, AND RELATED USE AREA PRINCIPLES

1. In general, manufacturing, wholesale, and related use areas should be located on reasonably level land, preferrably with not more than 5 percent slope or capable of being graded without undue expense.

2. A range of size and choice inclose - in fringe, and dispersed locations should exist.

   A. Extensive manufacturing requires large open sites for modern one-story buildings and accessory storage, loading and parking areas in fringe and dispersed location. Usually, 5 acres is the minimum size. With some sites 10, 25, 50, 100 or more acres, depending on the size of the urban area and economic outlook for industrial development of extensive lines of activity.

   B. Intensice manufacturing requires a variety of sizes for modern one-story buildings and accessory storage, loading, and parking areas in close-in and fringe locations. Site size is usually under 5 acres.

3. Locations should have direct access to commercial transportation facilities. Fringe and dispersed locations should have access to railroad, major trucking routes, cargo and airports. A major portion of the sites should have access to both railroad and trucking routes, while the rest at least have access to adjoining trucking throughfares.

4. Locations should be within easy commuting time of residential areas of labor force and accessible to transit and major thoroughfare routes directly connected with housing areas.

5. Utilities at or near the site such as power, water, and waste disposal facilities should be available.

6. Proposed developments and locations in the extra-terrirorial jurisdiction should be compatible with surrounding uses, possibilities of protective belts or open space, development of "industrial parks" and other factors as amenity both with the manufacturing area and in relation to adjoining land uses.

INDUSTRIAL STANDARDS

Definitions of Density Classes

	Workers per Acre	
	Net	Gross
Intensive	147	50
Intermediate	40	18
Extensive	18	6

ENVIRONMENTAL LOCATION STANDARDS

1. Location of industry, especially that which has a high possibility of producing non-point sources of pollution should not be near water courses or the Cape Fear River unless control measures can be incorporated into the design of the facility to limit runoff.

2. The location of polluting industries should be banned from airsheds of residential and central areas, space must be allocated for these industries where they will do the least harm.

3. Buffer zones should be required between industry and neighboring residential areas which effectively screen all negative effects such as noise, vibration, etc.

TRANSPORTATION LOCATION STANDARDS

1. A site of 20 acres or more and employs over 800 persons per shift, needs direct access onto arterial street. Under all other conditions, access should be indirect via an industrial street.

2. Locations require short, fast and direct truck access via major or arterial streets from service industries upon which the industry will depend.

3. Sites should be near sources of labor (residence areas) with specific emphasis on convenience for type employed. Maximize walk to work potential to reduce parking and travel demands.

   A. Industries which employ part time unskilled females or males primarily should locate close to low-middle and low income housing areas, fostering a walk-to-work pattern.

B. Industries which employ full time highly skilled technicians or professionals should locate in convenient driving distance from middle and upper-middle income residence areas.

GENERAL SITING CONSIDERATIONS

1. No industrial sites should be less than 200 feet in depth and 100 feet in width.
2. Railroads should be located at side or rear of Industrial property lines.
3. For industrial developments, off-street parking should be provided in accord with the following schedule:

   A. 1 space for each 1000 sq. ft. of warehouse floor area
   B. 1 space for each 500 sq. ft. of manufacturing or research floor area
   C. 1 space for each 400 sq. ft. of office floor area

GENERAL SITE DEVELOPMENT STANDARDS

Industry Type	Minimum Front Yard Setback	Minimum side and Rear Yard Setback	Bilding Coverage
Warehousing and General Industry	25 feet	10 feet	70%
Neighborhood Industry, Prestige Industry	100 feet	100 feet	25%
Nuclear, Explosive or Erosive Industry	2000 feet	2000 feet	10%

TRAFFIC GENERATION

Average trip generations have been established for different types of industries. These are presented in the Industrial Traffic Generation table on the following page. When planning industrial locations and devleopment, such standards should be considered for estimating impacts the development may have on the transportation system in the area as well as the safety of area citizens.

INDUSTRIAL TRAFFIC GENERATION

Land Use	Density (Employees/ Acre)	Range (Number/Acre)	Typical (Number/Acre)	Range (Number/1000 square feet floor)	Typical (Number/1000 square feet floor)
Highly automated industry ..... low employee density (refinery, warehouse)	5	2.8	4	0.2-1.0	0.6
Light service industry... Single-lot industry (lumber yard)	5-20	6-30	16	1.4-1.2	0.8
Industrial tract..... (5 acres) (machinery factory)	20-100	30-160	70	0.6-4.0	2.0
Office campus ..... research & development (research industry)	100	150-200	170	3.8	4
Mixed central industry..	varies	10-200		1.4	

Population Projections

In order to better understand population trends. Past population and current estimates are summarized below. Population change is the result of birth, deaths and migration. Migration is the most difficult variable to predict because it is subject to so many outside factors.

Under the past population count we see that the City of Southport percent increase from 1930 to 1970 has been less than either Smithville Township or Brunswick County. It should also be noted that Southport from 1930 to 1970 has represented an average 9.8 percent of the county's total population. (See table of Historic Population).

Due to Southport's small size and lack of a data base, it is necessary to discuss population changes at the County level.

The first Census of Brunswick County was taken in 1790, and listed a population of 3,071. From 1790 through 1900, each ten year Census period had a population increase of 14% or more with two exceptions, 1830 to 1840 and 1860 to 1870. Since 1910, the percentage growth has been 8% or less except in the 1940-1950 and the 1960-1970 decades. The growth has been 47.1% from 1970 to 1975. The growth from 1975-1980 was 7.0%. Below is the County's most recent population change data.

BRUNSWICK COUNTY POPULATION CHANGE
1960 - 1980

Year	Population	Change	Percentage Change
		(From)	
1960 -	29,278	1,040 (1050)	5.4
1970	24,223	3,945	19.5
1975	35,621	11,398	47.1
1980	38,100	2,479	7.0

Source: 1960, 1970, U.S. Census
1975, 1980, N.C. Department of Administration

Population projections for Southport and Brunswick County have been calculated to the year 2000. These are based on data reported in the 1970 U.S. Census and are taken from different sources. The projections are presented in the following table.

SOUTHPORT POPULATION PROJECTIONS

Year	Brunswick County	Southport Permanent
1970	24,223 (1)	2220 (3)
1974	32,200 (5)	2900 (3)
1980	38,100 (1)	3136 (3)
1985	51,200 (1)	3641 (3)
1990	64,300 (1)	4145 (3)
2000	78,000 (2)	5341 (3)

Source:

1. N.C. Department of Administration, 1980
2. Cape Fear C. O. G., 1980
3. The SOUTHPORT LAND USE PLAN, 1976
4. Consoer, Townsend & Associates, SOUTHEASTERN BRUNSWICK COUNTY FACILITIES PLAN, September, 1978
5. Offices of State Budget and Management, 1980.

Holding Capacity

The holding capacity of a planning district refers to the ability of the natural and man-made systems of an area to support the demands of various land uses. It refers to inherent limits in the systems beyond which change cannot be absorbed without resulting in instability, degradation, or irreversible damage.

Residentially speaking, the holding capacity of a planning district is the number of dwelling units the vacant and renewal land in the planning district will accommodate to a prescribed pattern of residential densities.

The basic elements used in determining holding capacity are projected population increases during the planning period, existing and proposed urban water & sewerage facilities, future planned development, institutional and organizational constraints, transportation systems, vunerable habitats, acquifer recharge zones, air and water quality standards establsihed by the EPA, engery supplies, man-made hazard areas and archeological and historical sites.

Measurement techniques for holding capacity are necessarily dynamic rather than static. Measurement is based upon current existing and proposed holding capacity elements. In the future these elements may change and thus alter the holding capacity of the planning area. Changes in the elements may be brought about by technogical advances, economic fluctuations, energy crises, new life style attitudes, and institutional changes. However, major changes are not brought about in very short time spans. The holding capacity analysis is under review every five years and should therefore keep up with all element changes that have occurred. Because of this, and because the following holding capacity analysis is based upon all current element trends, the resultant land use projections are thought to be rather accurate.

The result of a holding capacity analysis is a Land Use Design Map for 1990. Placement of proposed land uses, such as residential, are accurate only in their adherence to suitability and policy criteria. Regardless, the result is a farily accurate representation of future densities and land use compatability relationships. The Land Use Design Map for Southport revealed the need of the City of plan for expansion of facilities to meet projected growth.

Following in this relationship, the Land Use Design Map is an instrumental factor in the determination of the Land Classification Map for 1990. The Land Classification Map is one of the most important tools of federal, state, and local level planning for land use related issues. Therefore, it is obvious that the holding capacity analysis is a valuable element in the development of The Southport Land Use Plan.

The following chart is the result of the holding capacity analysis process. The actual process is presented in outline form in the appendix.

Southport Holding Capacity Summary

Land Use	New 1990 Units	New 1990 Acreage Requirement	Total 1990 Units	Total 1990 Acreage
Single family Residential	355	161.36	1317	599.61
Multi-family Residential	7	1.39	49	9.73
Mobile Homes	12	2.70	77	17.35
Commercial	27	39.00	112	161.38
Industry	0	0	2	705.47
Office	8	5.04	33	20.76
Recreation	2	2.26	9	10.16
Transportation, communication, and utilities	N/A	N/A	12	518.12
Public Institution	9	7.65	38	32.29
Private Institution	1	2.31	5	11.53
Agriculture, Forestry, and Fisheries	1	-12.26	8	1059.35
Subtotal	422	222.45	1662	3158.75
Undeveloped	N/A	0	N/A	481.85
Total	422	222.45	1662	3640.60

* One forestry unit was decreased by 13 acres while one fishery unit of .74 acre was added.

SOUTHPORT

HOLDING CAPACITY APPENDIX

Southport Holding Capacity

Part I: Residential Land Use

I. Residential Existing Land Use

A. Summary Existing Stock of Dwelling Units

On Southport there are approximately 962 permanent single family dwelling units, 42 permanent multi-family, and 65 mobile home units.

B. Summary of Existing Acreages in Residential Use in Southport

In Southport there are approximately 438.25 acres in permanent single family use, 8.34 acres in permanent multi-family use, and 14.65 acres in mobile home use.

C. Summary of Prevailing Net Densities

Residential Category	Number of Units	Total Acreage	Average Acreage Per Unit
Permanent single family	9.62	438.25	.46
Permanent multi-family	42	8.34	.20
Mobile Homes	65	14.65	.23
Total	1069	461.24	.43

Density Calculation

$$\frac{\text{Total Acreage}}{\text{Approximate Number or units}} = \text{Average Acreage Per Unit}$$

Southport Population Data

Year	Permanent
1980	3136
1990	4145

Average Household Size Calculation

$$\frac{\text{Total 1980 Permanent Population}}{\text{Total Permanent Units*}} = \text{Average Permanent Household Size}$$

$$\frac{\text{3136 Permanent Residents}}{\text{1069 Permanent Units}} = \text{2.93 Average Permanent Household Size}$$

* All of Southports Residential are to be considered permanent.

2) RESIDENTIAL PERCENTAGES

$$\frac{\text{Acreage in Residential Subcategory}}{\text{Total acres in Residential use}} = \text{Residential subcategory acreage as a percentage of total developed acreage}$$

$$\frac{\text{438.25 acres in permanent single family use}}{\text{461.24 total acres in residential use}} = .9501561$$

The permanent single family land use is 95.02% of the total residential acreage of Southport.

$$\frac{\text{8.34 acres in permanent multi-family use}}{\text{461.24 total acres in residential use}} = .180816$$

The permanent multi family land use is 1.81% of the total residential acreage of Southoort.

$$\frac{\text{14.65 acres in mobile home use}}{\text{461.24 total acreage in residential use}} = .0317622$$

The mobile home land use is 3.18% of the total residential acreage of Southport.

II. Estimate of Future Residential Needs

Assumptions:

1. The average permanent and seasonal household sizes are assumed to remain constant through 1990.
2. The average acreages per unit for all residential subcategories are assumed to remain constant through 1990.
3. The relative residential percentages given in I.C. are assumed to remain constant thorugh 1990.

A) Household Size Assumptions

By applying the present average household size to the present population and the assumed future household size to the estimated future population, the difference between these two results provides a crude unadjusted estimate of the total new dwelling unit requirements.

Calculations:

(1) $\frac{\text{present permanent Population}}{\text{present permanent average household size}} =$ Existing number of permanent dwelling units

$$\frac{\text{3136 existing permanent residents}}{\text{2.93 existing permanent residents per household}} = \text{1069 existing permanent residential units}$$

(3) $\frac{\text{estimated 1990 permanent population}}{\text{assumed permanent average household size for 1990}}$ = projected number of permanent dwelling units for 1990

$\frac{\text{4145 estimated permanent residents for 1990}}{\text{2.93 assumed average household size for 1990}}$ = 1415 projected number of permanent dwelling units for 1990

Projected number of permanent dwelling units for 1990 - Existing number of permanent dwelling units =

Unadjusted estimate of the total new permanent dwelling units required for 1990

1415 projected permanent dwelling units needed for 1990 - 1069 existing permanent dwelling units =

An unadjusted estimate of 346 total new permanent dwelling unit for 1990

The total 1990 permanent dwelling unit requirement is 346.

B. Assumptions of Dwelling Unit Losses

There has been an annual average of 16 dwelling units lost by fire during the past five year period in Southport. This figure is 1.5% of the existing permanent dwelling units. This percentage applied to the 1990 figure of 1415 D.U. results in 21 units lost by fire. Therefore, the total permanent need for 1990 is increased by this amount. The new figure, the adjusted estimate of permanent dwelling unit need for 1990 is 367. The vacancy rate will further adjust this figure in the following section C.

C. Vacancy Rate Assumptions

Estimates of dwelling unit replacements to cover the residential loses by fire were tallied above in section B. The final cumulative totals of permanent and seasonal estimated dwelling unit requirements for 1990 are increased to make allowance for a normal vacancy rate. An estimated vacancy rate of 2% is applied to the figures os 346 for permanent dwelling unit need. The result of 7 units is then added to the adjusted estimate of 367.

[1]The 1970 Census of Population and housing

The residential percentages from I.C.) are then applied to the total estimate of 374 for the breakdown of the permanent category. The result of this is:

Permanent single family	.9502 X 374 = 355
Permanent multi-family	.0181 X 374 = 7
Mobile Homes	.0318 X 374 = 12
Total	1.00 X 374 = 374

A. Holding Capacity Analysis

1. The most developable vacant, platted areas of Southport will be used for the Land Design Map of 1990. In these areas the streets already exist, so no allowance shall be made for them in the projected acreage needs of 1990.

Residential Net Density Table

Land Use	Number of Units		Total Acreage	Net Density	dwelling units (Per Acre)
Permanent single family	962	:	438.25	=	2.20
Permanent multi-family	42	:	8.34	=	5.04
Mobile homes	65	:	14.65	=	4.44
Total	1069	:	461.24	=	2.32

Total Residential Acreage Requirements For 1990

Land Use	Projected 1990 Need		Unit Net Density		Projected 1990 Acreage Need
Permanent single family	355	:	2.20	=	161.36
Permanent multi-family	7	:	5.04	=	1.39
Mobile homes	12	:	4.44	=	2.70
Total	374		2.26		165.45

4. When distributing new dwelling units, priority is given to these areas with the following characteristics:

- Existing platted areas
- Existing accessibility to streets

- Within the existing pattern of development as determined from the 1975-1980 building permit records
- Existing and proposed facilities available.
- Existing historical and/or archeological sites are not present
- The soils are suitable for bearing capacity and a septic tank if no sewerage facilities are presently available.
- No conflict of use with adjoining and nearby properties.
- The Zoning Ordinance, The Subdivision Ordinance, and the Flood Prevention Ordinance and consistent with and favorable to the dwelling unit placement.

5. Refer to the Southport Land Use Deisgn Map for the resulting proposed allocation of permanent single family, permanent multi-family, and mobile home residential uses for 1990.

Part II: Commercial Land Use

I. Existing Commercial Land Use

A. Summary of Existing Stock of Commercial Units

In Southport there are 85 existing commercial units

B. Summary of Existing Acreage in Commercial Use.

In Southport there are approximately 122.38 acres in commercial use.

C. Summary of Prevailing Net Densities

1. $\frac{\text{Total existing commercial acreage}}{\text{Total existing commercial units}}$ = Existing average commercial acreage per unit

$\frac{122.38 \text{ Existing commercial acres}}{85 \text{ Existing commercial units}}$ = 1.44 existing average commercial acreage per unit

2. $\frac{\text{Total existing commercial acreage}}{\text{Total existing developed acreage}}$ = Existing commercial acreage as a percentage of total existing developed acreage.

$\frac{122.38 \text{ Existing commercial acres}}{2936.30 \text{ Total existing developed acreage}}$ = .0416783

The total existing commercial land use is 4.17% of the total existing developed acreage.

3. $\frac{\text{Total existing commercial units}}{\text{Total existing population}}$ = Existing commercial units per capita

$$\frac{85 \text{ Total existing commercial units}}{3136 \text{ Total existing population}} = .027$$

There are presently .027 commercial units per capita in Southport.

II. Estimate of Future Development

Assumptions:

1. The commercial units per capita are assumed to remain constant through 1990.
2. The average commercial acreage per unit is assumed to remain constant through 1990.

A. Applied per capita assumptions

By applying the present average per capita sizes to the present population and the assumed future per capita size to the estimated future population, the difference between these two results provides a crude unadjusted estimate of the total new commercial unit requirements.

Calculations:

1) Existing population X Existing commercial units per permanent capita = Existing number of commercial units

3136 existing permanent population X .027 existing commercial units per capita = 85 existing commercial unit

2) projected 1990 permanent population X existing commercial units per capits = projected number of commercial units for 1990

4145 projected 1990 permanent population X .027 existing commercial units per permanent capita = 112 projected commercial units for 1990

3) 112 projected commercial units for 1990 - 85 existing commercial units = 27 total new commercial units needed for 1990

B. Assumptions of Commercial Unit Losses

A fire loss percentage cannot be applied to the estimate of 1990 commercial unit need and because of the unavailability of information on commercial fire loss and the trend of the information that is available to indicate a large majority of residential fire loss.

C. Vacancy Rate Assumptions

A vacancy rate percentage cannot be applied to the estimate of 1990 commercial unit need because the available information applies to residential units only.

3. Fitting Space Needs to Land Supply

A. Holding Capacity Analysis

1. The most developable vacant, platted areas of Southport will be used for the Land Design Map of 1990. In these areas the streets already exist, so no allowance shall be made for them in the projected acreage needs of 1990.

Commercial Net Density Table

Land Use	Number of Units		Total Acreage		Net Density	(Units) (Per Acre)
Commercial	85	÷	122.38	=	.69	

3. Total Commercial Acreage Requirement For 1990

Land Use	Projected 1990 Unit Need		Unit Net Density		Projected 1990 Acreage Need
Commercial	27		.69	=	39.00

4. Distribution Criteria

When distributing new commercial units, priority is given to those areas with the following characteristics:

- Existing platted areas
- Existing accessibility to streets
- Within the existing pattern of development as determined from the 1975-1980 building permit records
- Existing and proposed facilities available.
- Existing historical and/or archeological sites are not present
- The soils are suitable for bearing capacity and a septic tank if no sewerage facilities are presently available.
- No conflict of use with adjoining and nearby properties.
- The Zoning Ordinance, The Subdivision Ordinance, and the Flood Prevention Ordinance are consistent with and favorable to the unit placement.

5. Refer to the Southport Land Use Design Map for the resulting proposed allocation of commercial use for 1990.

Part III: Industrial Land Use

I. Existing industrial land use

A. Summary of existing stock of commercial units.

In Southport there are 2 existing industrial units

B. Summary of existing acreage in industrial use

In Southport there are approximately 705.47 acres in industrial use.

C. Summary of Prevailing Net Densities

1. $\frac{\text{Total existing industrial acreage}}{\text{Total existing industrial units}}$ = Existing average industrial acreage per unit

$\frac{\text{705.47 existing industrial acres}}{\text{2 existing commercial units}}$ = 352.74 existing average industrial acreage per unit

2. $\frac{\text{Total existing industrial acreage}}{\text{Total existing developed acreage}}$ = Existing industrial acreage as a percentage of total existing developed acreage

$\frac{\text{705.47 existing commercial acres}}{\text{2936.30 total existing developed acreage}}$ = .2402581

II. Estimate of Future Development

Within the past five years the industrial development of Southport has claimed a significant amount of acreage. This has been due to the development of the Pfizer Chemical Co. in Southport's extraterritorial jurisdiction.

The estimate of future industrial development cannot be based upon the units per capita ratio used for residential as well as various other land uses. There are many variables which interact to determine the estimate of future industrial development need. Zoning, land use policy statements, existing facilities, environmental impact, physical suitability permit acquisitions, and property ownership are several of these variables. The development of an industry is a difficult process which usually must begin several years in advance.

Southport at this time has no industrial development planned. It is also the opinion of the Brunswick County Planning Department that Southport could not physically support another industry the size of Pfizer due to their limited extraterritorial space, physical characteristics of the land, and the existing facilities.

It is for this reason that no future industrial development is being projected for 1990. However, to allow for an error in this many - variabled projection, the Southport Land Classification Map shall allow for possible industrial development through the use of the Transitional Mixed Use Category. The purpose of this category is to provide for those areas which are expected to be intensely developed within the next ten years and which have or will have public facilities (minimum of water and sewer). The uses within this category may be one of several types, i.e., residential, commercial, office, recreational, industrial, etc. . The final determination is made by the municipality via their Land Use regulations. Also used will be the developed mixed use category.

Part IV: Office Land Use

I. Existing Office Land Use

A. Summary of existing stock of office units

In Southport there are 25 existing office units.

B. Summary of Existing Acreage in Office Use

In Southport there are approximately 15.72 acres in 15.72 acres in office use

C. Summary of Prevailing Net Densities

1. $\frac{\text{Total existing office acreage}}{\text{Total existing office units}}$ = Existing average office acreage per unit

$\frac{\text{15.72 Existing office acres}}{\text{25 Existing office units}}$ = .63 Existing average office acreage per unit

2. $\frac{\text{Total existing office acreage}}{\text{Total existing developed acreage}}$ = Existing office acreage as a percentage of total existing developed acreage

$\frac{\text{15.72 existing commercial acres}}{\text{2936.3 Total existing developed acreage}}$ = .0053536

The total existing office land use is .54% of the total existing developed acreage.

3. $\frac{\text{Total existing office units}}{\text{Total existing population}}$ = Existing office units per capita

$\frac{\text{25 total existing office units}}{\text{3136 total existing population}}$ = .008

There are presently .008 office units per capita in Southport.

II. Estimate of Future Development

Assumptions:

(1) The office units per capita are assumed to remain constant through 1990.
(2) The average office acreage per unit is assumed to remain constant through 1990

A. Applied Per Capita Assumptions

By applying the present average per capita sizes to the present population and the assumed future per capita size to the estimated future population, the difference between these two results provides a crude unadjusted estimate of the total new office unit requirements.

Calculations:

(1) Existing population X Existing office units per capita = Existing number of office units

3136 existing permanent population X .008 existing commercial units per permanent capita = 25 existing commercial units

(2) projected 1990 population X existing office units per capita = Projected number of office units for 1990

4145 projected 1990 population X .008 existing commercial units per permanent capita = Total of 33 projected office units for 1990

(3) 33 projected office units for 1990 - 25 existing office units =

8 total new office units needed for 1990.

B. Assumptions of Office Unit losses

A fire loss percentage cannot be applied to the estimate of 1990 office unit need because this information is not complete and from inspection of the information that is available, it would appear that the vast majority of fire losses were residential.

C. Vacancy Rate Assumptions

A vacancy rate percentage cannot be applied to the estimate of 1990 office need because this information is available only in residential terms.

3. Fitting Space needs to Land Supply

A. Holding Capacity Analysis

1. The most developable vacant platted areas of Southport, will be used for the land design map of 1990. In these areas, the streets already exist, so no allowance shall be made for them in the projected acreage needs of 1990.

2. Office Net Density Table

Land Use	Number of Units		Total Acreage		Net Density (Unit per acre)
Office	25	÷	15.72	=	1.59

3. Total Office Acreage Requirement for 1990

Land Use	Projected 1990 Unit Need		Net Density		Projected 1990 Acreage Need
Office	8	÷	1.59	=	5.04

4. Distribution Criteria

When distributing new office units, priority is given to those areas with the following characteristics:

- Existing platted areas
- Existing accessibility to streets within the
- Existing pattern of development as determined from the 1975-1980 building permit records
- Existing and proposed facilities available
- Existing historical and/or archeological sites are not present

- The soils are suitable for bearing capacity and a septic tank if no sewerage facilities are presently available.
- No conflict of use with adjoining and nearby properties.
- The Zoning Ordinance, the Subdivision Ordinance, and the Flood Prevention Ordinance are consistent with and favorable to the unit placement.

5. Refer to the Southport Land Use Design Map for the resulting proposed allocation of use for 1990 office.

Part V: Recreational Land Use

I. Existing Recreational Land Use

A. Summary of existing stock of Recreational units

In Southport there are seven existing recreational units.

B. Summary of existing acreage in recreational use

In Southport there are approximately 7.90 acres in recreational use.

C. Summary of Prevailing net densities

1. $\frac{\text{Total existing recreational acreage}}{\text{Total existing recreational units}} = \text{Existing average recreational acreage per unit}$

$\frac{\text{7.90 existing recreational acres}}{\text{7 existing recreational units}} = \text{1.13 existing average recreational acreage per unit}$

2. $\frac{\text{Total existing recreational acreage}}{\text{Total existing developed acreage}} = \text{Existing recreational acreage as a percentage of total existing developed acreage}$

$\frac{\text{7.90 Existing recreational acres}}{\text{2936.30 Total existing developed acreage}} = .0026904$

The total existing recreational land use is .27% of the total existing developed acreage.

3. $\frac{\text{Total existing recreational units}}{\text{Total existing population}} = \text{Existing units per capita}$

$\frac{\text{7 total existing recreational units}}{\text{3136 total existing population}} = .0022$

There are presently .0022 recreational units per capita in Southport.

II. Estimate of future development

Assumptions:

1. The recreational units per capita are assumed to remain constant through 1990.

2. The average recreational acreage per unit is assumed to remain constant through 1990

A. Applied per capita assumptions

By applying the present average per capita sizes to the present population and the assumed future per capita size to the estimated future population, the difference between these two results provides a crude unadjusted estimate of the total new recreational unit requirements.

Calculations:

1. Existing population X Existing recreational units per capita = Existing number of Recreational units

   3,136 existing population X .0022 existing recreational units per capita = Existing Recreational Units

2. Projected 1990 population X Existing recreational units per capita = projected number of recreational units for 1990

   4145 projected 1990 population X .0022 existing recreational units per capita = 9 projected recreational units for 1990

3. 9 projected recreational units for 1990 — 7 existing recreational units = 72 total new recreational units needed for 1990

B. Assumptions of Recreational unit losses

Southport has not lost any recreational units by fire over the past five years. Therefore, a fire loss percentage cannot be applied to the estimate of 1990 recreational unit need.

C. Vacancy Rate Assumptions

Southport has not had any recreational units vacated over the past five years. Therefore, a vacancy rate percentage cannot be applied to the estimate of 1990 recreational unit need.

3. Fitting Space needs to Land Supply

A. Holding capacity Analysis

1. The most developable vacant, platted areas of Southport will be used for the Land Design Map of 1990. In these areas, the streets already exist, so no allowance shall be made for them in the projected acreage needs of 1990.

2. Commercial Net Density Table

Land Use	Number of Units		Total Acreage		Net Density (unit per acre)
Recreational	7	÷	7.90	=	.886

3. Total Commercial Acreage Requirement for 1990

Land Use	Projected 1990 Unit needed		Unit Net Density		Projected 1990 Acreage needed
Recreational	2	÷	.886	=	2.26

4. Distribution Criteria

When distributing new Recreational units, priority is given to those areas with the following characteristics:

. Existing platted areas
. Existing accessibility to streets within the
. Existing pattern of development as determined from the 1970-1980 building permit records.
. Existing and proposed facilities available
. Existing historical and/or archeological sites are not present.
. The soils are suitable for bearing capacity and a septic tank if no sewerage facilities are presently available.
. No conflict of use with adjoining and nearby properties.
. The Zoning Ordinance, the Subdivision Ordinance, and the Flood Prevention Ordinance are consistent with and favorable to the unit placement.

5. Refer to the Southport Land Use Design Map for the resulting proposed allocation of recreational use for 1990.

Part VI: Public Institutional Land Use (P.I.)

I. Existing P.I. Land use

A. A summary of existing stock of P.I. units.

In Southport, there are 29 existing P.I. Units.

B. Summary of existing acreage in P.I. Use

In Southport, there are approximately 24.64 acres in P.I. use.

C.1. Summary of prevailing Net Densities

$$\frac{\text{Total existing P.I. Acreage}}{\text{Total existing P.I. units}} = \text{Existing average P.I. Acreage per unit}$$

$$\frac{\text{24.64 existing P.I. acres}}{\text{29 existing commercial units}} = \text{.85 existing average P.I. Acreage per unit}$$

2. $\frac{\text{Total existing P.I. acreage}}{\text{Total existing developed acreage}}$ = Existing P.I. acreage as a percentage of total existing developed acreage.

$$\frac{\text{24.64 existing P.I.acres}}{\text{2936.30 total existing developed acreage}} = .0084$$

The total existing P.I. Land Use is .0084% of the total existing developed acreage.

3. $\frac{\text{Total existing P.I. Units}}{\text{Total existing population}}$ = Existing P.I. Units per capita

$$\frac{\text{29 total existing P.I. Units}}{\text{3136 total existing population}} = .0092$$

There are presently .009 P.I. Units per capita in Southport.

II. Estimate of future development

Assumptions:

1. The P.I. Units per capita are assumed to remain constant through 1990.
2. The average P.I. acreage per unit is assumed to remain constant through 1990.

A. Applied per capita Assumptions

By applying the present average per capita sizes to the present population and the assumed future per capita size to the estimated

future population, the difference between these two results provides a crude unadjusted estimate of the total new P.I. unit requirements.

Calculations:

1. Existing population X Existing units per capita = Existing Number of P.I. Units

   3136 Existing population X .0092 Existing P.I. units per capita = 29 existing P.I. units

2. Projected 1990 population X Existing P.I. units per capita = Projected number of units for 1990

   4145 Projected 1990 population X .0092 existing P.I. Units per capita = 38 Projected P.I. units for 1990

3. 38 projected P.I. units for 1990 − 29 existing P.I. units = 9 Total new units needed for 1990.

Net Density Table

Land Use	Number of Units		Total Acreage		Net Density (unit per acre)
Public Institutional	29	÷	24.64	=	1.18

Total P.I. Acreage Requirement for 1990

Land Use	Projected 1990 Unit Needed		Unit Net Density		Projected 1990 Acreage Needed
Public Institutional	9	÷	1.18	=	7.65

4. Distribution Criteria

When distributing new P.I. units, priority is given to those areas with the following characteristics:

- Existing platted areas
- Existing accessibility to streets within the
- Existing pattern of development as determined from the 1975-1980 building permit records
- Existing and proposed facilities available
- Existing historical and/or archeological sites are not present

. The soils are suitable for bearing capacity and a septic tank if no sewerage facilities are presently available
. No conflict of use with adjoining and nearby properties.
. The Zoning Ordinance, The Suvdivision Ordinance, and the Flood Prevention Ordinance are consistent with and favorable to the unit placement.

5. Refer to the Southport Land Use Design Map for the resulting proposed allocation of P.I use for 1990.

B. Assumptions of P.I. Unit losses

Southport has not lost any unit by fire over the past five years. Therefore, a fire loss percentage cannot be applied to the estimate of 1990 unit need.

C. Vacancy Rate Assumptions

Southport has not had any P.I. units vacated over the past five years. Therefore, a vacancy rate percentage cannot be applied to the estimate of 1990 P.I. unit need.

3. Fitting Space needs to Land Supply.

A. Holding Capacity analysis

1. The most developable vacant platted areas of Southport will be used for the Land Design Map of 1990. In these areas the streets already exist, so no allowance shall be made for them in the projected acreage needs of 1990.

Part VII: Private Institutional Land Use (Pr. I.)

I. Existing Pr.I. Land Use

A. Summary of Pr. I. existing stock of units

In Southport, there are approximately 9.22 acres in Pr. I. use.

C. Summary of Prevailing net densities.

1. $\frac{\text{Total existing Pr. I. Acreage}}{\text{Total existing Pr. I. units}}$ = Existing average Pr. I. Acreage Per Unit

$\frac{9.22 \text{ existing Pr. I Acreage}}{4 \text{ existing Pr. I. units}}$ = 2.31 existing average acreage per unit

2. $\frac{\text{Total existing Pr. I acreage}}{\text{Total existing developed acreage}}$ = Existing Pr. I. acreage as a percentage of total existing developed acreage.

9.22 existing Pr. I acres / 2936.3 Total existing developed acreage = .00314

The total existing Pr. I. Land Use is .314% of the total existing developed acreage.

3. Total existing Pr. I units / Total existing population = Existing Pr. I. units per capita

4 total existing Pr. I. units / 3136 total existing population = .0013

There are presently .0013 Pr. I. units per capita in Southport.

II. Estimate of Future Development.

Assumptions:

1. The Pr. I. units per capita are assumed to remain constant through 1990.

2. The average Pr. I. acreage per unit is assumed to remain constant through 1990.

A. Applied per capita assumptions

By applying the present average per capita sizes to the present population and the assumed future per capita size to the estimated future population, the difference between these two results provides a crude unadjusted estimate of the total new unit requirements.

Calculations:

1. Existing population X Existing Pr. I. units per capita = Existing Number of Pr. I. units

3136 existing permanent population X .0013 existing Pr. I. Units per capita = 4 existing Pr. I. units per capita.

2. Projected 1990 population X Assumed Pr. I. units per capita = Projected number of Pr. I. units for 1990

4145 projected 1990 permanent population X .0013 assumed Pr. I. units per capita = 5 projected Pr. I. units for 1990

3.	5 projected Pr. I. units for 1990	-	4 existing Pr. I. units	=	1 total new Pr. I. units needed for 1990

B. Assumptions of Pr. I. unit losses

Southport has not lost any Pr. I units by fire over the past five years. Therefore, a fire loss percentage cannot be applied to the estimate of 1990 Pr. I unit need.

C. Vacancy Rate assumptions

Southport has not had any Pr. I units vacated over the past five years. Therefore, a vacancy rate percentage cannot be applied to the estimate of 1990 Pr. I. unit need.

3. Fitting Space Needs to Land Supply

A. Holding capacity analysis

1. The most developable vacant, platted areas of Southport, will be used for the Land Design Map of 1990. In these areas the streets already exist, so no allowance shall be made for them in the projected acreage needs of 1990.

2. Pr. I. net density table

Land Use	No. of Units		Total Acreage		Net Density (Units Per Acre)
Pr. I	4	÷	9.22	=	.4338

3. Total Pr. Inst. acreage requirement for 1990

Land Use	Projected 1990 Unit Need		Unit Net Density		projected 1990 Acreage need
Pr. I	1	÷	.4338		2.31

4. Distribution Criteria

When distributing new Pr. I. units, priority is given to those areas with the following characteristics:

- Existing platted areas
- Existing accessibility to streets
- Within the pattern of development as determined from the 1975-1980 building permit records

- Existing and proposed facilities available
- Existing historical and/or archeological sets are not present
- The soils are suitable for bearing capacity and a septic tank if no sewerage facilities are presently available.
- No conflict of use with adjoining and nearby properties.
- The Zoning Ordinance, The Subdivision Ordinance, and The Flood Prevention Ordinance are consistent with and favorable to the unit placement.

5. Refer to the Southport Land Use Design Map for the resulting proposed allocation of commercial use for 1990.

Part VIII: Agricultural, forestry, and fisheries Land Use (A.F.F.)

I. Existing A.F.F. Land Use (51)

A. Summary of Existing Stock of A.F.F. units

In Southport, there are 7 existing A.F.F. units

B. Summary of existing acreage in A.F.F. use.

In Southport there are approximately 1071.61 acres in A.F.F. use.

C. Summary of prevailing net densities

1. $\frac{\text{Total existing A.F.F. acreage}}{\text{Total existing A.F.F. units}}$ = Existing average A.F.F. Acreage per unit

$\frac{\text{1071.61 existing A.F.F. acres}}{\text{7 existing A.F.F. Units}}$ = 153.09 existing average A.F.F. acreage per unit

2. $\frac{\text{Total existing acreage}}{\text{Total existing developed acreage}}$ = Existing A.F.F. acreage as a percentage of total existing developed acreage acres

$\frac{\text{1071.61 existing A.F.F. acres}}{\text{2936.30 Total existing developed acreage}}$, = .3649524

II. Estimate of Future Development

Within the past five years, the Agriculture and Forestry acreage of Southport has decreased significantly due to the development of CP&L and Pfizer Chemical Co. within Southports planning jurisdiction .

The estimate of future agricultural, forestry, and fisheries needs

or losses cannot be based upon the units per capita ratio used for residential as well as various other land uses. There are many variables which interact to determine the estimate of future need. To apply a past decrease percentage to this category would be an error. The future decrease of Southport's forested acreage will depend heavily upon their pattern of industrial, commercial, and residential development.

Southport presently has no further industrial development planned, nor does it appear that their will be any additional expanion of CP&L or Pfizer into Southport's forested acreage. Therefore, no forestry acreage shall be allowed for this use in the 1990 Land Design and Land Classification Maps.

In accordance with Southport's Growth Policy as derived from their Land Use Policy Statements, all commercial and residential development was projected into existing undeveloped acreage within existing service corridors in compliance with their Zoning Ordinance. The projected commercial acreage took away no acreage from the forestry category. However, residential projection did claim 13 acres of forestry land based upon present growth rates and patterns along existing service corridors. The appropriate unit number for the category does not change, but acreage and thus the prevailing net densities do change.

The other land use to be addressed in this category is fisheries. At present there is one fishery unit proposed along the Cape Fear River. The acreage of the proposed fishery site is .74 acres. Therefore, this amount will be added to the estimate of future need as well as an additional unit.

The resulting estimate of future agriculture, forestry, and fishery land use is as follows:

Land Use	1990 Unit Need	1990 acreage Change	Percentage Decrease	Total 1990 units	Total 1990 acreage
Agriculture, Forestry, and Fisheries	1	-12.26	1.14%	8	1059.35

5. Southport Land Classification

The North Carolina Coastal Area Management Act Guidelines require that each city, town, and county located in the twenty county coastal area develop a land classification map classifying all of the land within a given jurisdiction into one of five classes. The criteria for the allocation of land into these categories are explicitly set forth in the State Guidelines, and the final adopted land classification maps for the twenty county coastal region will be combined into a coordinated, consistent expression of local policy at the large regional scale.

A land classification system for Southport was developed as a means of assisting in the implementation of goals, objectives, and policies. By delineating land classes on the map, the City officials and citizens can specify those areas where certain policies (local, state and federal) will apply. Although specific areas are outlined on the land classification map, it must be remembered that land classification is merely a tool to help implement policies and not a strict regulatory mechanism.

The State and the Federal Government utilize the local land classification system and map to determine whether projects and development which requires government license, permits or funds will be permitted to locate in the Southport area. If the proposed project is inconsistent with the land classification at its proposed location, the permit, license or funds will be denied.

The land classification system provides a framework to be used by the local government to identify the future use of all lands in the City. The designation of land classes allows the illustration of the policy statements in regards to where and to what density growth will occur, and where natural and cultural resources will be preserved.

The land classification system includes five broad classes, some of which have been further subdivided to better classify existing development in the City. The five general land classes are developed, transition, community, rural, and conservation.

The inclusion of a land area into a land classification category does not dictate the type of land use that will be allowed in a particular location. Several of the classes provide for and are designed to encourage a variety of land uses.

Although, as indicated above, the specific requirements of the land classification system are set forth at the State level, each jurisdiction's land classification map is developed locally and adopted by the local governing body prior to submission to the Coastal Resources Commission. As a result of this process, the land classification map represents a graphic statement of local government policy with regard to where, when and to what densities future land development will be encouraged.

The Land classifications and their subcategories which appear on the Southport Land Classification Map are defined as follows:

1. Developed

The purpose the the Developed class is to provide for continued intensive development and redevelopment of existing cities. To be classified Developed, the area should have a minimum density of 500 dwellings per square mile or 1000 people per square mile provided with usual public services including at least water, sewer, recreational facilities, police and fire protection. The Developed class is divided into two types: Developed Mixed Use and Developed Industrial.

A. Developed Residential areas are those where both water and sewer services are provided, as well as all other municipal services. Further residential development is first encouraged to occur in what ever vacant land is available in these areas.

B. Develop Mixed Use areas are those with a full range of municipal services, yet are more suitable for a wide variety of development ranging from residential to commercial and recreational.

C. Developed Industrial specifically includes the land owned by existing industries currently operating in the County.

2. Transition

The purpose of the Transition class is to provide for future intensive urban-development within the ensuing ten years on lands that are most suitable and that will be scheduled for provision of necessary public utilities and services. The Transition lands also provide for additional growth when additional lands in the developed class are not available or when they are severely limited for development.

The Developed and Transition classes should be the only lands under active consideration by the county or municipality for intensive urban development requiring urban services. The area within these classes is where detailed local land use and public investment planning must occur. State and federal expenditures on projects associated with urban development (water, sewer, urban street sytems, etc.) will be guided to these areas. The Transition class is divided into two types of use: Transition Residential and Transition Mixed Use.

A. Transition Residential includes the areas with partial municipal facilities provided usually adjacent to developed residential areas. Only residential use is encouraged in these areas.

B. Transition Mixed Use includes those areas provided with partial municipal services, yet more suitable for a wide range of activity including commercial, recreational, office, and institutional uses, often because of its location to main traffic arteries.

3. Rural

The purpose of the Rural class is to provide for agriculture, forest management, mineral extraction and other low intensity uses. Residences may be located within "Rural" areas where urban services are not required and where natural resources will not be permanently impaired. The Rural class is divided into two types of uses: Rural Residential and Rural Productive.

A. Rural Residential provides for low density residential development where urban services are not provided or planned and where natural resources will not be permanently impaired.

B. Rural Productive provides for the effective management of large agriculture and forestry areas.

4. Conservation

The purpose of the Conservation class is to provide for effective long-term management of significant limited or irreplaceable areas. This management may be needed because of its natural, cultural, recreational, productive or scenic values. These areas should not be identified as transition lands in the future.

The Conservation class is applied to lands that contain: major wetlands; essentially undeveloped shorelands that are unique, fragile, or hazardous for development; necessary wildlife habitat or areas that have a high probability for providing necessary habitat conditions; publicly owned water-supply, watersheds and aquifers; and forest lands that are undeveloped and will remain undeveloped for commercial purposes.

The projected permanent and seasonal population for Southport in 1985 is the primary input used in the preparation of the land classification map. The Developed and Transition class allocations are all directly related to the expected population level in 1990. While the Rural class is not directly a result of population projections, these are lands which are not expected to be needed for higher density development and are essentially "left over" from the above three allocations. The Conservation category is the only class which is in no way related to population, but is allocated based on completely independent criteria.

A. Conservation - Industrial Access - The purpose of this class is to provide ingress and egress to the Cape Fear River for industry. Lands in this category would be maintained in their natural state.

Most of the land in the Southport City limits meets the criteria for allocation to the developed class.

Lands allocated to the Transition class are those which are planned to accommodate a minimum gross density of 2,000 persons per square mile in 1985. They are also areas in which local government, city or county, plans to provide both water and sewer service within the up-coming ten year period. It is basically those areas in which local government will encourage a change to the Developed category by 1990.

In accordance with the State Guidelines requirements, the first priority lands for allocation to the Transition category were those areas which presently exhibit a gross population density of 2,000 persons per square mile. The second priority included those areas which have experienced septic tank problems and/or face potential public health threats in terms of contamination of on-site wells or pollution of estuarine waters to which much existing residential development is adjacent. The third priority provides for inclusion of more areas where future development is expected and can be clustered through the provision of services. The forth priority includes lands located along existing or proposed service corridors in which higher density development is to be encouraged.

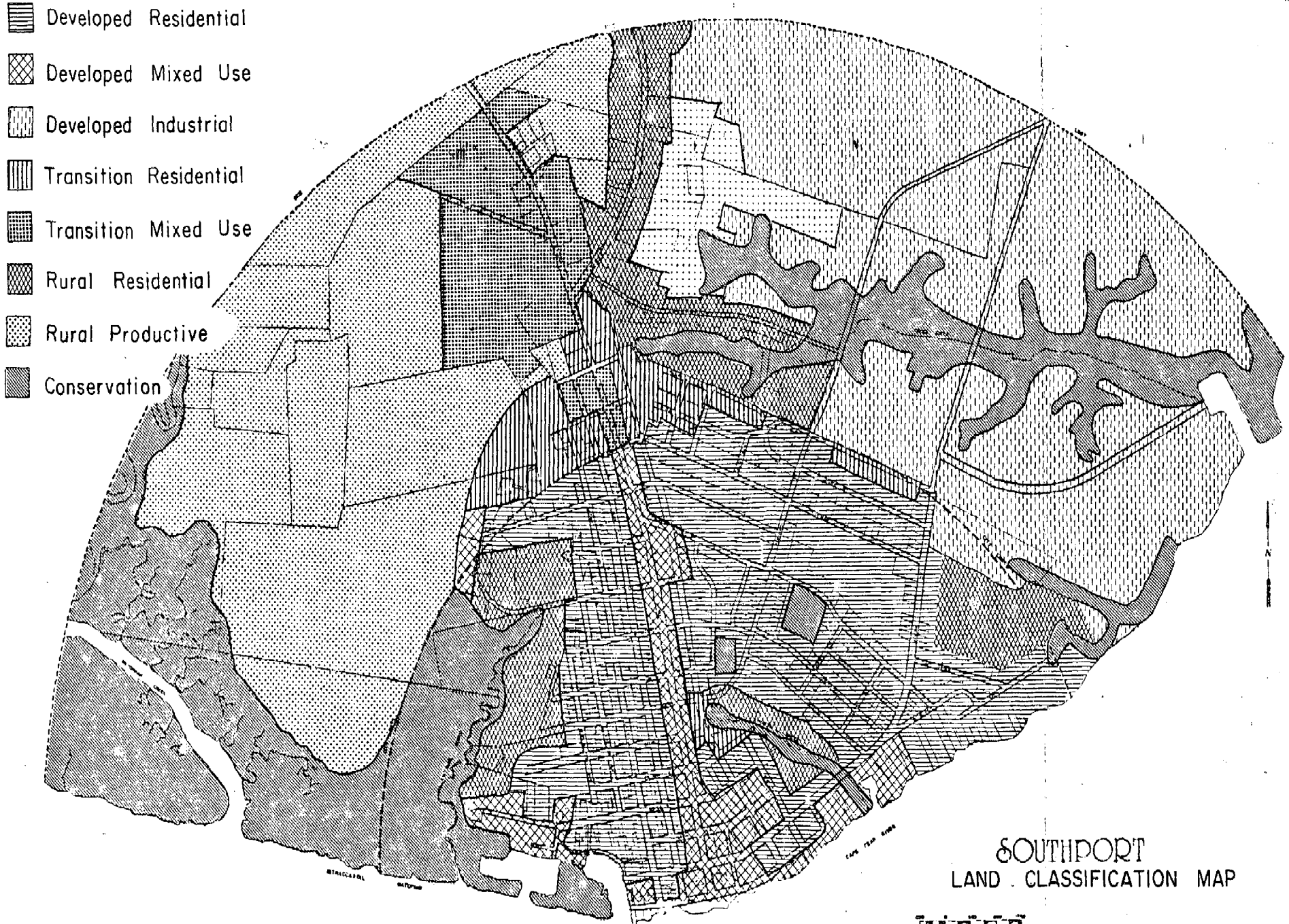
The State Guidelines identify Conservation lands as areas that are naturally fragile to intensive development, or areas which due to natural or man made hazards offer some potential threat to development and the public health, safety and welfare. Lands allocated to the Conservation Class should be maintained in a natural state with only very limited non-intensive use. Those lands in the Conservation class within the Southport area are:

a) Lands included in Areas of Environmental Concern.
b) Fragile fresh water wetlands with exceptional scenic and aesthetic qualities and potential for future passive and active recreational uses.
c) Natural and man made hazard areas
d) Cemetaries

All of the remaining area in the Southport area not included in the about allocations is classified as either Rural-Residential or Rural-Productive.

Rural-Residential lands are areas where low density residential growth has occured, or is projected to occur in the coming years. Although they are not provided with water or sewer facilities, connection to the existing county or city water and sewer systems would be permitted if the cost was borne by the developer.

Rural-Productive lands are large tracts of land in use as agriculture or forestry producing areas.



SOUTHPORT
LAND CLASSIFICATION MAP

Prepared by the Brunswick County Planning Department, 1980 cpb