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DEVELOPMENT PLAN
Report No. 2



PREPARED FOR JACKSONVILLE, NORTH CAROLINA

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A DEVELOPMENT PLAN FOR

JACKSONVILLE

NORTH CAROLINA

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INTRODUCTION

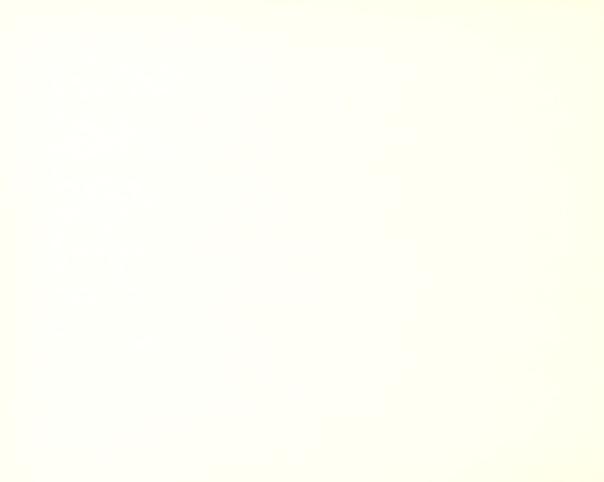
During the last decade Jacksonville has grown from a quiet town into a city. It is no longer a small town where most of the community responsibilities are taken care of by social and parental controls or where the places for recreation and personal development are provided through the beauties and immensities of the sky and river, the forests and fields.

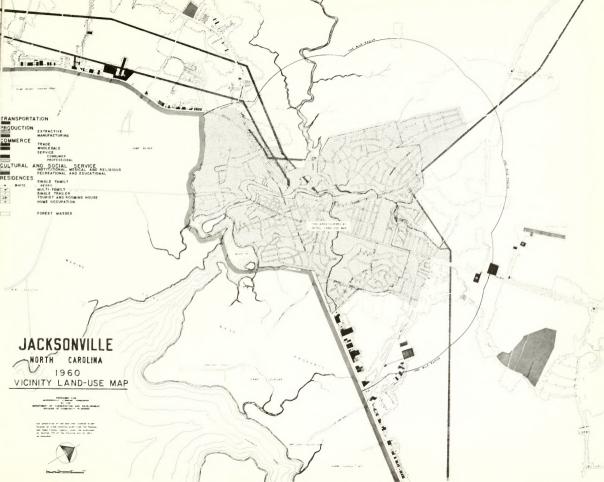
It is an urban area in which the automobile is "king" and where people are looking for the city to provide fire and police protection, schools, playgrounds and utilities. Jacksonville has big city problems related to major streets and traffic, land use and zoning, bad housing and disease.

During the last few years as these urban problems became more apparent the city contracted with the Division of Community Planning, of the Department of Conservation and Development to make a study of the different aspects of growth and development in Jacksonville. This report outlines the different facts found in this study which have been used in the preparation of the Development Plan.

The Development Plan is concerned primarily with defining the form and extent of the future city. It is designed to insure that future growth and development will be orderly and pleasant, by suggesting how existing and proposed playgrounds, residences, streets and other land uses should be related to each other. It, therefore, provides a general framework within which more detailed development can be made.

When future development or improvements are contemplated within the community, the Development Plan is intended to act as a guide, both to private citizens and to the public official. To the private citizen, it indicates the type of neighborhood he can expect to live in, the best location for his business or industry, and the location of major arterial streets. To the public official, it is a framework for providing public facilities. To the Planning Commission, it is an outline of long-term growth against which each proposed new development may be judged and evaluated before they make recommendations to the City Council.







This report has been divided into two sections; the first is an analysis of the natural site, land use and existing development, and the second is the design of the Development Plan. Section I analyzes and evaluates the many different characteristics of the site; it also analyzes the extent, type and characteristics of residential, commercial and other land uses. By evaluating existing development planners can determine the potentialities and limitations of the city as a basis for future planning.

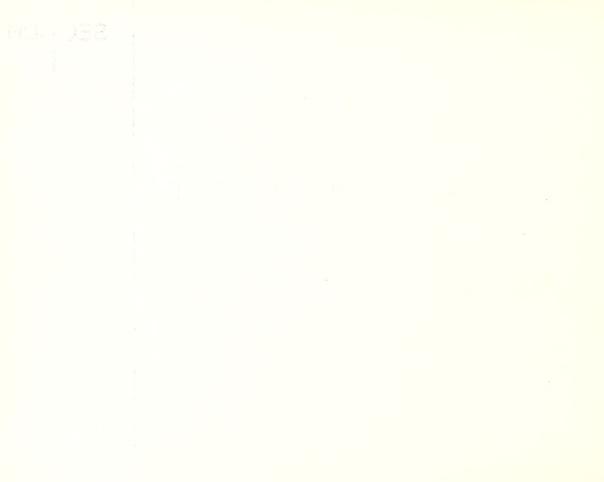
Section II presents the Development Plan design and recommendations. The design of the development plan designates or assigns land uses to the undeveloped land into which the city is going to expand in such a manner that it will insure good city planning principles and provide each citizen with a sense of identity or civic pride. Recommendations are provided which relate to the administration, advanced planning and development of the city.

The planning area for this study will include the city and its one-mile extraterritorial limits. The planning period of twenty years to 1980, provides a time element larger than the immediate problems of the next three to five years, sufficient for complete investigation and planning in detail the larger development problems.



ANALYSIS OF THE SITE

LAND USE AND DEVELOPMENT



CHAPTER I

JACKSONVILLE'S FORM, STRUCTURE AND APPEARANCE

The form and structure of a city are primarily determined by the natural features of the site and the local pattern of land development. The form of a city is concerned with the general outline and mass which the urban development assumes within the landscape. The structure of the city is concerned with the interrelationships between the different major land uses or functional areas.

The natural shape of a city is concentric, and it will always tend to form this circular shape because everyone likes to be as close to the center of the city and therefore to the city's activities, as possible. It is also concentric because of the necessity to utilize municipal utilities which cannot be expanded indiscriminately. The development of a city can also take on a linear shape assuming the characteristics of a line because of railroads, highways, rivers or other barriers to concentric development. Each of these types of development is broken by the natural features or topography of the site on which the city is built.

Jacksonville is not a city which stands alone and self-contained within the landscape. It is the largest community in a larger configuration of military and civilian communities which stretch in a half circle shape around the New River and United States Marine Corps Base. This half circle shape is formed and outlined by the Marine Corps property line and the dual lane highway which parallels it. Starting on the western side of this half circle are a large government trailer park and Camp Geiger. At the northern top of the half circle the City of Jacksonville has developed. To the east and south on the other side are Camp Knox Trailer Park, Paradise Park, Tarawa Terrace and Midway Park government housing areas and the permanent military installation and housing of the Marine Base. This linear type development along a highway has in part forced itself on the city.

Jacksonville has been developed in small isolated areas of land use directly off of major streets or highways so that it takes on many of the characteristics of linear development. These are isolated areas because their primary means of access is to the original major street and because they are not connected to adjoining developments. This is especially true of the development which has followed the dual lane highway



around the half circle shape of the Marine Base boundary and along U. S. 17. This development has occurred because of (1) the topography of the site, (2) the development of major highways, and (3) no forethought or planning.

The structure of the average city is to develop around a central core of intensive urban city activity with less intense use and development of land taking place at the periphery or city limits. At one time Jacksonville was developed in this manner; however, as the city expanded it has changed into a city of many competing functional areas. Nucleated areas of residential and commercial development are scattered off of the major streets usually completely isolated by the manner in which they have been developed and by the natural drainage and waterways.

Nucleated development like Jacksonville has many advantages and many disadvantages. The manner in which smaller residential neighborhoods have developed off of major highways is very good since it provides isolation of the residential units from traffic, protects them from incompatible land uses and provides them with a neighborhood identity. The major disadvantages of nucleated developments is the difficulty of providing the necessary visual, vehicular and pedestrian relationships of isolated residential neighborhoods to such community facilities as schools and playgrounds.

Nucleated development has completely nullified the priority of the central business district over other commercial areas. As the city grew, the old central business district could not expand to take advantage of the new demands for commercial spaces. Commercial uses then emerged not in one competing center, but into two major and several minor shopping areas.

Jacksonville's main appearance is one of strip commercial development. It is characterized by cars, streets, driveways, off-street parking spaces, neon signs and unrelated land uses. Behind these commercialized streets are many attractive residential areas. School and recreation areas have been provided but seem naked without planting and trees. There are no unifying features within the Jacksonville landscape. Most streets do not have sidewalks or street planting. The city is flat, and the absence of trees and planting makes the level land form even more severe.

Trees and planting could be an important part within Jacksonville's landscape. They could provide shade to cool the summer sun, soften the harsh sterility of concrete



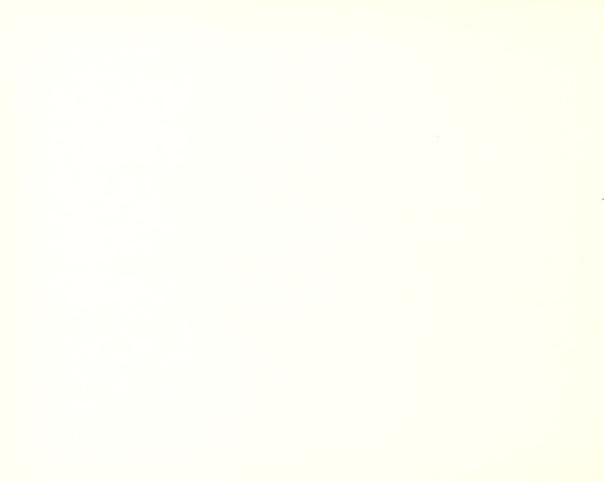
and asphalt and provide a dominant natural feature in a flat landscape. Trees could also help provide a transition between different types of land use and architecture.

At the present time the city has no definite policy on trees or tree planting. It needs to formulate and develop a positive policy of planting trees and shrubs. The maintenance of a beautiful city with more parks and a definite tree program will certainly be expensive, and this fact should be so recognized. However, anything of value costs money or sacrifice of some sort. Shade trees and flowering trees and shrubs should be found for the planting strips separating the moving lanes of traffic and to line residential streets. It should be possible to find some small or medium size trees whose root system will do a minimum of damage to underground utilities and overhead wiring for the commercial districts.

Summary

Jacksonville has taken on a nucleated structure which has been developed off its major streets and highways. This development has followed primarily a linear form although the city has not developed either in one line or in a straight line. The location of community facilities and an efficient circulation system to tie all these nuclei together will be extremely important.

Jacksonville's appearance is naked and stark. These features could be softened by a municipal program to promote the planting of shrubs and trees along highways and streets.



CHAPTER 11

JACKSONVILLE'S SITE: TOPOGRAPHY AND USE

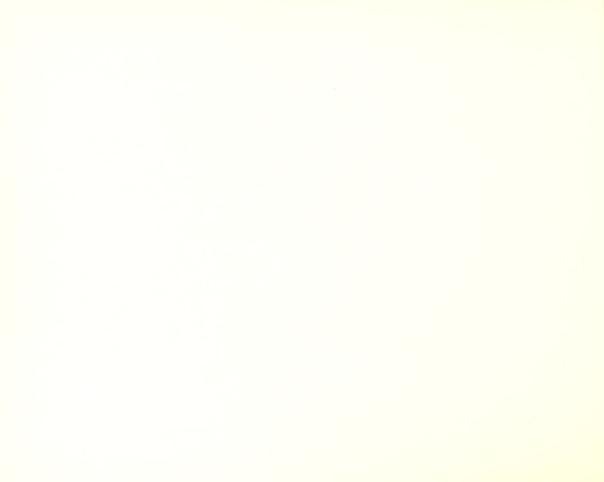
The development of any city is a combination of man's architectural structures with the topographical features of the natural site upon which it is built. The extent to which the structure and topography of the site are taken into consideration determine (1) the practical economy of installing utilities, (2) the degree to which the natural topographic features are utilized within the city plan and (3) the aesthetic qualities of its appearance.

In building his cities, man has three choices: he can choose to ignore the features of the site, he can site his buildings to dominate the natural features of the land, or he can site his buildings to complement and utilize the natural features of the site. Certainly this is always a matter of degree, but too often the topography and natural features of the site are ignored and its potentialities lie undeveloped.

Jacksonville has been built on the east side of the New River, with its many tributary drainage streams. Instead of a straight, fast-flowing stream the river winds slowly through one bay on the north and Wilson Bay on the south. The city has been built on a shallow bluff above the river which is broken by many drainage streams. This flat plain, except where it rises from the river and along its major drainage ways, has a gentle slope rising from the twenty foot contour line a short distance from the river to the forty foot contour line located at the far edge of the planning area near the airport. Swamp and flood plains are primarily located further north along the New River.

There are very few instances in Jacksonville where existing development has recognized the functional and visual qualities of the landscape. In fact, it is difficult to realize that Jacksonville has so much water front property since so little has been developed for public appreciation and use. The only time the river is visible from a major street is when one is crossing either of the two bridges. There are no water front streets or parkways; and except for Wilson Bay Park, which will soon be ruined by the construction of a building, there are no water front parks.

A number of beautiful residential lots which have been developed along the major drainage ways provide a pleasing relationship between the city and the water.



One private park has been developed for picnicking and boat launching,

The largest part of the water front, however, still lies undeveloped. Some of it has been made extremely difficult and expensive to develop because of the manner in which adjoining land has been developed. The area along Wilson Bay has not developed because of its close proximity to the Negro slum area and the sewage disposal plant.

All water front land north of U. S. 17 has been completely ignored because of the entrances to Chaney and Mill Creek, existing land uses and swampy soil conditions.

Summary

Jacksonville has not developed the site upon which it is built for either the recreational function of water sports or the beauty which New River can provide to the landscape.



CHAPTER III

THE FUNCTIONS WHICH JACKSONVILLE SERVES

The functions which a city serves are the reasons it exists as an economic, social and cultural unit. These are synonymous with the manner in which a family makes a living and might be thought of as primary and secondary functions. Primary functions are those which are directly related to the size and development characteristics of a city. The secondary functions are those activities which do not appreciably affect the size of the city.

Jacksonville's primary function is to provide the residential, educational, commercial, recreational and cultural needs of the military and civilian population working at Camp Lejeune. This function is so dominating in its effects on Jacksonville's growth that for all practical purposes a direct relationship can be assumed between the number of military personnel stationed on the base and the population of Jacksonville.

Jacksonville has four secondary functions. These are functions which although important, have not added extensively to Jacksonville's population or to its economic growth.

- (1) It serves as the seat of the Onslow County government, housing the Court House and other county governmental offices for educational, agricultural and medical services.
- (2) Jacksonville acts as a retail trading center for the surrounding county. Although it is primarily a center for shopping goods, there is some demand for agricultural supplies.
- (3) Jacksonville is a stopping place for tourists going to local beaches and following Ocean Highway (US 17) from New York to Florida. Places for eating, sleeping and the necessary services of gas and repair are provided along the highway.
- (4) Jacksonville has a small retirement population of civilian and military



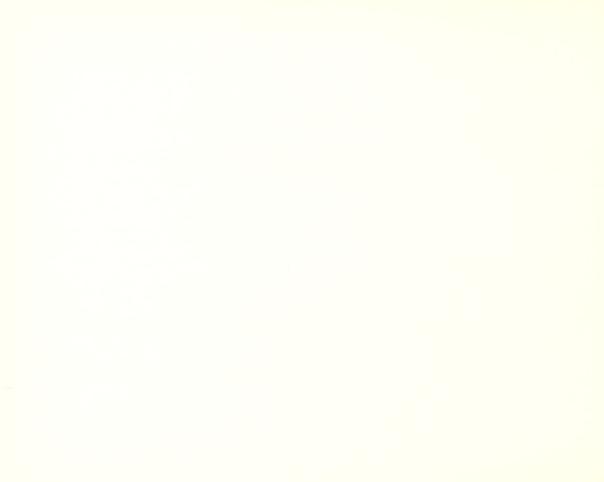
families. The Marine Base with its hospital and commissary is a definite attraction for military retirement in the area.

Jacksonville at the present time has no manufacturing industries. Whether it can obtain some in the future may depend upon the initiative of local citizens. Jacksonville should attempt to provide an industrial area in which it could locate industry in order to provide a better balance in its economic base.

A more detailed account and analysis of Jacksonville's economic base is contained within the supplementary planning report, "Population and Economic Summary".

Summary

The functions which a city serves are important since plans must be made for providing land areas and facilities necessary for each function to be served effectively. These functions provide a guide to the city's needs. The Development Plan for Jacksonville must be concerned with providing land areas and complementary needs for the following functions: (1) residential neighborhoods and complementary services for the military and civilian personnel serving the Marine Base; (2) an entertainment area primarily for the single military population; (3) an Onslow County Governmental Center; (4) retail stores for families in the trading area; (5) personal conveniences for tourists; and (6) an industrial area for new manufacturing plants.



CHAPTER IV

UTILITIES: SEWER, WATER AND STORM DRAINAGE

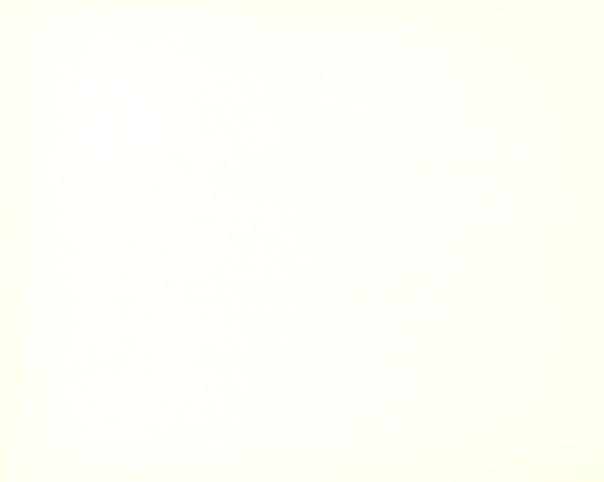
The extent to which an area is serviced by utilities determines in great part its potentialities for development. Those areas into which water and sewer service will not be extended because of expensive construction costs will certainly not develop within the foreseeable future while other land areas located within the range of Jacksonville's existing utility system will have a greater economic chance for development. This chapter will examine the service areas for water and sewer facilities. Information and material for this chapter have been taken from the publications noted in the bibliography.

Geology and Water Supply System

There is a very close relationship between the geology of Jacksonville and the quantity of water that can be obtained from municipal wells. In contrast with the hard, crystalline rocks of the Piedmont and Mountain sections of the state, the Coastal Plain consists of unconsolidated and semi-consolidated sediments deposited in and along the margin of a sea that once covered the eastern part of the state. This geological formation, which slopes gradually toward the ocean from the Fall Line, near Raleigh, has the advantage of yielding large quantities of water from wells.

The amount and quality of the water depends upon the particular geologic formation from which the water is taken. Jacksonville is located upon a layer of sand which overlays the sands of the Pee Dee formation and the Castle Hayne limestone formation. These formations are made up of different amounts of sand, clay, shell, rock, marl and limestone.

The top layer of sand covers Onslow County to a depth ranging generally from 10 to 30 feet. As the water table almost everywhere is within 15 feet of the surface, wells penetrate enough saturated sand to yield sufficient water for domestic purposes. Municipal wells, one of which yields 300 gallons per minute, have been drilled into the limestone formation to a depth of about 200 feet. The average tested yield for 32 wells ending in the Castle Hayne marl is 203 gallons per minute. However, larger yields up to 1,000 gallons per minute are available if needed.



The mineral content of ground water depends on the minerals which are dissolved as the water percolates through the ground and therefore depends upon the kind of ground material through which it moves and the length of time it is in contact with such soil, sand or rock. The chemical constituents which affect the characteristics of water in the Coastal Plains are chlorides, iron and fluorides, which coincide with hardness and corrosiveness.

The quality of the water from the surface sands and Pee Dee sands is soft and low in dissolved mineral matter and satisfactory for almost all uses. However, the water from the limestone is hard, with a calcium bicarbonate character, and in some places contains objectionable amounts of iron.

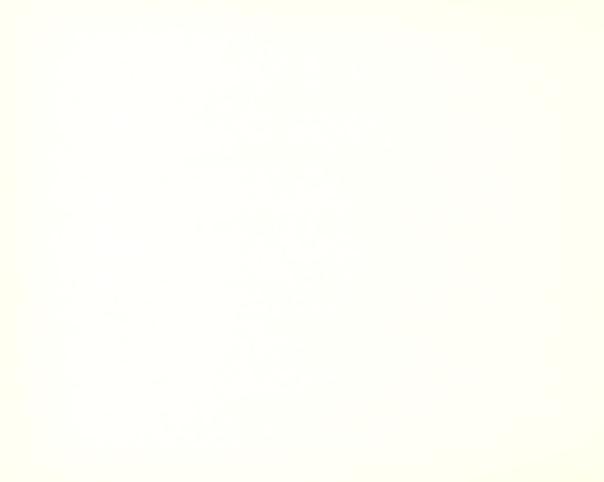
The most serious problem concerning quality of water is the possibility of salt water encroachment. The Pee Dee sand formation in the vicinity of the New River and to the south provides brackish water at depths of 200 to 600 feet. Care should be taken to keep pumping levels relatively shallow in the general area surrounding the New River and its many bays.

Jacksonville's water supply consists of five wells supplemented by two elevated storage tanks. The greatest need at the present time is to stabilize the water supply north of Mill Creek and to supplement the city's feeder pipelines. The areas served by municipal water facilities are shown on the accompanying map. The developed area west of the New River is not served by city water, nor is any of the area outside the city limits. The expansion of water facilities in Jacksonville is primarily a problem of providing a new system of wells and storage tanks in those areas where demand is evident.

During the Spring of 1960 the City Council carefully considered the engineers' report on proposed improvements to the utilities system. Proposals for a system of twelve inch feeder lines, new wells, an elevated storage tank on the city limits boundary in Northwoods and water softening equipment have been proposed. The manner in which these are to be engineered has not been completely determined.

Sewers, Soils and Septic Tanks

Because the land upon which Jacksonville has developed is extremely flat with many small drainage areas, one central sewer system has been developed by the use of



eight different pumping stations. All lines flow toward the sewage treatment plant, which is located on Wilson Bay at the foot of Court Street. The entire area within the city limits is now served by this sewer system. This is indicated on the accompanying map, "Areas Served by Water and Sewer." The area to the west of Jackson-ville is not served by the sewer system nor is the developed area west of US 17 between the city limits and Gum Branch Road.

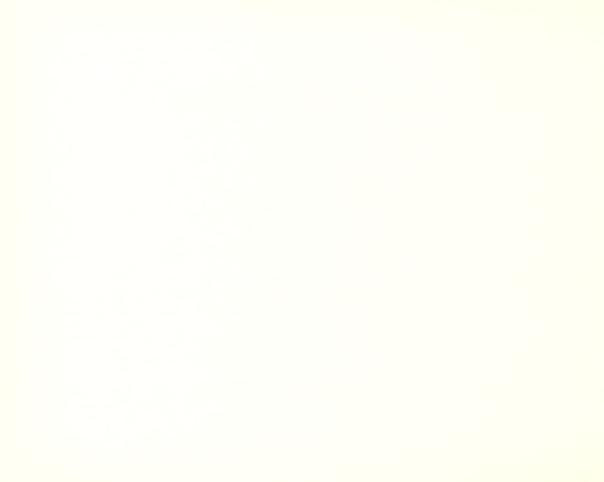
Expansion of sewer lines into the planning area outside the city limits can be accomplished with the addition of larger mains and pumping stations. These can all feed into the existing sewage treatment plant. The extension of sewer lines west across the New River would be more difficult than in any other direction. The present location of the sewage treatment plant is better than any other without going further toward the ocean. The city must determine the priority of utilizing the New River for processed sewage residues or for water recreation.

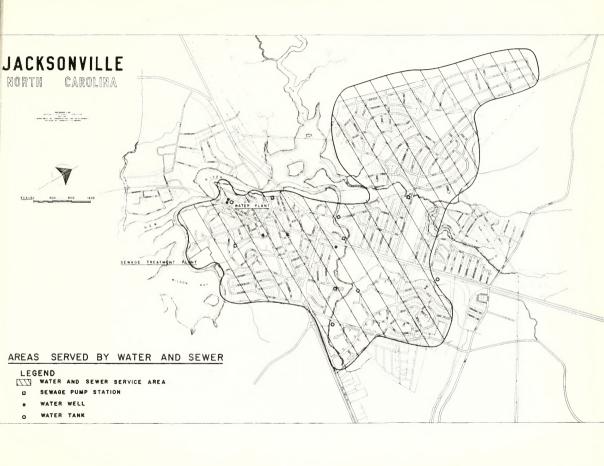
The engineering study of the sewer system and sewage treatment plant presented to the city this year indicated the necessity of increasing the capacity of the sewage treatment plant and changing the size of the sewer lines in order to maintain service for the next ten years or for a fifty percent increase in population.

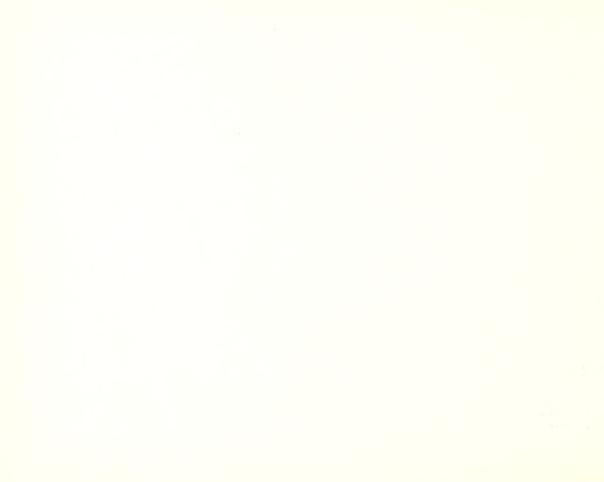
Those areas which are not serviced with municipal sewer systems utilize individual septic tanks. The degree to which septic tanks operate successfully and the conditions under which they operate without endangering health are directly related to soil conditions.

The soils around Jacksonville generally come under either of two categories, the well-drained soils or the poorly drained soils. The major group of the well-drained soils are the Klej sand, and the poorly drained soils are the Lynchburg and Rutledge sands. In addition to the drainage characteristics of soils, their texture, permeability, water table level, percolation rate and the existence of hardpans underneath these soils all help to determine the extent to which they are suited for septic tank installation.

The drainage characteristics of the soils are extremely important in determining capabilities of soils for a safe, efficient disposal system. Problems may be encountered both with slowly drained and very rapidly drained soils. In the latter, movement







of sewage effluent through the soil may be so rapid that the filtering and purifying action of the soil is held to a minimum, resulting in pollution of underground water which may be serving as the source of water supply to the individual wells in the neighborhood. Slowly drained conditions may result in accumulation of sewage effluents which present pollution problems through runoff, etc.

A planning map, "Soils Rated According to Septic Tank Suitability,"* indicates the different soils within the Jacksonville planning area. This information is of an extremely general nature, having been transposed from the 1927 large soils map. The classification of Onslow County soils into different groups has been prepared by James M. Brown and Professor E. F. Goldston, members of the Agricultural Extensions Service of North Carolina State College. In their report they indicate that these soil groupings have been prepared for the purpose of suburban and community planning and development and that in no case should these groupings be used in lieu of percolation tests or on-the-spot soil examinations in making final decisions on development of particular sites.

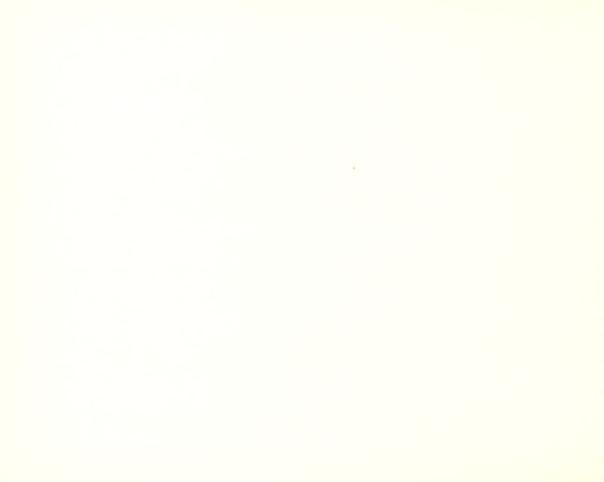
The darker shaded areas on the map indicate large areas of poor and very poor soils for septic tank installations. The white and cross-hatched areas indicate areas of good to excellent soil conditions for septic tank installations on either side of the New River in the areas into which Jacksonville is going to have to expand.

Well and septic tank installations are inspected and approved by the Onslow County Health Department. Houses which are built to Federal Housing Authority and Veterans Administration standards must meet the minimum acceptable standards for wells and septic tank installations. However, trailer parks, individual trailers, and housing individually or locally financed cannot be forced to abide by minimum standards for septic tank installation.

Storm Drainage

The New River and its major tributary creeks are the primary storm drainage outlets for the city. The gentle slope of the land provides moderate drainage in those areas close to these structures. Land furthest from these creeks requires improvement by ditching and widening.

* The above map is available on request in the Raleigh office, not reproducible size for report.



Urbanization is closing in on Jacksonville's natural drainage ways. During the last decade as Jacksonville has grown from a small town of 3,000 to an urban community of more than 13,000 people, the land on either side of its major drainage ways has been developed. Commercial and residential lots are being created by filling in the land adjoining creeks. Urban development, with its ever increasing areas of paved streets, parking lots, sidewalks, and roofs, seals off the water absorbing characteristics of the original soil, grass and trees. The resulting increased rain runoff very often cannot be handled by the original natural drainage features.

Jacksonville's storm sewer system extends the natural water courses into the developed areas of the city to carry surface water into the New River. Storm sewers, like sanitary sewers, are related to the major drainage areas of the city but, unlike sanitary sewers, can have their outfall points at almost any point on a major drainage stream since storm water does not carry any harmful pollution. This means that instead of one major system within any one drainage area, Jacksonville's storm drainage system consists of many different small systems emptying into the major tributary creeks of the New River.

Jacksonville's drainage system is not as highly developed as the sanitary sewer system. Although most of the area within the city limits has storm drainage, there are several places in which larger drainage mains lead into smaller mains. As the city has grown, the increased runoff from expanded development has made some of the existing storm drainage culverts too small. Jacksonville's major drainage problems occur when there are large amounts of rainfall either in heavy storms or in long periods of continual rain.

The city should develop a system of natural drainage ways with adequate rights-of-way or easements. This is true not only for those areas within the city limits but also for areas developed as the city expands into the one-mile planning area.

Summary

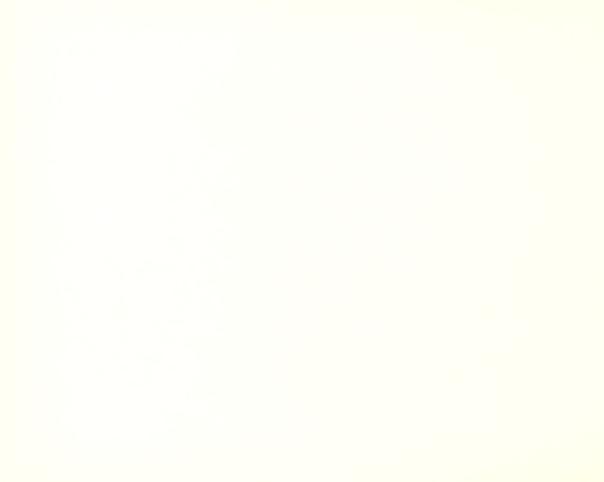
All the area within the city limits can be supplied with water at the present time. The area of west Jacksonville does not have water and has not been considered in the expansion of water facilities. The city cannot afford to expand its utilities in all directions at the same time. Its responsibility is to all the people living



in the city today as well as the city that Jacksonville will be in the future. If west Jacksonville is to become part of Jacksonville in the future rather than an independent community with all the accompanying competitive feeling, then Jacksonville will have to take the initiative in expanding utilities into that area. The city is faced with the problem of determining a policy of competing necessities in the expansion of utilities. In which direction should utilities be expanded and what portion of the total cost of these expansions should the city bear.

Existing sewer facilities can be expanded for future growth. Any large increase in sewer demands can be served by the addition of pumping stations and sewer line capacities. Since septic tanks create difficult health problems because of poor soil conditions, the municipal sewer system should be expanded into the planning area as development necessitates. Sanitary regulations for trailers and trailer parks should be improved through additional regulations and their enforcement.

Storm drainage problems have not been excessive up to the present time because of the numerous water courses breaking the topography of the land. As the city continues to expand, the development of a comprehensive storm drainage system will be more important.



CHAPTER V

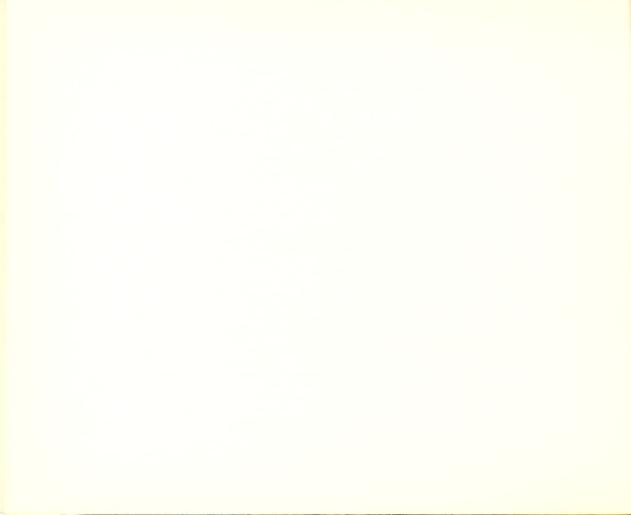
LAND USE ANALYSIS

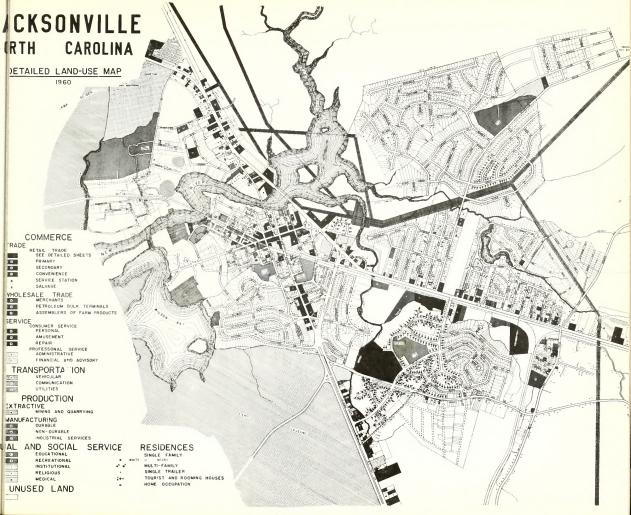
In order to analyze and evaluate the manner in which Jacksonville uses its land, base maps were prepared, a field survey was made, and the land use data classified for planning purposes. During the Fall of 1959, base maps of Jacksonville were prepared at several different scales. Large scale maps at 100 feet to the inch were prepared from Onslow County tax maps and were used in the field survey. Large scale maps of Jacksonville at 400 feet to the inch and of the planning area at 800 feet to the inch were prepared for land use data presentation.

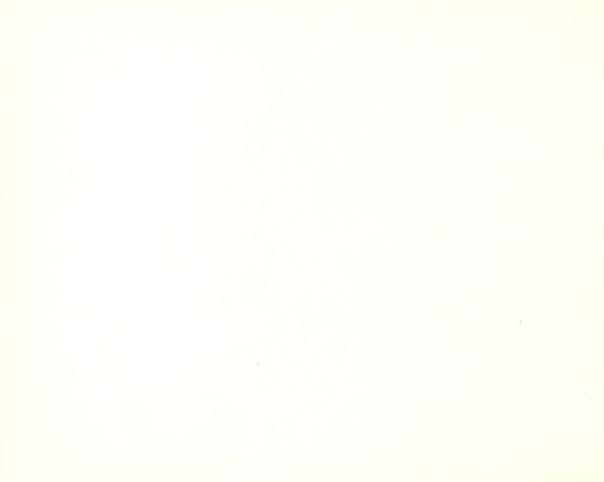
During the field survey, the use of each piece of land within the city limits and the planning area was identified. These were then classified according to "A Proposal for A Standardized Land Use Classification System" as published and adopted by the Division of Community Planning. These data are presented on the accompanying map, "Detailed Land Use, 1959."

For analysis purposes, the total amount of land in each type of land use within the city limits was measured in acres. In order to determine the significance of these land-use acreages, it is necessary to compare them with figures from other cities of similar size. Figures on land use classified under the same system as Jacksonville are available for three other eastern North Carolina cities: Elizabeth City, Kinston, and Wilson. In comparison, the function or purposes of each city must be kept in mind. Jacksonville is primarily a military city while Kinston and Wilson are trading centers within an agricultural area.

In the following three tables land-use acreages are presented for purposes of comparison and analysis. The first table indicates acreage totals and the percent of total developed land. The second table indicates land use as a percent of all developed land and the third table indicates land use in acreage per one hundred persons. In tables two and three figures for Elizabeth City, Kinston and Wilson have been averaged. Analysis of each of these tables will provide the land-use characteristics for Jacksonville.



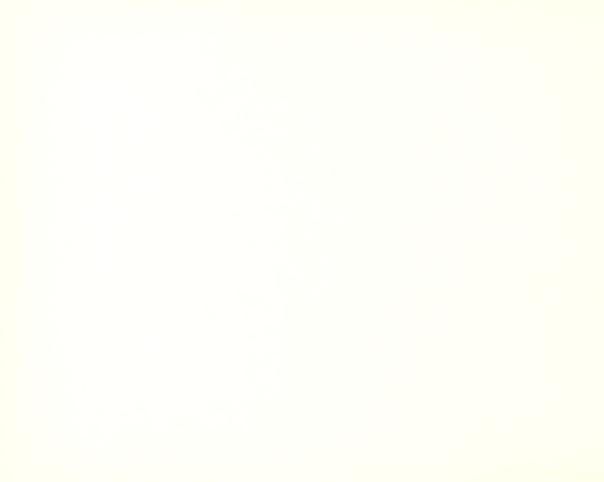




ACREAGES AND PERCENT OF TOTAL DEVELOPED LAND - 1960

TABLE 1

		Percent				Per	cent
Type of Use	Total Acres	Developed	Type of Use	Total	Acres	Deve	loped
RESIDENTIAL	1058.9	58.4	COMMERCIAL SERVICES	38,0		2.1	
Single family	871.1	48.0	Personal		25.1		1.4
Two-family	121.1	6.7	Amusement		1.2		. 1
Multi-family	66.7	3.7	Repair		3.7		. 2
			Administrative		3.7		. 2
TRANSPORTATION	502.9	27.7	Financial		4.3		. 2
Streets	398.9	22.0					
Communications	58.3	3.2	WHOLESALE TRADE	13.8		. 8	
Railroads	33.2	1.8	Merchants		6.7		. 4
Terminals	12.5	. 7	Petroleum		7.1		. 4
			Farm products		-		-
CULTURAL SERVICES	108.2	6.0					
Educational	43.3	2.4	MANUFACTURING	21.8		1.2	
Recreational	30.8	1.7	Durable		9.8		. 6
Institutional	5.9	. 3	Non-durable		. 4		-
Religious	21.5	1.2	Services		11.6		. 6
Medical	6.7	. 4					
_			TOTAL LAND	1812.0		100.0	
RETAIL TRADE	68.4	3.8	DEVELOPED				
Service Stations	10.7	. 6					
Primary	17.9	1.0	Vacant land	342.8			
Secondary	23.9	1.3	Rivers & creeks	120.4			
Convenience	15.9	. 9					
			TOTAL LAND	2275.2			

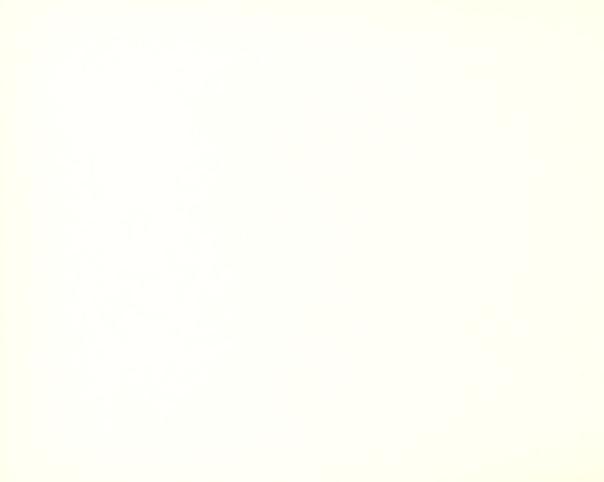


ACRES PER 100 PERSONS - JACKSONVILLE AND THREE EASTERN NORTH CAROLINA CITIES

	Elizabeth City	Kinston	Wilson	Average	Jackson- ville
Preliminary Census	13,805	24,648	27,275*		13,411
Residential, total	4.9	5.1	5.1	5.0	7.9
Single family	4.5	4.7	4.7	4.6	6.5
Two-family	. 3	. 2	. 3	. 3	. 9
Multi-family	. 1	. 2	. 1	. 1	. 5
Transportation	4.9	2.7	3.3	3.6	3.4
Streets	4.5	2.4	3.1	3.3	3.0
Cultural Services	1.4	. 4	1.0	. 9	. 8
Retail Trade	. 3	. 2	. 2	. 2	. 5
Commercial Services	. 2	. 3	.1	. 2	. 3
Manufacturing	. 2	. 1	. 5	. 3	. 2
Wholesale Trade	. 1	. 3	. 3	. 2	. 1
Total	11.9	9.1	10.5	10.4	13.2

^{*}Does not include college students.

TABLE 2

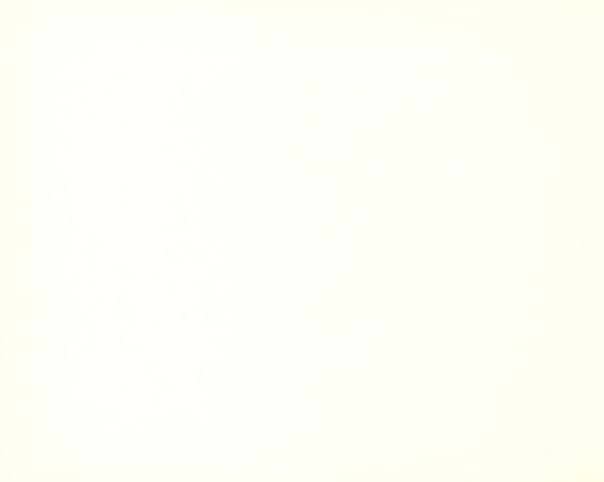


PERCENT OF DEVELOPED LAND - JACKSONVILLE AND THREE EASTERN NORTH CAROLINA CITIES

TABLE 3

	Elizabeth City	Kinston	Wilson	Average	Jackson- ville
Residential, total	41.0	55.1	48.0	48.0	58.4
Single family	38.1	51.1	44.0	44.4	48.0
Two-family	2.3	2.0	3.0	2.4	6.7
Multi-family	. 6	2.0	1.0	1.2	3.7
Transportation	40.8	29.4	31.4	33.9	27.7
Streets	37.9	26.0	29.0	30.9	22.0
Cultural Services	11.6	5.0	9.2	8.6	6.0
Retail Trade	2.6	2.6	2.3	2.5	3.8
Commercial Services	1.8	2.7	1.3	1.9	2.1
Manufacturing	1.9	1.2	4.8	2.6	1.2
Wholesale	. 3	3.5	3.0	2.3	. 8
Total	100.0	99.5*	100.0	99.8	100.0

^{*}Vacant structures were not classified and were .5 percent of total.



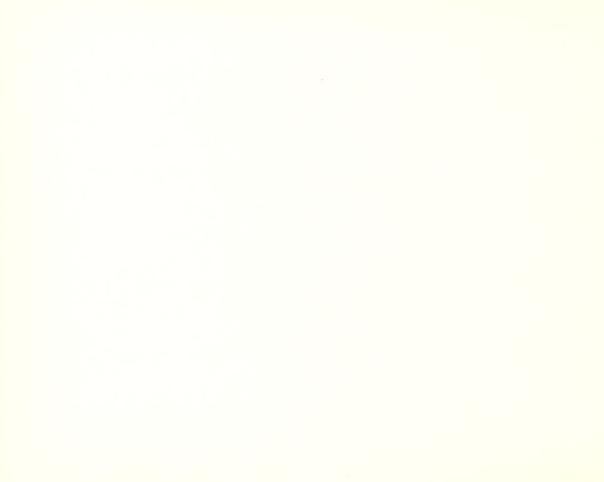
The major use of land in Jacksonville is for residential purposes. A total of 1,058 acres, or nearly 60 percent of the land within the city limits, is used for this purpose. This is much higher than the low of 41 percent for Elizabeth City and nearly 12 percent higher than the average for all three cities.

Approximately half of this acreage is utilized for single-family homes. This 49.3 percent is greater than the 44.4 percent average of the three cities noted. Two-family and multi-family housing in Jacksonville utilizes nearly three times as much land as it does in the three other cities. Jacksonville has 6.4 percent of its land in two-family residences against a high of 3.0 percent in Wilson and a 2.4 percent average. A total of 3.7 percent of all land is used for multi-family residences, three times the average of 1.2 percent for the three cities and nearly six times larger than the lowest .6 percent for Elizabeth City.

The second largest use of land in Jacksonville, for transportation purposes, utilizes 503 acres of land or 27.7 percent of all developed land. This is lower than the average of the three cities which is 33.9 percent and much smaller than the 40 percent figure for Elizabeth City. The largest use within transportation, for street purposes, uses 22.0 percent of all developed land, in contrast to nearly 38 percent in Elizabeth City. A low percentage of land acreage used for streets is desirable since they must be maintained by the city. Jacksonville has a larger percent of its land in right-of-way for power lines than most other cities.

Land areas for cultural services take up 108 acres or 6.1 percent of all developed land, which compares with 8.6 percent, the average for three cities. The table showing acres per 100 persons indicates eight-tenths of an acre for Jacksonville and nine-tenths for the average of three cities. This indicates that in terms of land area for cultural services, Jacksonville is just slightly below the other cities.

Combining retail trade and commercial services, Jacksonville uses 106 acres, or 5.9 percent of all developed land. In terms of acres per 100 persons population, Jacksonville has eight-tenths of an acre as against four-tenths of an acre for the average of the three cities. This is nearly twice as much commercial land for retail trade and services.



Manufacturing is an extremely small user of land within Jacksonville, with 21.8 acres, or 1.2 percent of all developed land. This is less than half the average of the three other cities and four times less than the 4.8 percent in Wilson. Wholesaling is another small user of land, having only eight-tenths percent of all developed land or one-tenth of an acre for every 100 persons. This is one third the amount of land in wholesaling within Wilson and Kinston, but the same as in Elizabeth City.

Of the total of 2,275 acres contained within the city limits, 1,812 are developed, 343 are vacant, and 120 are for rivers and other water areas. Jacksonville uses 13.2 acres of land for each 100 persons, which is nearly 3 acres per 100 persons more than the average of the other cities noted.

Summary

Jacksonville's major use of land is for residential purposes having three times as much land in two-family and multi-family apartments as the other cities noted. The city has very little land for manufacturing and wholesaling, but twice as much land for retail trade and commercial services as used by the other three cities noted. The amount of land used for streets and cultural services is about the same as that for other cities.



CHAPTER VI

TABLE 4

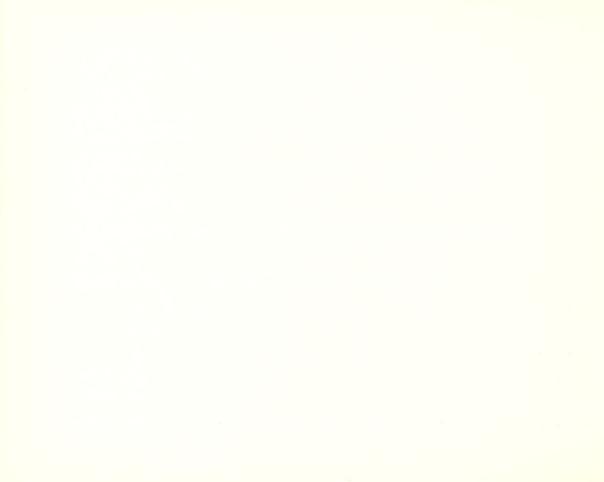
RESIDENTIAL DEVELOPMENT

Jacksonville is primarily a city of houses although this fact is difficult to realize from riding through the city on one of its major highways. Just off each highway are many different residential areas. There are beautifully planned and landscaped homes; there are housing developments with their uniformity in arrangement and appearance; there are high, medium and low cost homes; there are shacks which should be razed as a public health hazard; and there are trailers and trailer parks.

The following table indicates the different kinds of residential structures in which people in Jacksonville live.

HOUSING TYPES IN JACKSONVILLE AND THE PLANNING AREA - 1960

Type of Residential Structures	Located Inside City Limits		Located in One-mile Jurisdiction		Total	
Structures	Number	Percent	Number		Number	Percent
Single-family	2,590	82.2	395	62.6	2,985	78.9
Two-family	367	11.7	8	1.3	375	9.9
Three & four-family	8 4	2.7	1	. 2	85	2.3
Five & over-family	36	1.1	0	-	36	1.0
Trailers	73	2.3	227	35.9	300	7.9
Total	3,150	100.0	631	100.0	3,781	100.0



There are a total of 3,150 residential structures inside the city limits of Jacksonville. The majority, or 82.2 percent, are single-family residences with 11.7 percent duplexes and 3.8 percent in multi-family apartments. Within the city limits at the time of survey there were 73 trailers, or 2.3 percent of all residential structures.

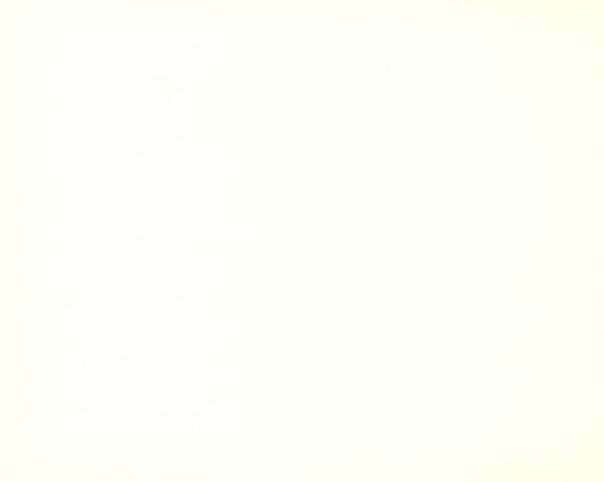
Outside the city limits and within the planning area there are only 631 residential structures of which 62.6 percent are single-family homes, 1.5 percent multi-family homes and 35.9 percent trailers.

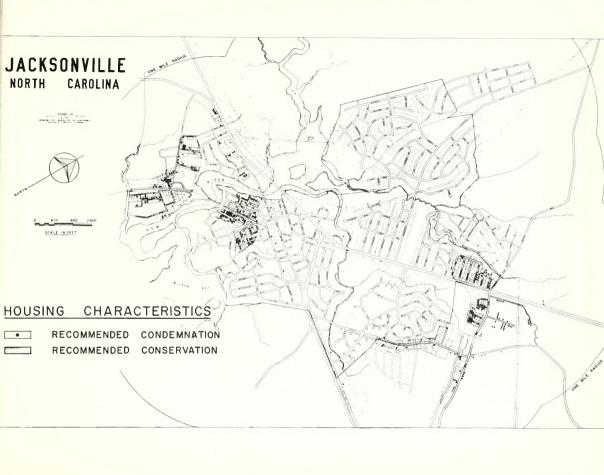
These figures indicate major differences in the types of residential development. Jacksonville has a much different pattern of residential development than most of the smaller cities in North Carolina. Most cities have less than one percent of their population living in trailers while eight percent of the residential structures in Jacksonville's planning area are trailers. Only 79 percent of Jacksonville's residential structures are single-family homes while most of the smaller cities in North Carolina have more than 90 percent of their homes as single-family units. Over 13 percent of the housing within Jacksonville are duplexes or multi-family homes while most small North Carolina cities have about half this number.

In order to determine how well Jacksonville is doing its job of providing housing it is necessary to analyze residential areas according to their structural appearance, density of population and the manner in which the subdivisions have been designed.

During the land use survey, the general condition of housing in Jacksonville was estimated by rating each residential structure according to its general visual appearance and structural condition. Residential structures were rated as excellent, good, fair, poor and very poor. This study is interested primarily in the poor and very poor housing structures since these are the ones which need to be improved.

Within the city limits a total of 59 houses, or 1.8 percent of all residential structures, were rated as "poor" So that they do not become slum housing, immediate action should be taken to improve these houses, which are in the process of deterioration and need major painting and repair in order to bring them up to a standard of healthful livability. One hundred eight, or 3.4 percent of all residential structures, were rated as "very poor" and are deteriorated beyond the point of repair.







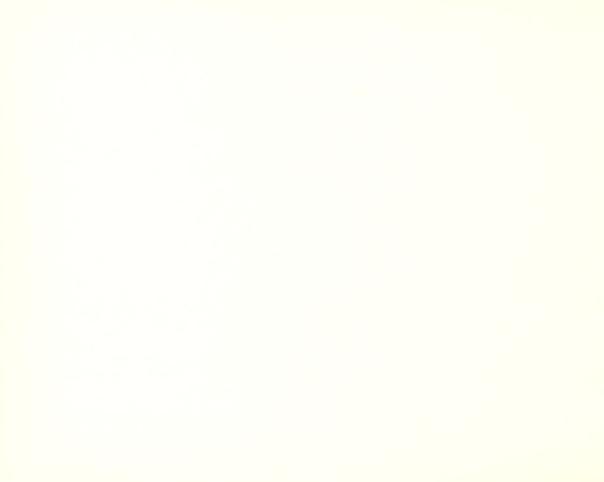
These structures are in such shape that they should be condemned by the city and torn down to prevent their being used.

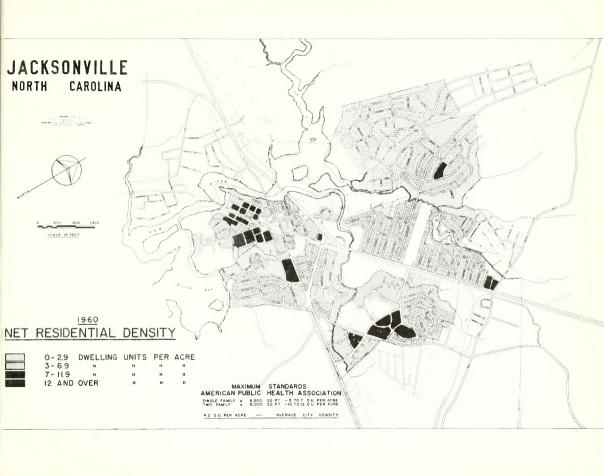
Within the one-mile planning jurisdiction there are 113, or 17.9 percent of the residential structures, which are "poor" and 157, or 24.9 percent of the residential structures, which are "very poor". This is a total of 270 or 42.8 percent of all residences which were rated below the standards for healthful living. This is an extremely serious condition, not only from the fact that it menaces the physical health of the community, but also from the fact that it reflects the state of community pride. The houses which have been designated as "very poor" are indicated for comdemnation on the accompanying map. This map also shows those areas which need conservation practices to bring them up to a healthful standard.

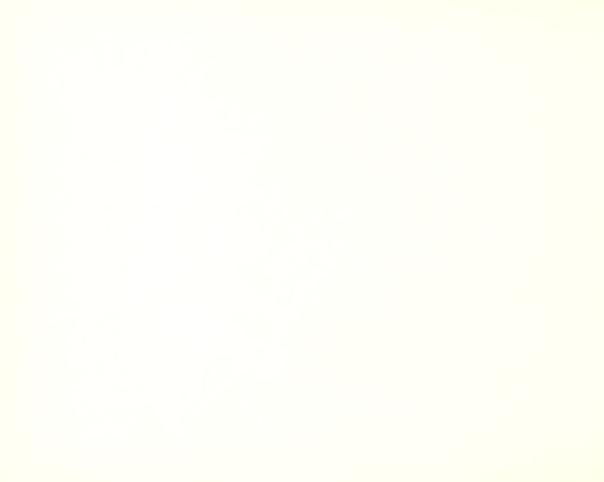
The fact that such a large percent of the housing within Jacksonville's one-mile planning jurisdiction is below the minimum standard for healthful housing will provide Jacksonville with development problems within the near future. This particular area is outside the city's immediate jurisdiction except for zoning and subdivision regulations. And yet this is the area into which Jacksonville must expand as it continues to grow. The majority of the housing within the city limits is good because it is of recent origin and because of the city's building code and inspection. However, the building code is applicable only within the city limits. One of the factors which adds to the health problems in these poor housing conditions outside the city limits is the fact that they are not provided with city water and sewer service. Poor housing conditions, wells, outhouses and septic tanks can cause a serious health problem in the Jacksonville area because of poor soil conditions.

The net residential density of each block has been indicated on the accompanying map. Density standards used are 6,000 square feet for two-family residences or 10 to 12 units per acre. These are used by the American Public Health Association in their publication "Planning the Neighborhood".

Jacksonville has not been developed with a high density of residences per block. The average for all the blocks within the city limits is only 4.2 dwelling units per net acre. This includes just the land within the block which is used for residential purposes. All other land uses have been omitted.





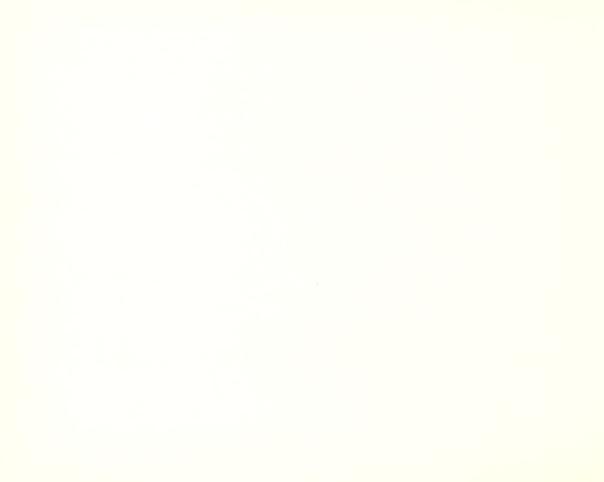


The areas in which the highest densities exist or in which there are more than seven dwelling units per acre are indicated in a dark pattern. Except for a few scattered blocks the dark patterns are indicated in two major areas. The first is located in the housing development around the New River Shopping Center. This is above seven families per acre because it is apartment type development, yet still within the recommended standard of 10 to 12 dwelling units per acre. The other area is south of College Street in the older part of town. In this case the blocks are small and the area is developed primarily in single-family residences which should meet the standard of seven dwelling units per acre. However, most blocks are above seven dwelling units per acre and one or two above twelve dwelling units per acre. This high density area also coincides with the area of poor housing conditions.

The manner in which subdivisions are designed determines their beauty and their efficiency. The manner in which the street pattern fits the topography of the land, the provision of collector streets, the block and lot size and type of improvements required all go into making attractive and useful residential areas. The manner in which some of Jacksonville's subdivisions have been laid out indicates the lack of a master street plan, poor subdivision planning and very poor enforcement of subdivision design standards by the Federal Housing Authority and other responsible financing agencies. Northwoods subdivision doesn't take advantage of its site. It is a big puzzle of curvilinear streets providing no collector streets and no land for recreation or school purposes. The entire subdivision seems to have been accepted on the basis that developers can do no wrong. Other subdivisions throughout the city suffer from the same mistakes. If Jacksonville's future residential growth is going to be useful and attractive, more attention must be paid to the manner in which subdivisions are designed.

Summary

Jacksonville's planning area has about ten percent fewer single-family residences than the other eastern North Carolina cities noted. Two-family and multi-family residences make up 13 percent of the total, which is approximately three times more than other small eastern North Carolina cities. Nearly 8 percent of the total residences are trailers, most of them located outside the city limits yet within the planning area.



The majority of poor housing areas are located outside the city limits although the largest and most concentrated is within the old part of Jacksonville, south of College Street. Within this area several blocks have block densities above Public Health Association standards. Although many subdivisions in which residences have been built are efficiently and attractively designed, many have street patterns which present many problems. Poor planning has eliminated collector streets, provided a maze of confusion in street direction, and ignored the topography of the land.



CHAPTER VII

COMMERCIAL DEVELOPMENT

There are four kinds of commercial development in Jacksonville: (1) retail shopping centers; (2) an entertainment and amusement area, catering to military personnel; (3) tourist services such as motels and eating places along the highway; and (4) mixed commercial development strips along the major highways and streets.

Most of these areas cannot be separated into functional groupings such as central commercial area, neighborhood business, etc., because each is a mixture of many commercial uses. The retail shopping areas not only serve as the central shopping areas for the city, but also provide neighborhood services for the surrounding residential community. Strip commercial development along the highway is a mixture of neighborhood services, wholesale firms, and tourists facilities. The area devoted to entertainment and amusement for military personnel is the only one which serves a single function and is tightly self-contained.

Jacksonville has three main shopping centers: the old downtown area around the County Courthouse, the New Bridge Street area and New River Shopping Center. These have all developed because old downtown was not centrally located and could not expand fast enough to take care of the new and increased need for commercial services and goods. They provide Jacksonville with three different centers of commercial activity rather than the usual one Central Business District. The difficulty is to keep each of these centers operating at an economical level. The commercial area around the County Courthouse is the only area which is suffering at the present time. One of the major difficulties with this area is the difficulty of securing parking spaces and the proximity of the military entertainment area. The planning commission should work in conjunction with the merchants in this district to provide a development plan which would indicate off-street parking lots, provide an efficient street system and develop an attractive county office building grouping.

New River Shopping Center is well-contained, has sufficient off-street parking space and is well located on a major street. There do not seem to be any specific planning problems in the area at this time.



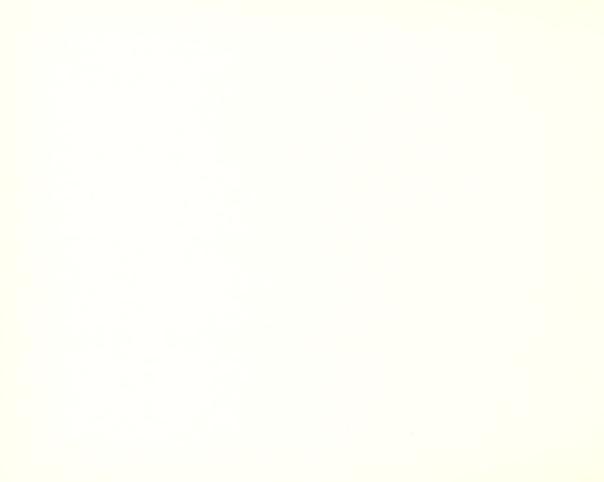
The New Bridge Street Shopping Center has nearly all of its parking space on the street. When a bridge is constructed on New Bridge Street and it is widened to the courthouse, it may be necessary to change from angle parking to parallel parking. This would necessitate providing more off-street parking space in this area.

The military entertainment district north of the County Courthouse is intensely developed along narrow streets and is well-contained. Every effort should be made to keep it this way, since it is well located in relation to the police and fire departments. The major problem with this area is one of providing transition districts and barriers between these intense uses and adjoining areas. this can be done through the development of a design plan for the entire courthouse area commercial district.

Tourist services such as motels, eating places and automobile services are provided along the major highways. Most establishments seem to have sufficient offstreet parking. At the present time there do not seem to be any large planning problems related to these commercial uses. The major difficulty seems to be the mixture of uses which surround them. No specific zone in which tourist services could develop without having unattractive highway uses on either side is provided in the zoning ordinance.

The major problem in terms of commercial development in Jacksonville is the strip commercial development along the highways. Major highways through the city, US 17 and NC 24, are stripped with a mixture of commercial enterprises stretching far outside the city limits. These highway commercial strips contain personal services for tourists, neighborhood groceries and other convenience stores, junk yards, cab stands, churches, wholesaling firms and secondary trade establishments such as used car lots, trailer lots, etc.

Since the highways serving Jacksonville's strip commercial development are wide, the major problems are sufficient off-street parking, controlled driveway entrances and mixed land uses. These can be controlled by the zoning ordinance. Strip commercial development within the planning area but outside the city limits could also be controlled by the zoning ordinance. However, some strip commercial development would still be outside the city's jurisdiction. Strip commercial uses along the highway will expand during boom times and be abandoned as marginal locations during economic recessions. As commercial areas are abandoned the zoning classification should be changed in order to remove marginal commercial uses from the area.



Summary

Jacksonville does not have a central commercial district, but several different districts and a wide expanse of commercial strips along its highways. The commercial district around the Courthouse needs a development plan. Problems related to other commercial uses can best be solved by use of the zoning ordinance and its proper enforcement.



CHAPTER VIII

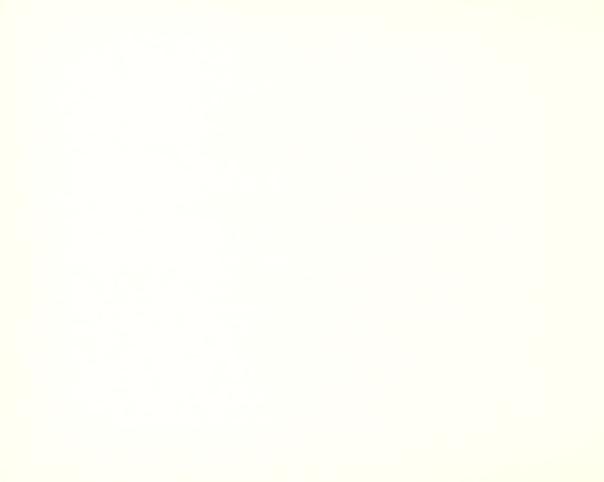
CIRCULATION: STREETS AND SIDEWALKS

Circulation is concerned with the movement of people and goods either by vehicle or foot throughout the city. The manner in which circulation is developed within a city determines the most efficient and best use of land. Each type of land use, whether it is for residential, commercial, school or recreation purposes, has different circulation needs. These needs are related to the characteristics of the particular use it serves.

Highways, major streets and residential streets are the circulation routes we think of most often; they dominate our thinking because of their size and because of the importance our society has placed on the individually owned automobile. The automobile is a necessity in Jacksonville to such an extent that it might be considered an appendage.

Two important highways break into the middle of the urbanized area. Ocean Highway, or US 17, coming from New Bern to the north meets NC 24, the major access road to Camp Lejeune. Each is a four lane highway bearing not only civilian trucks and cars but also military vehicles going from one side of the New River to the other, since there is no bridge connecting Camp Lejeune with Camp Geiger.

The manner in which streets have been developed in Jacksonville seems to indicate that they were planned with the idea that if the major highways are widened then the other streets will take care of themselves. The internal street system after one leaves the mayor highway is very difficult to comprehend and has no form or purpose. Major streets existing at the time the city was developed have been relied upon to provide all other major internal traffic movements. In general, this means that if you ever get off one of the major highways you become lost either in traffic or in a maze of streets. The city has not demanded that its subdivisions be built with collector streets, nor has it had a major street plan which would indicate future major street location or their required widths. A major street system for Jackson-ville in the built up part of the city is extremely important and will be difficult to secure without the active leadership of an interested city administration.



Planning a major street system to improve traffic movement necessitates a detailed study of roadway capacities, traffic volumes, destination points and street pattern. The only available information on how Jacksonville's streets are used is contained on the accompanying map, "1958 Traffic Volumes". Traffic volumes on Jacksonville's two major highways are high in comparison to those in North Carolina cities, but the pavement and right-of-way widths are large enough to handle them.

The highest traffic volumes in the area are on US 17 west of the New River bridge. This strip of highway has a high of 19,400 vehicles per day. The next highest volumes are on NC 24 to Camp Lejeune with a volume of 17,700 vehicles per day.

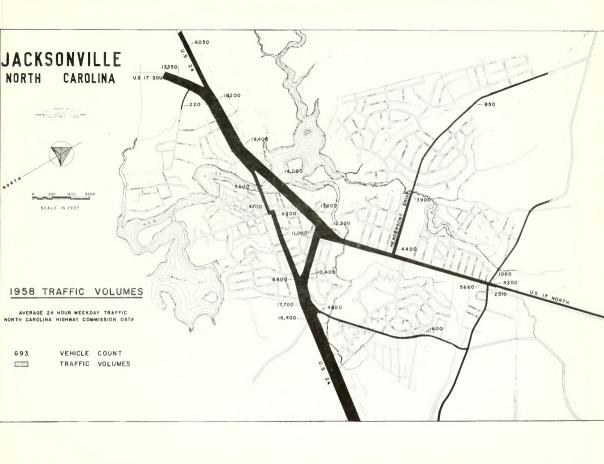
The traffic volume on Old Bridge Street going into the courthouse commercial area is 5,300 vehicles per day; this approaches capacity for such a narrow, two lane street and bridge structure. New Bridge Street as it leaves the courthouse area to the east has a volume of 6,300 vehicles per day, which is also approaching capacity for a two lane street. There are plans at the present time to widen this part of New Bridge Street.

All traffic north of the Mill Creek in the newest residential areas must cross over the Henderson Drive bridge, thereby creating one of the more difficult traffic problems. In 1958 its traffic volume was 3,900 vehicles per day, but this volume will certainly increase to capacity when the new high school is completed at the end of Henderson Drive. Traffic volumes approaching capacity or over 6,000 vehicles per day are also indicated on US 258 west before its junction with US 17.

Because each kind of street within the city has a different function or use, it must have a different width or right-of-way. Streets are made up of land used for moving traffic or parking. Street lanes for moving traffic in residential districts are usually just ten feet wide, in commercial and industrial districts eleven or twelve feet wide. Parking lanes on streets vary from eight to ten feet according to whether they are for residential, commercial, or truck parking. The wider lanes are used in areas where there is a greater volume of traffic and where there is more truck traffic. Utility strips provided along the paved widths vary in size according to the type of utilities, the width of sidewalk and type of tree planting desired.

The following minimum rights-of-way should be reviewed by municipal officials as the basis for establishing a definite city policy of future street development.





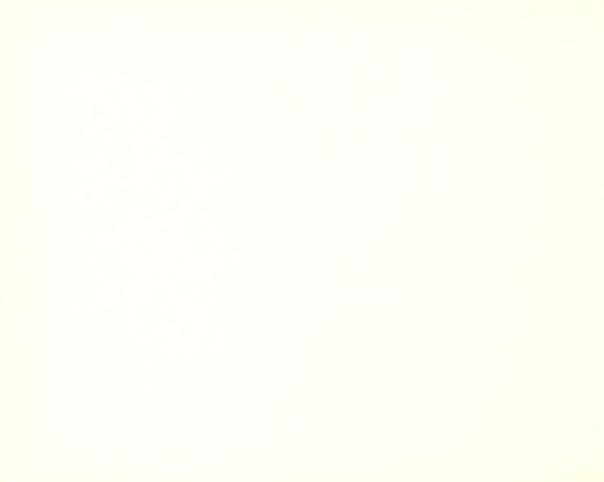


TABLE 5

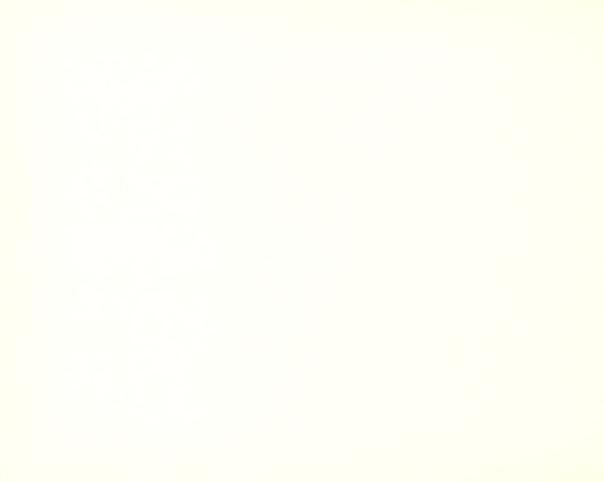
SUGGESTED MINIMUM RIGHTS-OF-WAY FOR JACKSONVILLE STREETS

Type of Street	Minimum Right-of-way	
State and Federal Highways		
In developed or built up areas	80 feet	
In open or undeveloped areas	120 feet	
Internal Major Streets	80 feet	
Collector Streets	60 feet	
Commercial - Industrial Service Streets	80 feet	
Minor Residential Streets	50 feet	

These minimum rights-of-way should be considered for the future development of Jacksonville, especially in those cases where traffic engineers have not determined the specified rights-of-way for a particular street.

The need for pedestrian circulation or providing sidewalks has never been considered as important in building cities as street construction. However, for the purpose which they serve they are just as important as streets and should be considered a necessary and vital part of a city's circulation system.

During the last fifteen or twenty years it has been fashionable to build residential developments without sidewalks. Now this shortsighted economy is beginning to take its toll in dangerous walking conditions and serious, if not fatal, accidents. Sidewalks provide for many things. Every family of small children finds itself impelled to provide the children with roller skates, tricycles, wagons and all the other exciting vehicles children want Santa Claus to bring them. Without sidewalks, streets become the children's play space since the car is parked in the driveway.



Besides safety, sidewalks provide a very definite unifying feature in the development of any city. Curb and gutter, with planting strip and sidewalk, provide a unifying feature to each block. Regardless of the type of land use or the appearance of the structure; curb, gutter and sidewalks with accompanying landscaping help soften and unify the individual architectural choices.

Jacksonville has very few sidewalks. Some are provided in the neighborhood of schools, some in the older parts of the city and some in the housing development. But in general, Jacksonville has no sidewalks and the city administration has no policy on sidewalk construction.

Ideally pedestrian ways should be divorced from the street system. In this manner, children walking could be separated from automobiles. However, the manner and intensity in which Jacksonville has been developed at this time and the particular character and function of the city seem to point to the need for providing sidewalks along its major streets rather than separate pedestrian ways.

Summary

Very little has been done in the past to develop a detailed major street plan. for Jacksonville. The location of future major streets and the detailed determination of street widths is extremely important because of the nucleated manner in which Jacksonville has been developed. The major highways running through Jacksonville take care of most traffic problems. New Bridge Street needs a new bridge and the old bridge removed. Another major street is needed into the area above Mill Creek in order to relieve the pressure on Henderson Drive and its small bridge. The entire city needs to be united by a comprehensive major street system tying the many different nucleated areas together.

Jacksonville has few sidewalks and no municipal policy for requiring their development. Sidewalks are a necessary part of any city and supplement the street system as well as provide safety for children's play. Sidewalks should be required in new subdivisions, as the city grows in the future. A policy of sidewalk development should be started within the city.



CHAPTER IX

RECREATION SITES AND SERVICE AREAS

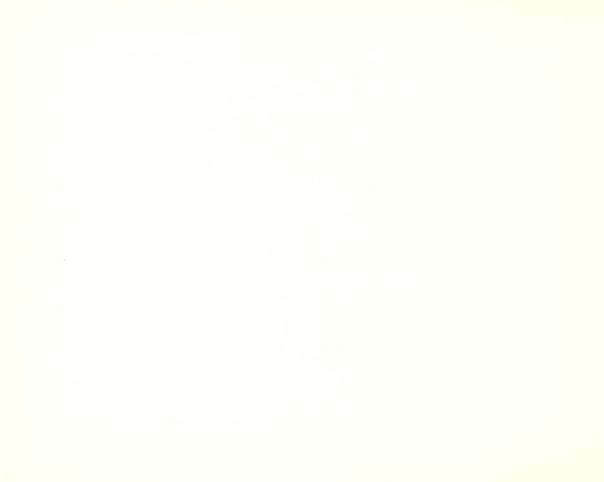
In order to evaluate the recreation facilities for Jacksonville, it is necessary to analyze existing facilities in terms of some basic recreation standards. The following general standards have been established in cooperation with the North Carolina Recreation Commission.

In general, three different types of recreation facilities are recommended for a comprehensive recreation program: play-lots, playgrounds, and a community recreation and park area.

Residential Play-lots. Play-lots are designed primarily for children of preschool age and are unsupervised, depending upon the care of parents for their children. In areas with net residential densities above seven families per acre, play-lots should be developed with 5,000 to 7,000 square feet serving the population within one-fourth mile. Small play equipment and sandboxes should be provided as well as shade and benches for adults. Fencing or screening can be used so that children will remain within the developed area.

The Neighborhood Playground. It is recommended that playgrounds be developed on ten to twelve acre sites and located within three-fourths of a mile of the people they serve. This is primarily within walking or bicycle distance. These playgrounds are designed primarily for supervised play and should contain lighted ball fields, tennis courts, basketball goals and other play equipment.

The Community Recreation Area. The Community recreation and regional park area should be designed as the focal point for all recreational activities within the entire community. There should be a total of approximately twenty to forty acres in this area, which should serve approximately 12,000 to 20,000 people, or those people within a one and one-half to two mile radius, who come to the area by auto. The community recreation building should be located at this site as well as a sports field or stadium, a swimming pool, tennis courts, picnic areas, and similar concentrated recreational uses.



Regional Park. Ideally a large regional park should be located to preserve scenic beauty and to provide a pleasant environment in which individuals may engage in a variety of recreational activities. It should be designated and developed for the enjoyment and diversified use of large numbers of people not only from the city itself, but from the entire region which the city serves. Since it is seldom possible to secure the desired effect in a smaller area, most authorities recommend one hundred acres as a minimum for this type of park. The location depends upon the availability of land that is suitable in size, topography, and other natural features; it should be readily accessible to all the people of the city region. Parts of the area should be left in various types of woodland, open meadow, and stream wherever possible, Facilities should be provided for nature or botanical areas, picnicking, horseback riding, hiking, field sports, a stadium and similar large scale activities. Paths for walkers should be numerous, and comfort stations, shelters, and parking facilities should be planned where people congregate in large numbers.

This is a statement of the recreation facilities for a standard or average city, which, for population purposes, will be compared with existing facilities. Jackson-ville has the following recreation facilities located within the city limits.

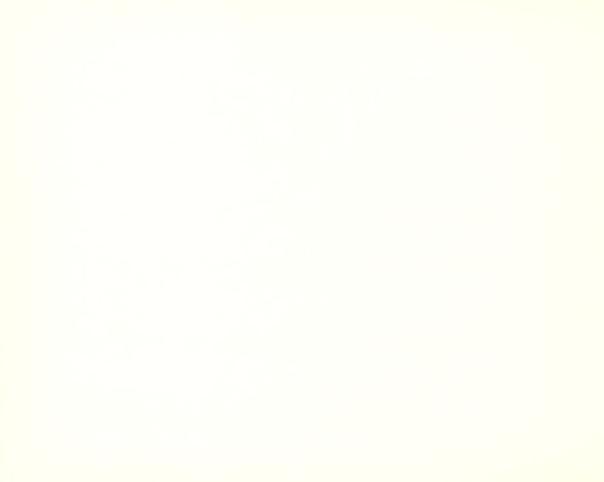
Community Recreation Areas

- The Jack Amyette Recreation Center serving the entire city with a community center building, recreation department offices, playroom and official ball fields.

 Approximately twelve acres of land in this center are sufficient for a neighborhood playground, but not for a community park.
- The Kerr Street Recreation Center for Negroes which includes a community center with playrooms, tot-lot with wading pool and ball field. There are approximately five acres in this center, which is insufficient for a neighborhood playground or community recreation area.

Neighborhood Playgrounds

The Northwoods Recreation center includes a recreation building, small playground and facilities on the adjoining school property for tennis courts and ball



fields. There are only about three acres in this center, which is below the standard for neighborhood playgrounds.

Preschool Play-lots

Overbrook Park contains play equipment and a lot of play space. It contains about two acres. More land is available so that sometime in the future it can be developed into a neighborhood playground.

Freedom Park contains play equipment on approximately half an acre.

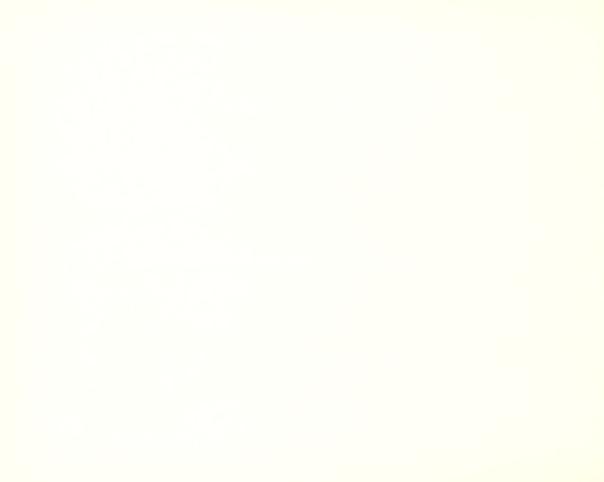
Wilson Bay Park has about three acres with play equipment and picnicking facilities for the entire community.

The following table compares the acreage within each recreation area to the proposed standards for recreation facilities.

TABLE 6

COMPARISON OF RECREATION LAND AREAS WITH PROPOSED STANDARDS

Community	Existing	Standard	
Recreation	Acreage	Recommended	Deficiency
Amyette Center	12 acres	20 acres	8 acres
Kerr Street Center	5 acres	20 acres	15 acres
Neighborhood Playgrounds			
Northwoods	3 acres	10 acres	7 acres
Preschool Play-lots			
Overbrook Park	2 acres	1/4 acre	none
Freedom Park	4/10 acre	1/4 acre	none
Wilson Bay Park	3 acres	1/4 acre	none



All the recreation areas except the play-lots are deficient in land area as recommended by the proposed standards. The locations of these recreation facilities have been plotted on the accompanying map, which indicates their adequacy in providing recreation services to all parts of the Jacksonville planning area.

As a community recreation area, the Jack Amyette Recreation Center provides services to the entire city; however, it is not large enough in terms of land acreage to fulfill the needs of this type of facility. It serves as a neighborhood playground. Neighborhood playgrounds serve the most populated areas of the city and many areas are outside the playground service area.

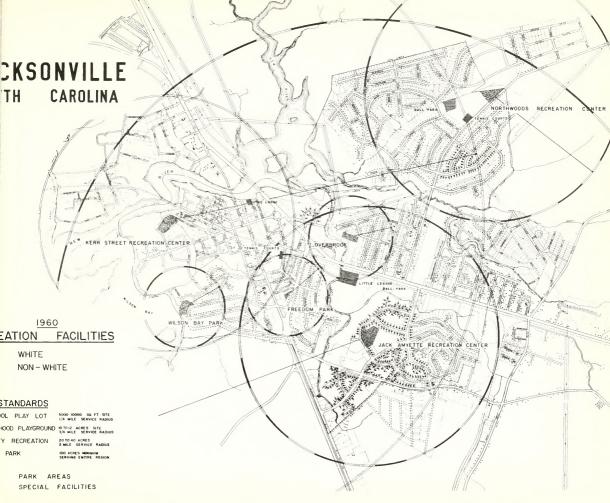
Although the Kerr Street Recreation Center for Negroes is considered a Community Recreation Center, it is more in keeping with a Neighborhood Playground. Recreation facilities for Negroes are extremely difficult to place since the major areas of Negro residential development are scattered into three areas: Kerr Street, Georgetown and Bell Fork Road. The service area for the Kerr Street Community Center covers the major area of Negro residential development including the Negro residential areas across the New River which are inaccessible because there is no bridge. It does not cover the Negro residential area near Bell Fork Road.

Overbrook and Wilson Bay Parks, preschool play-lots, are located on property which the Recreation Commission hopes to convert into neighborhood playgrounds in the future. Wilson Bay Park is best suited for its present use, which is for small play areas and picnicking. The Recreation Commission has plans at the present time to ruin the only natural scenic park the city has, by adding a community center building. The play-lot at Freedom Park is much too small to accommodate anything more than play equipment. It is isolated by major streets on either side, and its service area covers as much commercial development as residential development.

Play lots should be provided in areas of high residential density, such as the apartment house development around New River Shopping Center. They should be used where dwelling units do not have enough space around them for preschool children to play.

At the present time a city recreation program for crafts is conducted in Pine Lodge located next to the New River. The city should place more emphasis on activities which do not require active sport participation. In a city like Jacksonville,







where the personnel of the base are stationed for a limited time, it would be rewarding for the city to employ one person to organize and keep small groups of people working on cultural projects. At the present time the auditorium in the City Hall as well as the Pine Lodge are available for use of community gatherings. Jacksonville's recreation program could be widely broadened by the stimulation of small groups for specialized activities such as music, acting and art shows. A small orchestra or band, a theatre group to present plays and annual art shows to stimulate painting and crafts would be a great asset to the city.

Jacksonville does not have any large scenic parkways or recreation areas which could be considered a regional park. There is plenty of land which could be developed along the New River for scenic purposes as well as for water sports.

Summary

Jacksonville's recreation areas are growing rapidly into a comprehensive system. However, many areas are not adequately served at the present time. There is a continuing need to develop neighborhood playgrounds more than any other facility. The necessity for play-lots for preschool children in the vicinity of the New River housing development should be more thoroughly investigated. The fact that no water access areas have been provided for recreation purposes ignores a major natural resource. Parks and parkways adding to the natural beauty of the city and to the areas for picnicking and passive recreation have not been developed. The city needs a broader program of cultural and craft activities to serve the needs of a population with broad interests.



CHAPTER X

SCHOOL SITES AND SERVICE AREAS

Jacksonville's schools are administered as part of the Onslow County School system rather than as a separate city system. The Jacksonville School District takes in a large part of the county in addition to the city. In general, it includes the area within eight miles of Jacksonville. This means that the school system is not a city system and not a rural system, but must meet the particular needs of both an urban and a rural area. In an urbanized area school sites are extremely important because everyone walks or secures his own transportation. Therefore specific school locations within an urban area should be centralized to provide easy access to those it serves. In a rural area because nearly everyone rides the school bus, school locations are not as crucial.

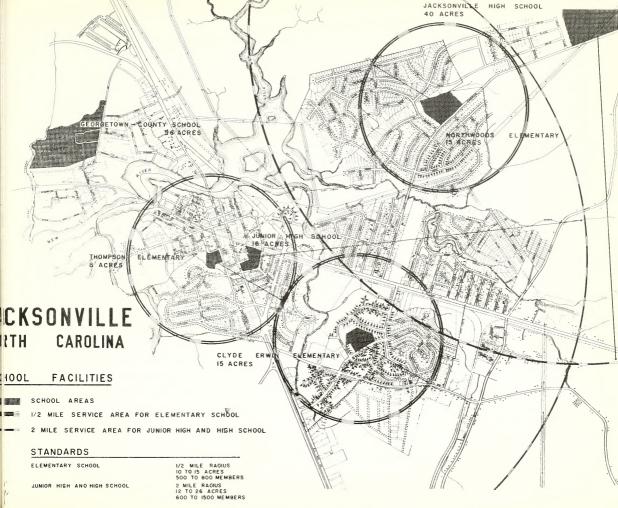
In order to analyze school locations and service areas, minimum urban standards have been formulated which indicate the immediate service areas for each school eliminating the flexibility provided by bus transportation. In this manner, it is possible to evaluate existing school service areas and locations. The following urban school standards have been proposed for analysis purposes.

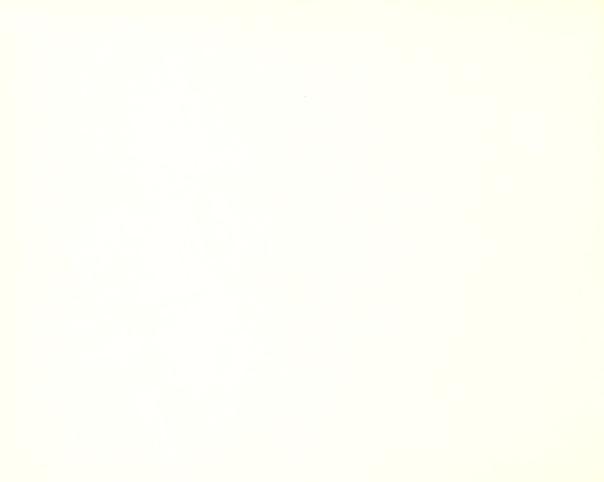
<u>Elementary Schools</u>. Elementary schools serve the residential area within one-half mile of the school. This is considered an average service area and is related to the walking distance for elementary school children. Elementary schools should be located on land areas from ten to fifteen acres and should have a membership of approximately 500 children.

<u>High Schools.</u> Both junior and senior high schools should serve a residential area within two miles of the school. This is related to the recommended enrollment of approximately 1,000 pupils and to the fact that high school children can go further distances to school walking or riding.

The accompanying map, "School Facilities," indicates these different standards for White and Negro schools in the Jacksonville planning area. This map takes into consideration some factors which are not a reality at this time. The new high school has not been completed, and the junior high school is now serving







as the district senior high school.

TABLE 7

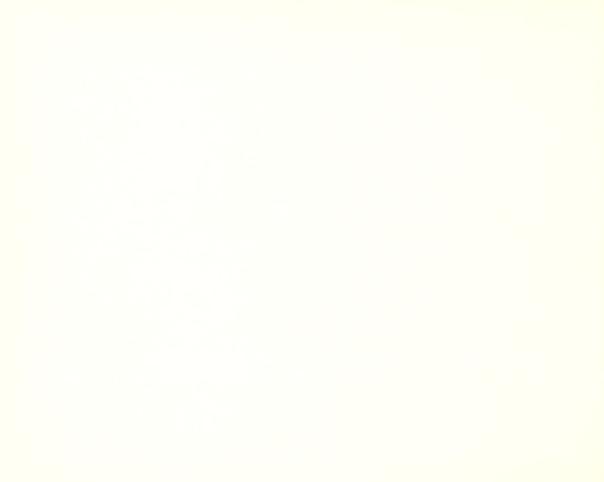
The White population is served by Thompson, Northwood and Clyde Erwin Elementary schools. The one-half mile circle for these elementary schools does not completely cover Jacksonville's residential areas. A large belt of residential land west of US 17 is not within the one-half mile district. At the present time children in this area are carried by buses to Thompson Elementary School.

The present high school, which is indicated as the junior high school on the map, can well serve the entire city. Many of its pupils are brought in by bus. The new high school site contains forty acres and is located on the far north end of the city so that the two-mile service radius only takes in about half the city. The location of the new high school to the north is very dependent on the construction of a northern bypass route to connect NC 53 with Gum Branch Road. However, it might well take the united action of all the County Commissioners to get this road built.

The Georgetown County School provides both elementary and high school for the Negro population of Jacksonville and the entire county. Since very few live within walking distance it is served by buses. One new Negro elementary school is planned for construction within the near future off of Bell Fork Road near NC 24 to Camp Lejeune. There are no large Negro residential areas, but many scattered Negro communities. The location of this new elementary school will tend to stimulate Negro residential development within that area.

COMPARISON OF TAGUSONVILLE SCHOOL SITE AGREACES WITH PRODUCED STANDARDS

COMPARISON OF JACKSONVILLE SCHOOL SITE ACREAGES WITH PROPOSED STANDARDS					
Schools	Existing Acreage	Proposed Standard	Deficiency		
Thompson Elementary	8	10 - 15	2 - 7		
Clyde Erwin Elementary	15	10 - 15	None		
Northwoods	15	10 - 15	None		
High School (existing)	16	12 - 26	0 - 10		
High School (new)	40	12 - 26	None		
Georgetown (combined)	56	22 - 41	None		



The preceding table analyzes the number of acres within each school site against the proposed standards. This comparison indicates that all school sites have sufficient land except for Thompson Elementary School, which lacks seven acres of having the required standards, and the existing Jacksonville High School, which lacks ten acres from the standard.

Summary

The location of school sites within the Jacksonville area must take into consideration the urban-rural nature of the service areas. At present, another elementary school is needed in the northern area of Jacksonville. The new high school site may be centrally located as far as the entire school district is concerned, but it is poorly located to serve the Jacksonville urban area. It will always demand a lot of vehicular transportation and could be improved by the location of a bypass to the north of Jacksonville. This may take concerted effort by local county officials before it is constructed.



CHAPTER XI

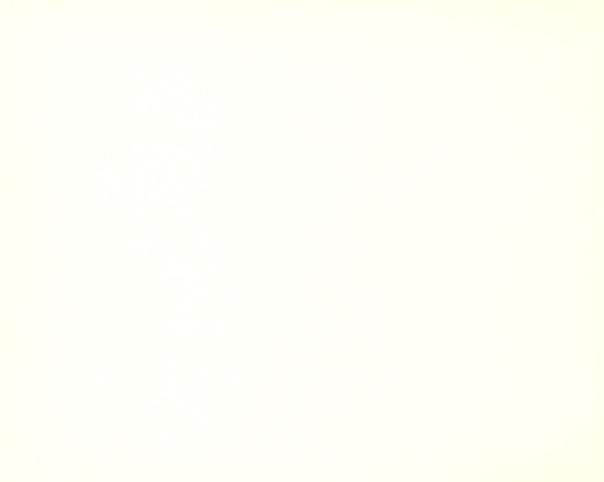
COMMUNITY FACILITIES

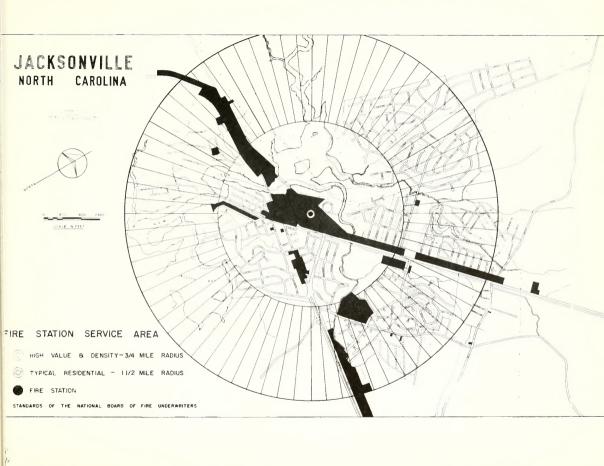
Within each city there are a number of both public and private organizations which provide services to the entire community such as medical, governmental, and cultural services. The extent to which a community has developed these services determines in great part its social unity and cultural attainment.

Jacksonville has a very attractive new city hall on US 17 in a prominent and efficient location. The building is of modern design, is set back from the highway and provides adequate off-street parking. It houses the major administrative offices, police and fire departments as well as a large community meeting hall. At the present time it is being expanded to house a city courtroom and other administrative offices.

Jacksonville is also the seat of Onslow County government. The courthouse is located at the end of Old Bridge Street in another attractive new building. It houses the judicial, law enforcement and other administrative offices. Next to the courthouse there are several buildings housing other county agencies. The manner in which these buildings are related to each other should be improved, and lack of off-street parking should be remedied. The county should investigate the possibility of providing a County Governmental Center close to the courthouse to provide space for all governmental agencies and adequate off-street parking. It could be planned in the block facing the river so that it would command an attractive site, with a view of the river. A beautifully landscaped governmental center would provide a sense of pride and dignity for everyone in Onslow County.

The Onslow County Hospital, nurse's home and health department are located on College Street. The buildings are attractive and efficiently related to each other. There is sufficient land for off-street parking, and the buildings are set back from the street. The location is excellent in the fact that it is centrally placed within the city and next to a quiet residential area. It is readily accessible, being located only one block from a major street and three blocks from a four-lane highway. It also has commercial services such as restaurants and drugstores within the immediate vicinity. At the present time the hospital, with seventy-five beds, is







sufficient for immediate needs with enough room for expansion. It must be remembered that this hospital is supplemented by the United States Marine Corps Hospital at Lejeune for military personnel.

Because all of Jacksonville's growth has taken place within the last decade, it hasn't had a chance to develop any cultural facilities. The city does not have a library, but utilizes the Onslow Library located near the courthouse. There is little reason to believe that Jacksonville should work for a cultural center, since it is still a small city with a very specialized function. But there is no reason why it shouldn't work to develop a historical museum for United States Marine documents, uniforms, and military weapons. This type of museum could be developed as a tourist attraction, a place of historical interest, and a place of pride for the City of Jacksonville. This type of museum could be worked into the county governmental center.

Fire protection is a major municipal service which affects everyone within the city. The extent to which a city provides adequate fire protection service determines the insurance rating for individual structures as well as the ability to control fires.

This report is concerned primarily with evaluating the location of the fire department and its immediate service areas. At the present time, Jacksonville has one major fire station located at the City Hall. This department serves the entire city limits area and is available for calls outside the city limits on a payment basis. The following National Board of Fire Underwriters Standards for fire station locations have been indicated on the accompanying map.

TABLE 8

STANDARDS FOR FIRE STATION LOCATION	OND
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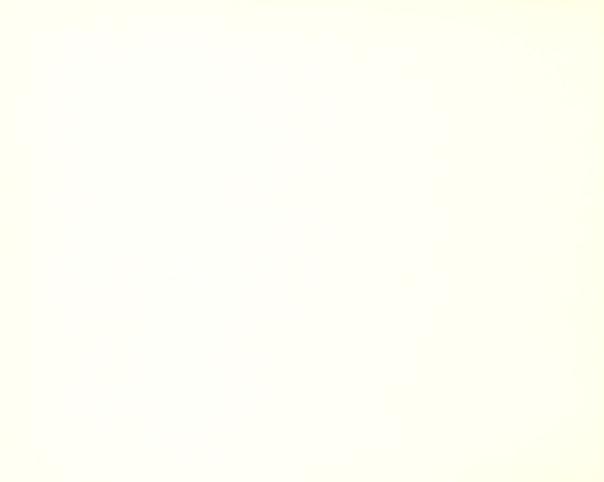
	Recommended Maximum Distance In			
Type of District	Miles From The Fire Station			
High Value and density of development				
(commercial, industrial, etc.)	3/4 mile distance			
Typical residential development	1.5 mile distance			
Scattered residential development	3.0 mile distance			



From its location Jacksonville's fire station can serve most of the city's typical residential areas except for the newest subdivisions north along Henderson Drive and the new Jacksonville High School being constructed at this time. However, the fire station is not within three-quarters of a mile of all commercial and high density development; this poses an almost impossible problem because of the manner in which business has developed, stripping the major highways. New River Shopping Center is also outside the three-quarter mile radius. The map indicates the immediate need for another fire station location, preferably in the area where Onslow Drive and Henderson Drive intersect US 17.. From such a location, fire protection service could easily reach any point off of Henderson Drive and also the New River Shopping Center. A location in the vicinity of Henderson Drive is important because it is the only access road into the Northwoods area.

Summary

Jacksonville is well supplied with community facilities. It has a new City Hall and a County Courthouse. Land areas for the County Hospital and health facilities are both attractive and adequate. The County should consider the possibilities of developing a governmental center related to the courthouse to provide office space for county departments. These could be provided in conjunction with a United States Marine Corps Museum. These could be located in a landscaped area facing the New River with plenty of space for off-street parking and for a beautiful river park. Jacksonville needs a new fire station to serve the high value areas to the northeast. A location in the vicinity of Henderson Drive and US 17 seems most feasible and efficient.



CHAPTER XII

PRELIMINARY RENEWAL AREA STUDY

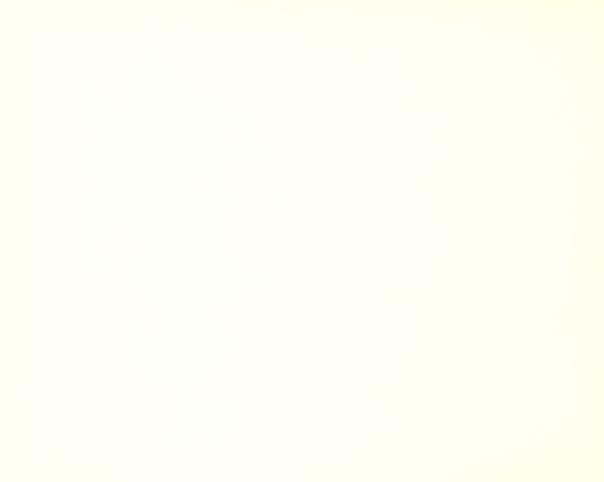
This section will analyze data related to the designation of an area for redevelopment through urban renewal. Nearly every city has older areas of housing which have deteriorated below the minimum acceptable standards for healthful living conditions. These areas are characterized by poor residential structures, inadequate sanitary facilities and overcrowded conditions. Throughout the United States this type of housing generally provides less than ten percent of the tax returns for a city, yet requires over thirty percent of the city's expenditures for police, fire and health protection.

Redevelopment is a term indicating the legal process by which a municipality may work toward changing slum areas into healthful living areas. It refers to a locally planned and developed program to renew deteriorated or dilapidated areas by rebuilding them according to a definite plan.

This report will analyze some of the many different things which cause or are caused by poor housing conditions in order to determine the area or areas in which they exist. Proposals will be made indicating how the renewal area might be redeveloped. The following criteria will be considered: incompatible land uses, inefficient street patterns, poor housing conditions, overcrowding and a high incidence of communicable diseases.

Jacksonville is different from the usual city in which areas for urban renewal are determined. Many of the criteria which bear a direct relationship to slum areas in other more urbanized cities do not necessarily indicate slum conditions in Jacksonville. This is true primarily because most of the city has been developed within the last ten years and because of its particular function, as a service area for the Marine Base.

The words "incompatible land uses" are often meaningless to the average citizen, but a specific example such as locating a filling station, garage or junk yard next to a group of expensive residences provides a meaningful example. It indicates the extent to which property values can be lowered when different uses are indiscrminately



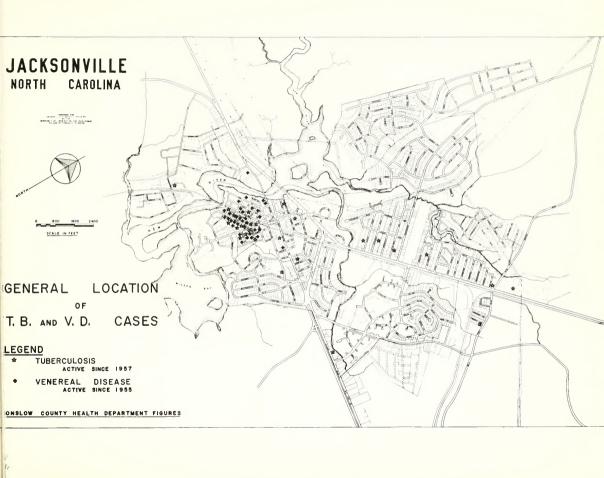
located throughout the city. Mixed land uses are predominant throughout Jacksonville, especially along the major streets and highways. Strip commercial development backed up by residential development is located in all directions. In many cases adjoining residential development is of poor quality; in other cases residential development has not been greatly affected. The worst areas of deteriorated housing caused by incompatible land use are along the major highways leading into Jacksonville and around the commercial area centered at the courthouse. Places in which incompatible land uses have not affected housing are located south of the New Bridge Street commercial area and around the Northwoods Shopping Center. In general, incompatible uses in Jacksonville's areas cannot be considered as a primary cause of deteriorating housing and land values, but one of its many causes.

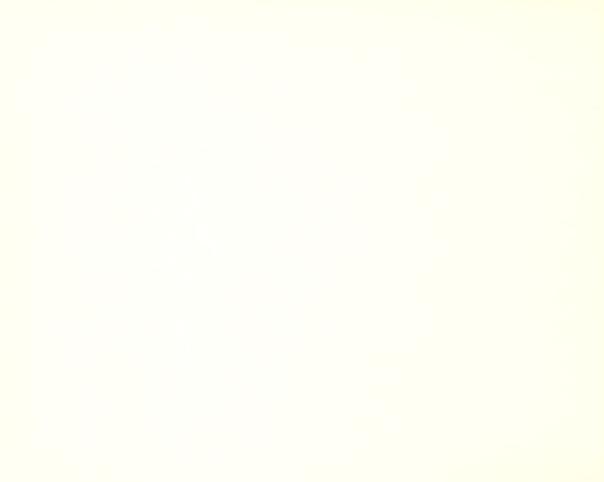
An inefficient street pattern can also cause deteriorated housing. Street patterns without direction or purpose seriously impair traffic movement and provide a psychological barrier to development. Inefficient street patterns are not isolated in any one area of Jacksonville. As noted in the section on residential development there are many subdivisions scattered throughout the city which have an inefficient street pattern. Some of these subdivisions are characterized by good housing and some by poor housing. The major difference seems to be that the better housing areas have paved streets while the inexpensive housing areas have unpaved streets. A poor and inefficient street pattern cannot be used as a primary criterion in locating slum conditions.

Poor housing conditions can be caused by the construction of new shacks or by the deterioration of old residential structures. Although each of these conditions can be remedied by adequate building and housing codes and their proper enforcement, in most United States cities such policies have never been popular with city administrations. Poor housing conditions are related to poor structural conditions, inadequate utilities and general appearance.

A map and analysis of housing characteristics is contained in the chapter on residential development. Except for scattered houses it indicates six areas in which housing characteristics were rated "poor" and "very poor". Of these six areas only two are within the city limits and therefore eligible for redevelopment under city responsibility. The rest are within the planning area. If the area west of US 17 north which has just recently been taken into the city is provided with water services, sewer services and building code enforcement, it will soon stabilize. The







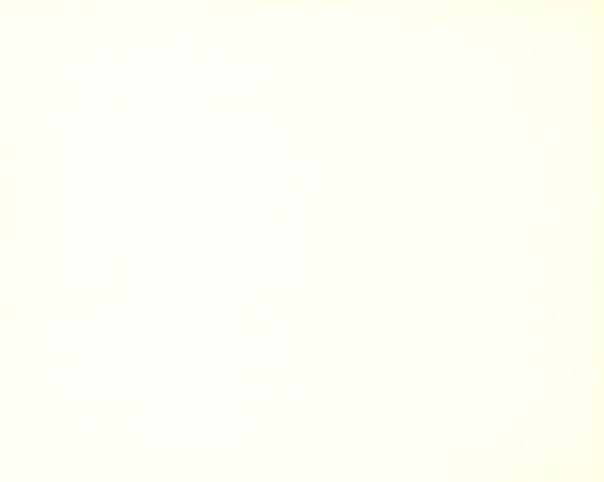
other area south of College Street and the County Courthouse is extremely bad. It contains approximately seventy-five houses which need to be condemned and demolished. Many of the structures are filthy shacks which should be razed for health purposes. Besides these structures there are many others which need repair and painting. In terms of poor housing this is the worst area in Jacksonville and one in which bad residential conditions are concentrated.

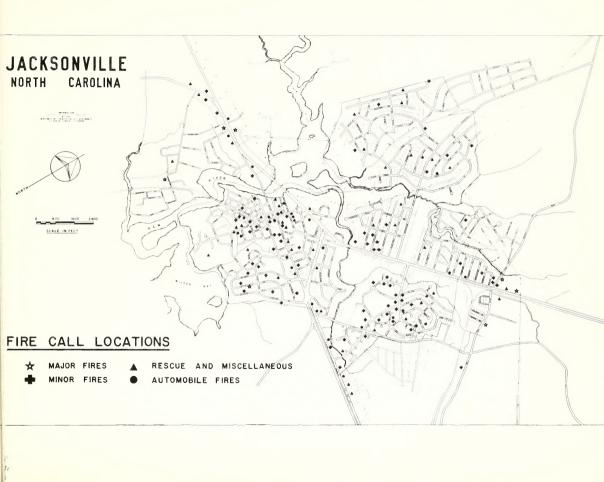
A high density of population living within residential structures also tends to depreciate the appearance and health conditions within an area. A high density of development usually indicates overcrowding. This is especially true when a large number of single-family homes are developed on small lots of 40' x 100'. In cases where houses are developed in a row on small lots, much outdoor space is lost in meaningless narrow spaces between buildings. These spaces are usually so small they receive no sunshine, nothing grows and they become harbors of accumulated trash.

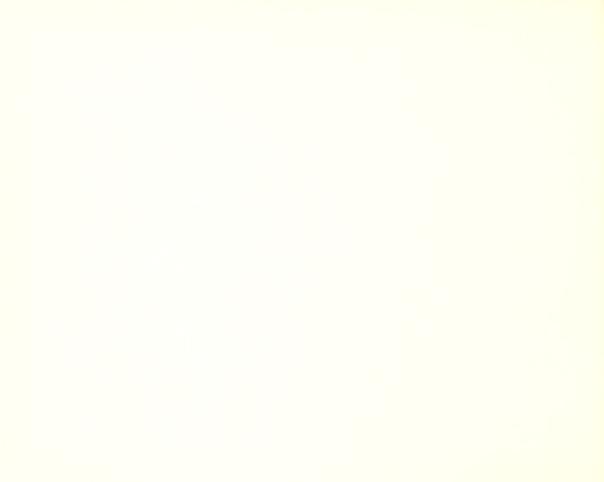
An analysis and map of residential density is provided in the chapter on residential development. The residential density map shows the area south of College Street to have densities of development over the recognized standard. This area is developed primarily in single-family homes and according to the standard should have a density of less than seven families per acre. The map indicates that nearly all these blocks have densities of more than seven families per acre and, in some cases, above twelve families per acre. This overcrowding robs the area of usable land which could be used for play space and, in its place, creates an atmosphere of disorder.

An additional problem related to overcrowding is the lack of sanitary facilities. One of the multiple family homes provides a communal toilet which no one keeps clean and which therefore becomes a health problem. The entire area is provided with water and sewer services since the main water plant is located within the area and the sewage disposal plant is immediately adjacent to the area. However, most of the dwelling units either are furnished with minimum facilities or are not utilizing them at all. The City of Jacksonville does not have a housing code requiring every dwelling unit to be provided with safe and sanitary plumbing fixtures.

The extent to which crime, fires and communicable diseases exist within an area is most often an indication of poor housing conditions. Arrests in Jacksonville occur primarily within the commercial entertainment and amusement area north of the County







Courthouse. The majority of arrests are for public drunkenness and disturbing the peace. The area of poor housing conditions south of College Street and the courthouse directly adjoins this area.

There does not seem to be any area in which fires occur more often than others. The primary reason for fire calls is minor fires in oil heaters.

Health department figures on communicable diseases point directly to the area south of College Street. The accompanying map indicates the general location of cases of tuberculosis and venereal disease, the majority of which are found in the old part of Jacksonville, south of College Street. This incidence is caused by two reasons: bad housing conditions and the fact that it is the area in which prostitution takes place.

The area south of College Street in the old part of Jacksonville should be considered as Jacksonville's redevelopment area. It has the worst housing conditions, the most overcrowding and the greatest incidence of communicable diseases. No particular areas within the city were singled out for specific incompatible land uses and inefficient street pattern; however, now that other criteria have indicated this area south of College Street to be a slum, these can be pointed out.

The redevelopment area contains a number of uses incompatible with residential activities: the main railroad yard and depot for Jacksonville, and scattered warehousing, industrial and commercial uses. The street pattern can be said to have no particular unity. Streets lead toward the river, where they stop. In general, the area is a maze of dead end streets.

All indices point to the area south of College Street for redevelopment purposes. However, the redevelopment of this area is not as simple as might be first assumed. It is primarily a Negro residential area which contains not only nice residences, churches and a recreation area, but also beer halls and prostitution. Just to the east of this area is one of the better White residential neighborhoods separated from it by a drainage stream. To the south is a large area of undeveloped land. This land has remained undeveloped because of the proximity of the sewage disposal plant, because of disreputable establishments and because of existing feelings between the Negro and White races. The Negro population has not been able to develop this land



financially, and since the White population is scared of developing residences where they would be living close to the Negroes, the land has remained undeveloped. To the west lies the New River along which a barge loading dock for pulpwood has been established. To the north of the area is the County Courthouse and the surrounding commercial district. Any redevelopment of this slum area must take all of these relationships into consideration. It will have to provide transitional uses or barriers between incompatible land uses and provide a meaningful street pattern.

One of the social problems in the redevelopment of the area south of College Street is concerned with the best manner to control prostitution and beer halls. Redevelopment might scatter these uses all over the city and planning area or it could keep them contained within one area. So far as police, fire and health protection are concerned the present area in which these uses are self-contained would make their control easiest.

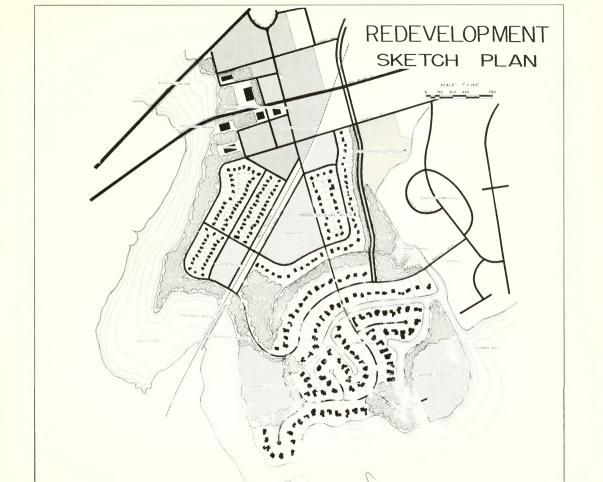
The accompanying map, "Redevelopment Sketch Plan", indicates one manner in which the entire area might be redeveloped. The plan indicates planning developments in adjoining areas with which it was necessary to coordinate. The old bridge needs to be replaced by a bridge on New Bridge Street. The old bridge should be demolished and the street closed. A one-way system of bridges would not help in any way since Old Bridge Street dead ends right at the courthouse.

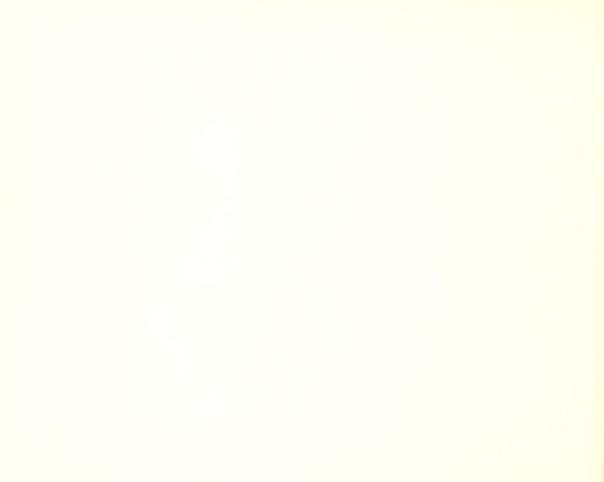
The area to the south should be further developed not only for residential use, but also for recreation areas which could utilize Wilson Bay. The sketch plan indicates not only park areas, but also a marina and subdivisions which could have boat docks with the houses.

The County Governmental Center as suggested in the community facilities chapter is also indicated. It is a grouping of county administrative buildings in a park-like area facing New River.

Within the area for redevelopment, land uses have been organized into groups. Places for commercial, industry, recreation and residences have been indicated. An efficient street pattern has been developed which tends to relate complementary uses and organize the area into a comprehensive whole.







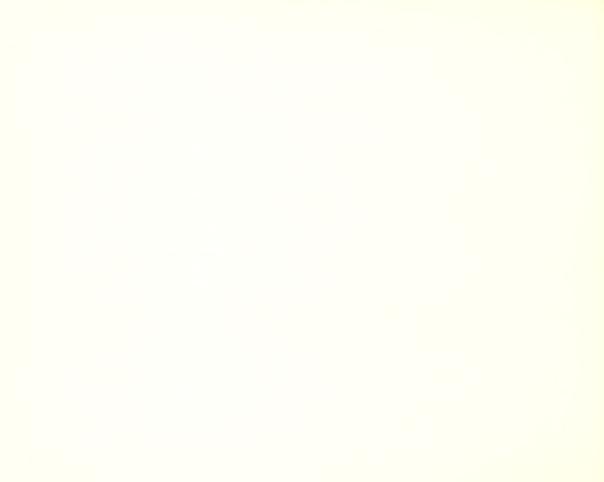
To be eligible for Federal assistance to redevelop its poor housing and slum areas, Jacksonville must make application and be certified under the Housing and Home Finance "Workable Program". This application is a general statement of the present status and the steps which the city proposes to take in the future in order to provide the following seven elements:

- (1) Sound local building, housing and health codes.
- (2) A development plan indicating how the city should grow.
- (3) A neighborhood analysis proposing corrective measures.
- (4) An administrative organization to handle the redevelopment program.
- (5) A statement of the city's financial ability to carry out the redevelopment program.
- (6) A plan and organization for the rehousing of displaced families.
- (7) A program of community-wide participation in the redevelopment project.

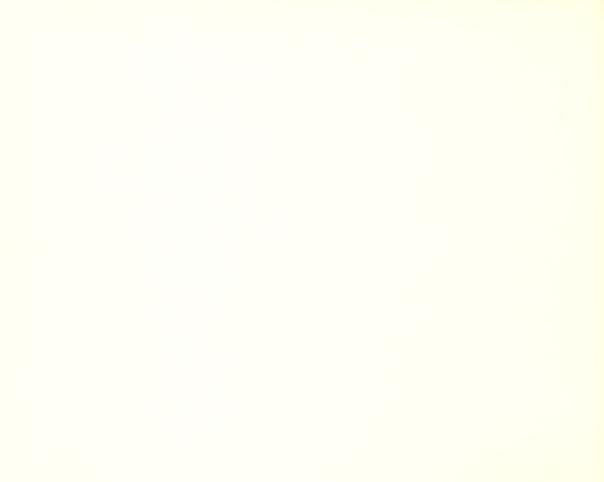
After Jacksonville has formulated a time schedule for meeting these requirements and has had its "Workable Program" approved by the Housing and Home Finance Agency's administrator, a Jacksonville Redevelopment Commission of five citizens should be organized and appointed by the Mayor and City Council. The Redevelopment Commission could then make application for loans to pay the cost of the necessary site planning work. With approval of the general plan for the redevelopment area, the Commission could apply for a capital grant to cover the cost of activating the project. Jacksonville's cost for such a redevelopment project would be one-third the final project cost.

Summary

A study of the entire planning area, utilizing housing characteristics, over-crowding and health conditions, has indicated an area south of Old Bridge Street, west of Hickory Street, and north of Wardola Drive extended to the New River needs immediate attention for urban redevelopment. This area is complicated in its structures and is a key to the development problems of all adjoining areas including the commercial area around the courthouse. A sketch plan has been prepared indicating the manner in which these problems might be solved. Jacksonville has not made application for certification under the Housing and Home Finance Agency's "Workable Program," nor has it appointed a Redevelopment Commission. Poor housing areas outside



the city limits should be improved through enforcement of zoning, sanitary laws, subdivision regulations and other laws. It will take the cooperation of all the administrative units of the city and county to improve these conditions.



CHAPTER XIII

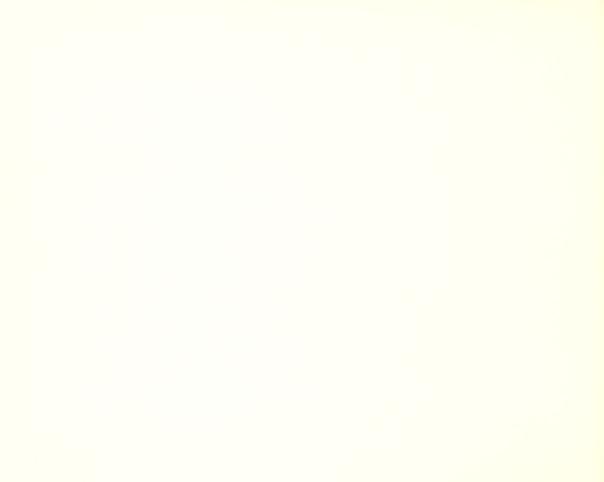
DEVELOPMENT GUIDES AND CONTROLS

The city is growing every day as new land is developed for urban purposes. These changes can be guided by planning or they can take place in their regular manner. There are several different ways in which the everyday growth can be guided in a planned manner by the city. State legislation enables Jacksonville to regulate development by means of subdivision regulations, zoning, building codes, housing codes and urban redevelopment.

Subdivision Regulations

In 1955 the General Assembly of North Carolina passed a special act enabling Jacksonville to control the development of undeveloped land in and around the city by means of subdivision regulations. These subdivision regulations can be enforced within the city and within the one-mile planning area outside the city limits.

One of the weakest points of these regulations is the fact that they do not require final plat approval by the Planning Board. This makes preliminary approval a meaningless task. One of the most important jobs of the Planning Board is to enforce the design standards and other requirements of the subdivision regulations, Definite criteria are set out in the subdivision regulations stating the minimum requirements upon which a subdivision will be approved. At the present time the Planning Commission has not set up a subdivision review committee to prepare recommendations for the Planning Commission meetings. It would be best for the Planning Commission to set up a subdivision review committee made up of at least one member of the Planning Board, the city engineer, a representative of the water and sewer department, and the Onslow County sanitary engineer. This committee could review all subdivisions and give their professional recommendations to the Planning Commission when it was scheduled for review and approval by the Planning Commission. This committee might also suggest changes in the minimum design standards and improvements within the regulations which need to be made. The subdivision regulations do not contain fees to aid in their enforcement.



Zoning

TABLE 9

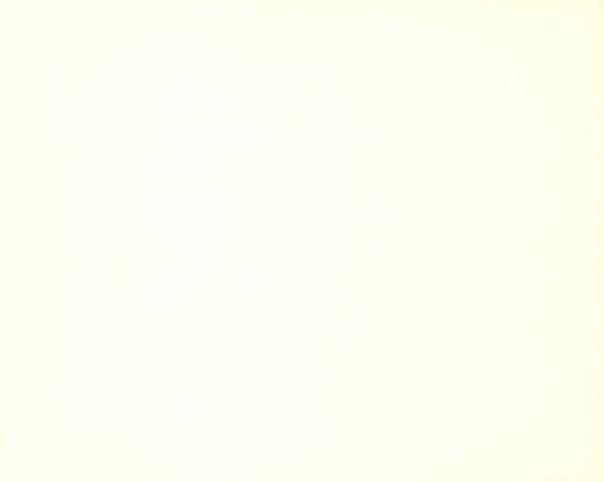
Zoning is the method by which a city regulates the use of land in order to provide for its most efficient use and to stabilize property values. Jacksonville has a zoning ordinance which is being enforced within the city limits. It provides for three residential zones, three business zones and one industrial zone. It does not contain any fees for the inspection.

The following table reviews the different land area requirements which are presently enforced in the Jacksonville Zoning Ordinance. These are compared with minimum recommended standards by the American Public Health Association.

LOT AREA IN SQUARE FEET PER DWELLING UNIT AS REQUIRED IN THE JACKSONVILLE ZONING ORDINANCE COMPARED WITH A MINIMUM STANDARD

Type Housing	Zone RA-7	Zone RA-6	Zone RA-5	Minimum Standard
Single-family	7,000	6,000	5,000	6,000
Two-family per unit	Not Permitted	4,000	3,000	3,000
Multi-family per unit	Not Permitted	3,000	2,000	1,750
Individual trailers	7,000	6,000	5,000	
Trailer Courts total area	Not Permitted	6,000	5,000	
Area Per Trailer		1,250	900	

This comparison indicates that except for single-family dwellings in the RA-5 zone, the lot requirements of Jacksonville's zoning ordinance are within the minimum standards. The Planning Commission should change the lot area requirements in the



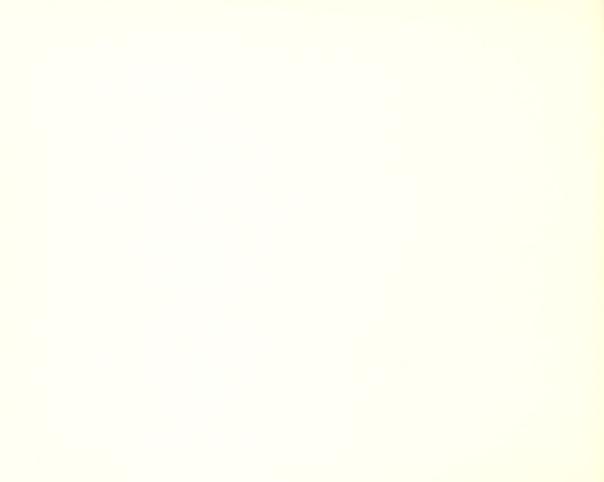
RA-5 zone. A residential lot with a fifty foot front and one hundred foot depth is extremely small for the development of a single-family home. Many times these regulations have been provided merely because such lots already exist. Such regulations only continue existing conditions, which, eventually become unhealthful housing and slums. The purpose of the zoning ordinance is to gradually change existing housing conditions to a more acceptable standard.

The requirements for trailers and trailer courts should also be reviewed for changes. At the present time anyone in the RA-5 and RA-6 or business zone can start a trailer court on a 5,000 or 6,000 square foot lot respectively. On a lot with 5,000 square feet the zoning ordinance would allow one trailer for every 900 square feet or five trailers. At the time the ordinance was written trailers might have been small, but the usual size for trailers now is about as large as the 900 square feet allowed, leaving nothing for space around the trailer. The trend in ordinances for trailer courts in recent years is to require at least an eight to ten acre site and a minimum of 2,400 square feet for each trailer.

The objective of the Planning Commission should be to develop residential areas which are diverse in the housing types and lot sizes in order to supply the wide variety of needs which a medium size city has. This diversity should be established within residential neighborhoods which are relatively stable in property values. This could be accomplished by enforcement of the zoning ordinance outside the city limits in the one-mile planning jurisdiction.

The requirements for neighborhood business zones should be reviewed to insure that they include every use desired. Allowing trailer courts in this zone might be questionable, especially with its limited space requirements. It also requires that business establishments use the first thirty feet of the property for parking space. This has a tendency to force cars to back out into the street in order to get out of the parking space and thereby stop moving traffic on that street. Control of curb cuts, sidewalks and planting strips, which the ordinance does not require, are important in the development of commercial areas and along major streets since they improve traffic movement, appearance and safety.

The types of businesses permitted within the three different business zones are about the same except for minor modifications. These zones should provide for a



functional differentiation. At the present time the types of commercial business establishments are mixed up and varied in nearly every commercial area. This mixture of land uses deteriorates appearance, property values and utility. As indicated in the chapter on commercial land use, Jacksonville has (1) tourist businesses along the highways, (2) shopping centers for retail stores, (3) secondary retail trade establishments such as used automobile lots, trailer courts, etc., and (4) the entertainment and amusement areas serving military personnel. The zoning ordinance should attempt to control and guide the growth of each of these business areas according to its function rather than maintain the existing generalized requirements which force every commercial area into a mixture of uses.

The Planning Commission has done a good job on controlling spot zoning and of investigating and studying all requests for zoning changes and amendments. If it can continue to function with increasing interest and willingness, it will be a great benefit to the future development of the city.

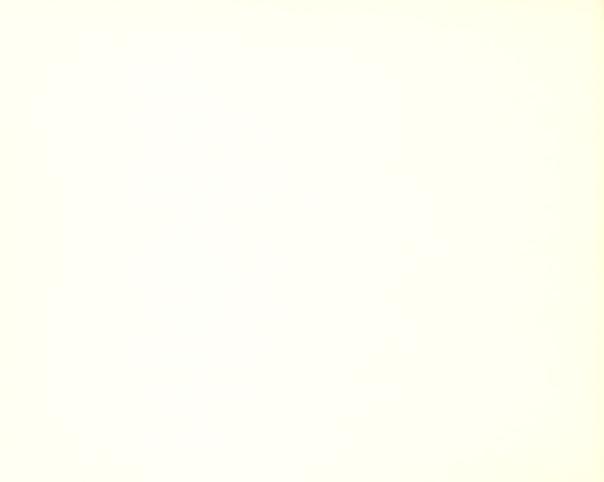
Building Codes

Construction of commercial, industrial and residential structures in Jacksonville is regulated by four different construction codes: a building code, plumbing code, an electric code and a gas code. The North Carolina State Building Code regulates the construction methods and materials for all multi-family residences, commercial and industrial structures passed by the City Council in 1950. A special residential code for single- and two-family structures, passed in 1950, regulates small residential construction. An electrical code based upon the National Electrical Code which was passed by the City Council in 1947 regulates the electrical installations. A plumbing code, passed in 1950, provides minimum standards for the installation of all plumbing installations. The gas code, which is a part of the state building code, regulates the installation of all heating systems and was passed in 1947.

All these codes are enforced by one building inspector. Fees are collected to cover the administrative costs of the building inspector's office.

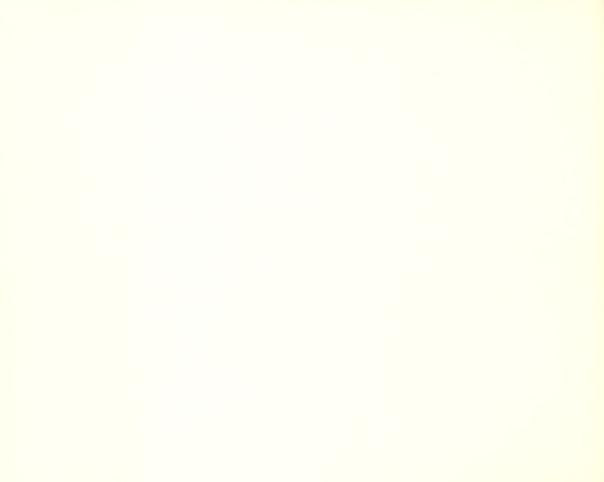
Housing Code

Jacksonville does not have a housing code to provide minimum health and sanitary requirements for dwelling units which would insure minimum requirements for living

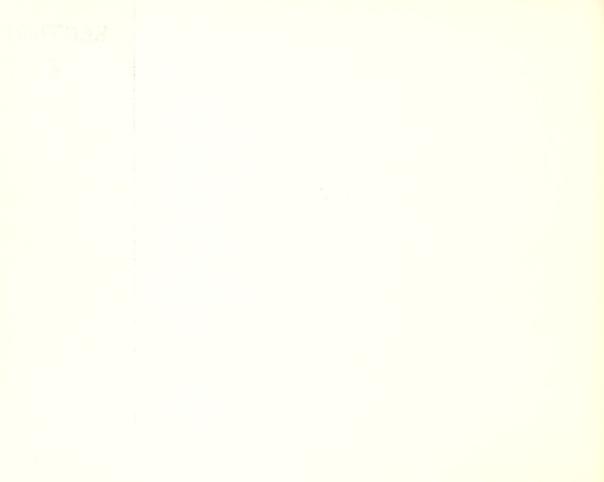


space, fresh air, light, and sanitary facilities, based upon the protection of the public health. A housing code is necessary for any urban renewal project and provides a legal basis and standard for condemnation proceedings against poor housing facilities.

Jacksonville is well fortified with the necessary legal tools for guiding its future growth. It has been and is enforcing subdivision regulations, a zoning ordinance, and building codes. Although enforcement is good, a number of improvements could be made. Fees are not charged under the zoning ordinance and subdivision regulations. It is customary that these ordinances carry fees to cover the cost of administration. A fee schedule should be considered for each of these ordinances. The zoning ordinance needs to be reviewed and changes in the district regulations recommended. The zoning ordinance, now applicable only within the city limits, should be extended to the one-mile extra-territorial jurisdiction. A housing code should be considered to provide minimum standards for sanitary and healthful housing.



DESIGN AND RECOMMENDATIONS



CHAPTER XIV

ESTIMATING FUTURE LAND AREA REQUIREMENTS

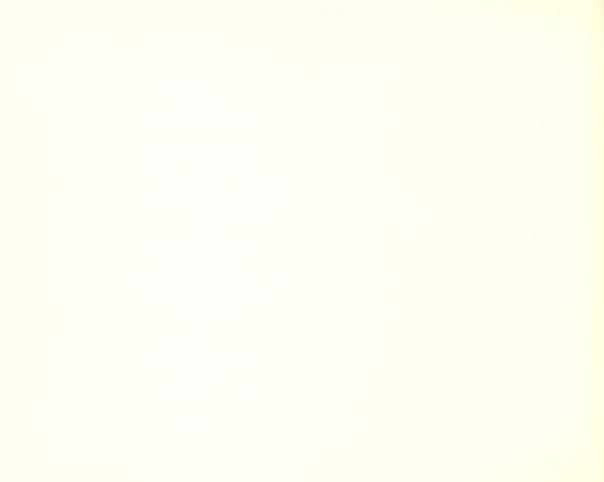
Future growth and expansion of Jacksonville is confronted by two problems; in which direction and how much can it grow. Since the city cannot expand in all directions at the same time it is necessary to determine the most efficient and economic use of the different land areas outside the city limits.

First it is necessary to determine how much land will be needed in the future for the different residential, commercial and other land uses; then it is necessary to determine the areas in which these different land uses will develop economically and efficiently. These factors will be determined in this section of the report by estimating future land requirements and proposing definite location and design standards to guide in the designation of land uses. The final part of the section will contain the Development Plan and accompanying recommendations.

A comprehensive analysis of Jacksonville's population growth and characteristics is contained in the supplementary planning report number one, "Population and Economic Summary." The report emphasizes the direct relationship between the growth of Camp Lejeune and the City of Jacksonville and points out the varied composition of Jacksonville's population. Besides the civilian population, it includes retired permanent and temporarily assigned military personnel, both single and married, with their families. One important characteristic of Jacksonville's population is the concentration of younger people under thirty-five years of age.

Jacksonville's 1980 population has been estimated at 21,574 persons. This prediction has been based upon the assumption that population growth as great as that of the 1950-60 decade will not continue and that the Marine Base population will level off. This figure must now be translated into development terms or into the amount of land which will be necessary to provide the new population with land for residences, schools, recreation areas and other needs.

Since the planning area contains more land than is necessary for development by 1980, it is necessary to determine the amount of space within this larger area which will be required. The following assumptions concerning future space requirements



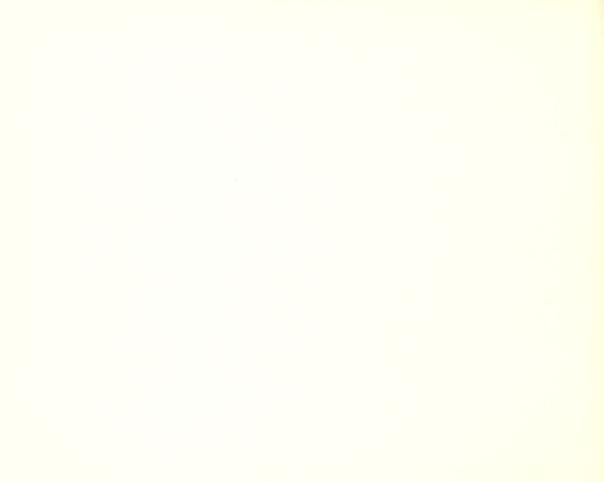
have been based upon the preceding land-use analysis, estimated growth trends and observations. This study will assume that there is a direct relationship between the amount of land within any particular use and the population which it serves.

There is no foreseeable reason at this time why the larger proportion of land used for residential purposes in Jacksonville will not continue. Jacksonville, like a satellite city, will continue to have to have large areas of residential land to serve the military and military-connected personnel. This report will assume that Jacksonville's major growth in the next two decades will be from a larger percentage of military-connected families moving into the city limits, primarily civilians employed on the military base. The proportion of land in single-, two- and multi-family structures will probably not stay at its present high level as Jacksonville grows larger. On the basis of these assumptions, future land needs for residences will be 7.9 acres per one hundred persons, 6.9 acres for single-family residences, .5 acre for duplexes and .5 acre for multi-family residences.

The analysis of land use indicated that the amount of land in transportation, primarily streets, compared favorably with amounts used in other eastern North Carolina cities with no indication that too much or too little area was being so utilized. Therefore, this report will assume that Jacksonville will use 3.4 acres per one hundred persons for transportation.

The amount of land in cultural services for Jacksonville was similar to amounts used in the other three eastern North Carolina cities. But the analysis of land for recreation areas and school sites indicated some existing shortages and the continued need for more recreation and park land. Therefore, this report will assume an increase in cultural services from .8 acre per one hundred persons to 1.0 acre per one hundred persons.

The amount of land Jacksonville uses for retail trade and commercial services is twice as large as the amounts used in the other eastern North Carolina cities noted. Whether Jacksonville will be able to maintain this high amount of land in commercial use is difficult to determine. A significant number of both type establishments receive trade from single military personnel and families who do not live within the city limits or planning area. This report assumes that there will not be any significant changes in the number of military men stationed at Camp Lejeune, and that there will be no significant changes in the amount of commercial land for these uses.



Any other changes in the amount of commercial land use should follow the estimated population increase. In all probability the major changes in the structure of commercial use in Jacksonville will be changes in commercial locations, with the marginal commercial locations declining in appearance and value.

Since there are no immediate figures on which it is possible to separate one source of commercial expenditures from another, this report will assume that Jacksonville's commercial land use will grow at the average rate of the three other eastern North Carolina cities noted. This will be .2 acre per one hundred persons for retail trade and .2 acre per one hundred persons for commercial services.

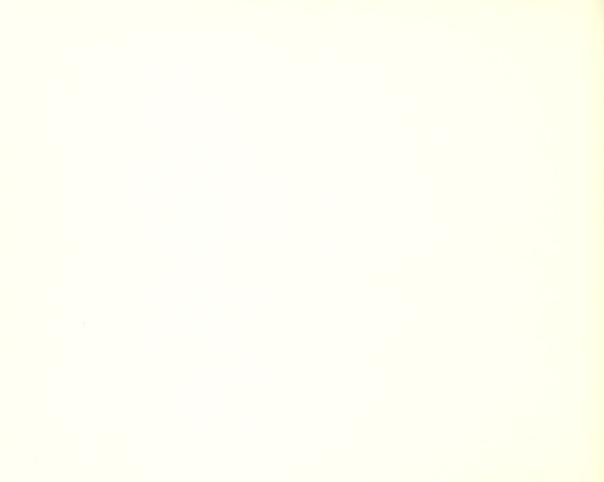
Jacksonville has a smaller percentage of its land both in manufacturing and wholesale use than other cities. This report will assume that Jacksonville will work toward acquiring more industrial establishments during the coming decades in order to improve the balance of its economy. The amount of land for manufacturing use will be considered as .3 acre per one hundred persons, which was the average for the other three North Carolina cities noted. The amount of land for wholesaling use should not increase significantly; this report will assume, therefore, that .1 acre per one hundred persons will be used.

TABLE 10

LAND ACREAGE REQUIREMENTS FOR	1980
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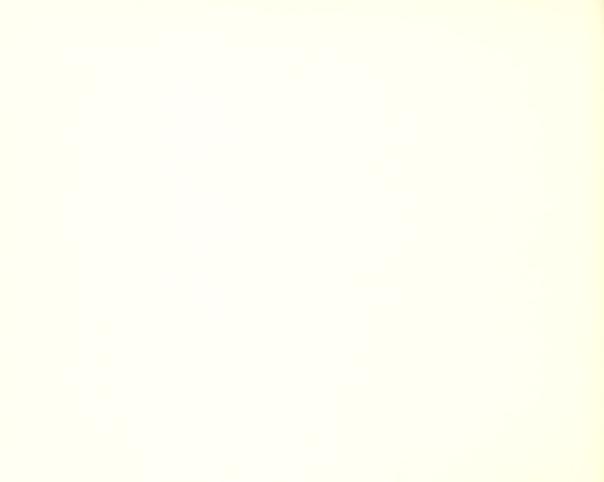
Land Use		Acreage Persons	Acres * Required	Land Use		Acreage Persons	
Residential	7.9		642.5	Commercial		2	16.3
Single-family		6.9	561.2	Service			
Two-family		. 5	40.3				
Multi-family		. 5	41.0	Manufactur	ing .	. 3	24.4
Transportation	3.4		276.5	Wholesale '	Trade .	1	8.1
Streets		3.0	244.0				
				TOTAL	13.	. 1	1,065.4
Cultural Services	1.0		81.3				
Retail Trade	. 2		16.3				

^{*} Figures based upon a population increase of 8.,133 persons from 1960 to 1980.



The preceding table indicates the amount of acres in each land use which this report estimates will be needed to provide the necessary services for the increased 1980 population of 21,574 persons.

These assumptions for future land area requirements indicate that Jacksonville will need 1,065 acres of land to house the needs of the increased 1980 population of 8,133 persons. The greater part of this acreage will be for residential and street purposes. These acreages will be designated on the vicinity map of Jacksonville according to the following locational and design standards.



CHAPTER XV

LOCATION CHARACTERISTICS AND DESIGN OBJECTIVES

Each type of land use, whether it is residential, commercial or industrial, has specific development characteristics which determine its best location within the community. The degree and the manner to which the undeveloped land outside the city limits fit these locational characteristics determines its suitability for that particular use. Each type of land use is considered according to the following characteristics:

- (1) Its soil conditions and topographical characteristics.
- (2) The availability and economic feasibility of providing adequate utilities.
- (3) Its relationship to transportation facilities, major streets, highways, railroads and navigable rivers.
- (4) Its relationship to existing development and the kind and character of that development.
- (5) The character of land ownership, i.e, whether it is in large tracts or small lots or parcels.

Future residential development should be located on land areas economical to serve with municipal utilities and not subject to flooding or poor drainage. Areas in large ownership will develop at a faster rate when available for development than smaller areas interspersed with individual homes.

Recreation areas should be located on land suited to their purpose. Playgrounds require flat areas, while parks, parkways and water sports require natural settings. Play areas should be located so that they are readily accessible to the residential areas which they serve; preschool play-lots should be located within one-quarter of a mile and playgrounds within three-quarters of a mile of the area they serve.

Schools should be located on well-drained flat sites, preferably off major streets. Elementary schools should be located as near as possible to the center of



their one-half mile service area and high schools in the center of their two-mile service area.

In the future, Jacksonville's commercial development will be primarily neighborhood convenience stores. These should be located on major streets with convenient access to customers from nearby residential areas. In general, these might be considered to be located at one mile distances from each other. Small land areas should be avoided since they do not provide sufficient space for off-street parking and loading and building setbacks.

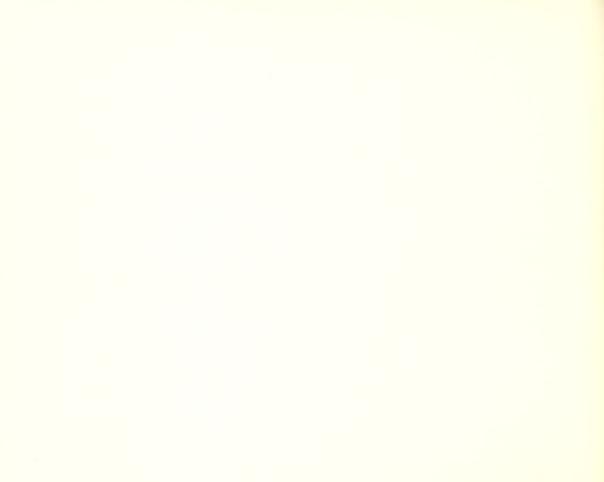
Locations for manufacturing and wholesaling activities should be well-drained and relatively flat. They should be located with easy access to major highways, railroads and navigable rivers.

Previous sections have analyzed all the different facts about the manner in which Jacksonville has been developed and have estimated the amount that Jacksonville will grow in the future. After complete investigation it is now possible to design the Development Plan; however, before presenting the Development Plan it is necessary to set forth the design objectives on which it has been based. In general, these are principles of good city planning which provide a sense of purpose or direction for the design of the future city.

Jacksonville is much different from the average city not only in function but also in structure. Jacksonville's major function is as a residential city while that of the average city is some combination of industry and commercial trade. Whereas the average city has large expanses of contiguous residential developments, Jacksonville has "nucleated" areas of development surrounded by natural drainage ways or highways which act as barriers to contiguous development. These two major differences have meant that the automobile is "king" in Jacksonville, for there is very little one can do without access to autombile transportation.

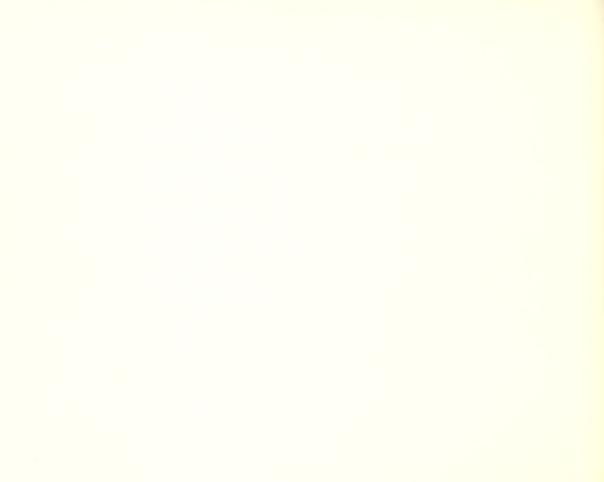
The design objectives for Jacksonville must fit these conditions, utilizing them to create the Development Plan for the future. The following design objectives will be used as the basis for Jacksonville's Development Plan;

 The natural features within the planning area such as the New River and its drainage ways should be developed for the practical necessities of



drainage and recreation and the aesthetic element of beauty to complement man's architectural structures.

- 2. A system of major streets should be planned to connect all the major land use areas. Major streets should be designed to provide convenient access from residential areas to all community services such as schools, playgrounds, shopping areas, and major highways leading to Camp Lejeune.
- 3. Residential areas should be planned to utilize the following principles:
 - a. Whenever the topography allows major streets should be planned to serve, but not bisect, the residential neighborhoods. Residential streets should be designed as loop or cul-de-sac streets in order to protect homes from through traffic.
 - b. Residential housing should provide a choice of density through a variety of lot sizes and housing types.
 - c. Sidewalks or pedestrian ways should be planned to schools, playgrounds, and shopping areas.
- 4. Besides being efficient and economical, Jacksonville's Development Plan should create a sense of civic pride and community identity for all its citizens.



CHAPTER XVI

DEVELOPMENT PLAN AND RECOMMENDATIONS

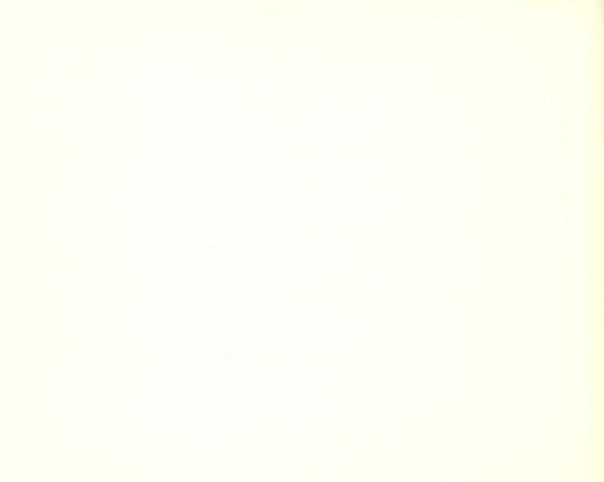
There are many good things about the manner in which Jacksonville has developed within the last decade. All are a great improvement over the past. The city has good shopping centers, nice residential areas, attractive community facilities such as new schools, recreation areas and city hall. It is difficult to be critical of these developments for they are very positive achievements.

During the same decade a lot of poor developments have been added to the city which because of their poor design and construction will deteriorate and therefore decrease property values and livability. Many of these mistakes could have been corrected by individual developers and the Federal Housing Authority but they weren't. Many could have been corrected by the city administration and Planning Commission but they weren't.

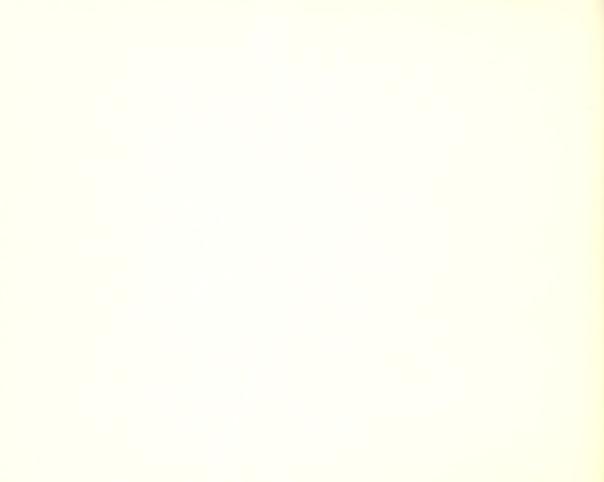
The major things which Jacksonville has lacked in the past which will be costly in the future are (1) no major street plan and no consideration by the Federal Housing Authority or sudividers for collector streets, (2) insufficient land for playgrounds and other community facilities and (3) the development of the city without a planned direction for growth.

Casting blame and pointing out error in the past is an easy occupation. Hindsight has always been much more convincing and reliable than foresight. In part, history or the past is always concerned with blame or responsibility, but it is only with this type of criticism that we can learn the mistake of the past and work toward correcting them in the future.

One of Jacksonville's big problems is that poor development in location and construction is predominantly taking place in the planning area outside the city limits. Development controls such as zoning and subdivision regulations are more difficult to enforce in this area so that the city needs to seek the aid of the county in regulating many types of development; such as trailer courts and other residential development.







The people of the county and officials should realize that these poor developments will be a handicap to the future prosperity of the county. How can Onslow County create an atmosphere which will attract industry, retired couples and more vacationers if development continues to leave the highways looking like rural slums. The land along the highways has become a dumping ground for wrecked automobiles and trailers. This kind of development is interspersed with poorly constructed trailer courts and houses which pollute the land with sewage from poorly located and installed septic tanks.

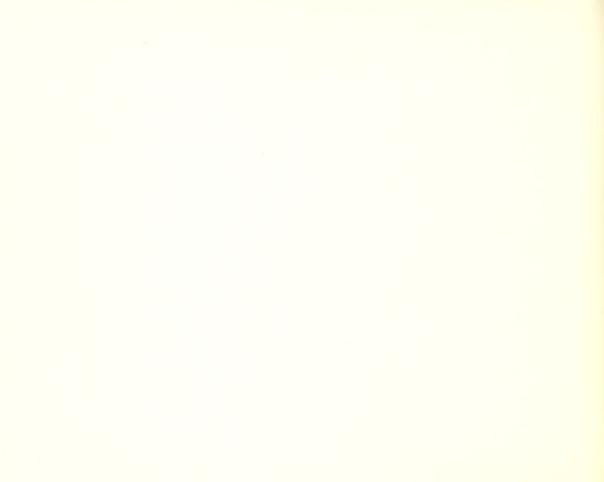
In order that Jacksonville may be developed within the next twenty years to its best advantage the following Development Plan and recommendations are proposed.

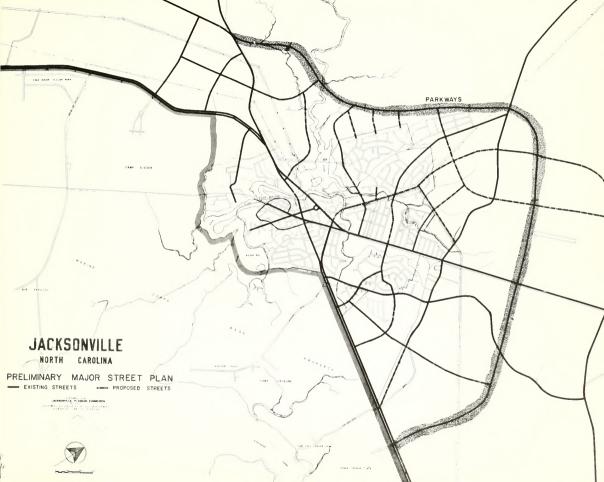
The Development Plan is made up of three major elements: the Drainage Plan, The Preliminary Major Street Plan and the Future Land Use Plan.

The Drainage Plan provides for the practical necessities of rain runoff and becomes a basis for tying the land structure into the architectural structure of the city. It outlines the major streams and drainage ways including swampland and areas subject to flooding. The Drainage Plan is very generalized and should be used as the basis for a more detailed and complete plan which would reserve rights-of-way for drainage purposes. This system should be coordinated with the development of storm drains.

The Preliminary Major Street Plan outlines the proposed primary and secondary street locations which would provide the necessary channels for communication and movement of utilities and vehicles into, through and around the city. It has been prepared in conjunction with the land use plan so that there is a direct relationship to the pattern of residential and commercial uses. This plan represents preliminary thinking concerning major streets. A more detailed plan should be made providing definite proposals for the design of all streets and intersections within the planning area.

The Future Land-Use Plan proposes the general location and most suitable use of all land within the planning area. The uses indicated are what might be considered the primary use of the designated land and include other related auxiliary uses providing services to the major uses. Land uses have been designated according to the location characteristics and the space requirements previously determined.





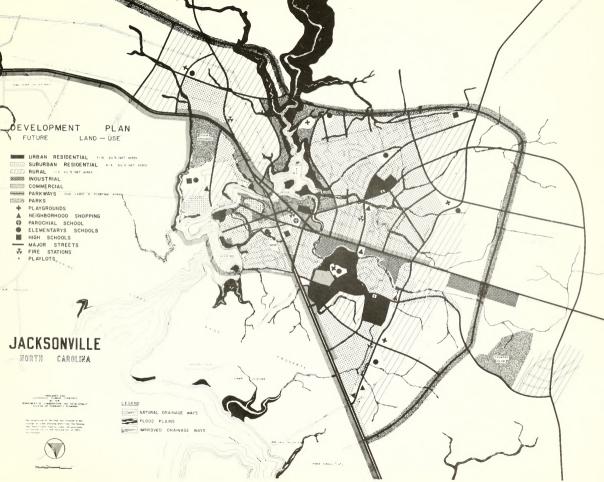


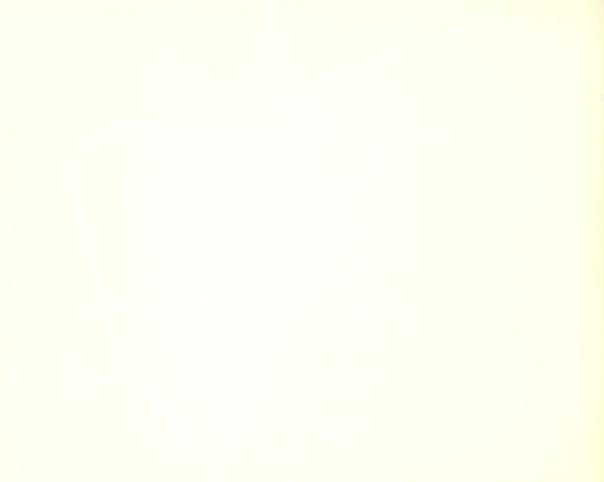
Residential land has been designated in three net residential densities. Net densities include land for residences as well as all neighborhood uses, such as streets, schools, and playgrounds. Densities used are as follows: an urban net density of seven to twelve dwelling units per acre, a suburban net density of four to six residences per acre and a rural net density of one - three residences per acre.

The following recommendations are made to accompany the Development Plan. These recommendations are related to administrative policies, future planning studies and development planning.

- The city should develop a combined drainage way and storm sewer plan. Rights-of-way should be obtained along the natural drainage ways and combined with a storm sewer system.
- 2. The city should be more concerned with the proper development of West Jacksonville. Unless the expansion of utilities into this area is encouraged and the land is taken into the city limits there is good reason to believe that two different competing cities will develop. The expansion of Jacksonville's existing utility system should be related to future needs in West Jacksonville.
- 3. Because there are no major streets within Northwoods subdivision running east and west, the city should refuse to approve the extension of Northwoods subdivision to the west of Jacksonville until the major secondary road connecting NC 53 and Gum Branch Road the the new high school site is actually in the process of construction.
- 4. The city should be concerned that strip residential development does not completely block residential expansion in depth especially along Hargett Street. The subdivision of any land in this area should allow space for streets into the interior at intervals of every 1,200 feet.
- 5. Jacksonville has a large concentration of strip commercial development. It is difficult to know whether all this area will be needed in the future. The Planning Commission should carefully consider the need for additional

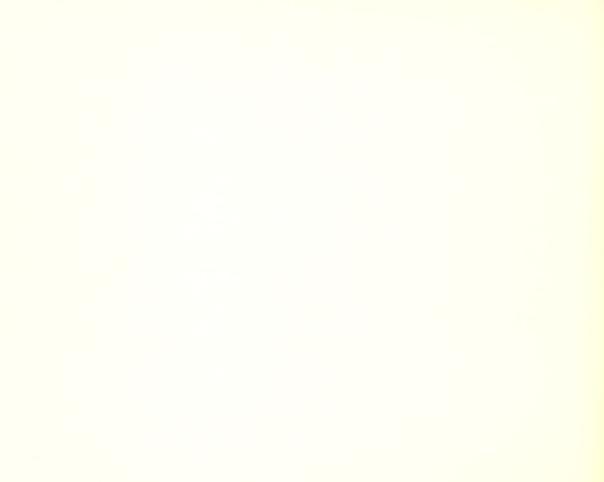






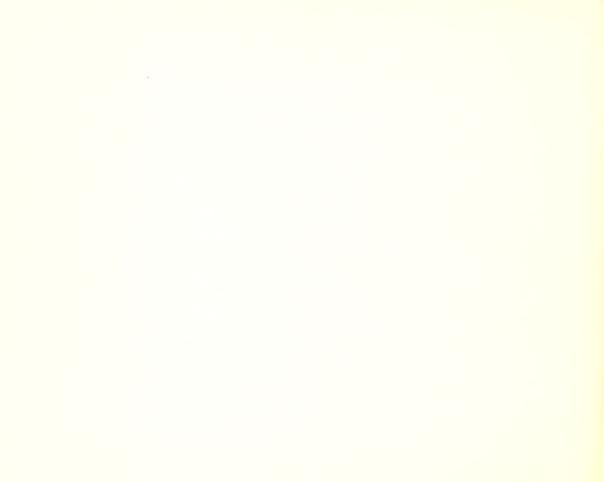
commercial zoning and consider changing commercially zoned areas to other uses when they become vacant.

- 6. The city and county need a trailer court ordinance. At the present time the use and location of trailers is regulated by the zoning ordinance, but these regulations are not comprehensive enough to control their proper design and construction. The location of trailers and trailer courts should be determined by the zoning ordinance, but minimum standards should be regulated by a trailer ordinance.
- 7. The city needs to revise its subdivision regulations. At the present time the Planning Commission has only a minor role in the regulation and approval of subdivisions. This should be changed and a more comprehensive system of subdivision control set up. The city has the power and should enforce these regulations for the one-mile planning area outside the city limits.
- 8. A new bridge is proposed for New Bridge Street and the old bridge should be condemned and the street closed. A footbridge is proposed next to the railroad bridge to connect the Georgetown area.
- 9. The Preliminary Major Street Plan should be reviewed and adopted by the City Planning Commission and City Council. It should then be sent to the State Highway Commission for approval as the Official Major Street Plan.
- 10. After an Official Major Street Plan has been adopted it should be used as the basis for a detailed plan which would determine the anticipated future traffic volumes, future rights-of-way, paving widths and traffic lanes.
- 11. The city should take special interest in developing the outer loop around Jacksonville as a dual land parkway with a minimum one hundred foot right-of-way. Although there might be no reason at the present for such plans, at some future date Jacksonville will completely surround these parkways and they will be needed not only for the movement of traffic, but as a green parkway beautifying and tying the city together.
- 12. The area northwest along the New River should be planned and developed for a large park area. This land should be reserved until such a time as it



could be developed for different recreation and park purposes. Such a park could contain picnicking areas, playgrounds, water sports and boat launching activities.

- 13. Jacksonville's new recreation areas are very commendable. In the future more playgrounds with ten to twelve acre sites are going to be needed. Smaller sites for preschool play-lots should be located in the multi-family dwelling areas.
- 14. The city should develop and inaugurate a policy of street tree planting and other beautification. Investigation should be made to determine small or medium size trees whose root system will do a minimum of damage to underground utilities and overhead wires. Different types of flowering and decorative shrubs should be recommended and planted.
- 15. The city needs to inaugurate a definite policy of installing sidewalks for the safety of its children. Sidewalks should be required in all new subdivisions and a program of building new sidewalks within the existing city limits should be started.
- 16. A County Civic Center is proposed for the area leading from the Onslow County Courthouse to the New River. It is suggested that new county administrative buildings be constructed in this area. It may be possible to accumulate the land for such a civic center through an Urban Renewal Project. A Master Plan for such a development should be developed.
- 17. It is suggested that a United States Marine Historical Museum be established within the Onslow County Civic Center. This would house historical documents, weapons, photographs, etc. The entire development should be preplanned in order for it to be developed correctly and as a historical attraction.
- 18. The city should continue to work toward an Urban Renewal Project. An Urban Redevelopment Commission of five members should be appointed by the Mayor and City Council which should determine the most feasible project area and submit an application for a Survey and Planning Grant to the Urban Renewal Administration.



- 19. In order to eliminate slums public housing should be provided in small quantities to provide clean and decent dwelling units for the low income families that cannot obtain decent, safe and sanitary housing at rents within their ability to pay. The city should organize a municipal corporation under the laws of the state to provide such housing. The Housing Authority would be administered by five citizens appointed by the Mayor.
- 20. The zoning ordinance needs to be revised and extended outside the city limits for one mile, in order to better control the development of the area into which the city must expand in the future. Fees should be added to the ordinance to cover administrative costs.
- 21. A new fire station should be located somewhere in the vicinity of US 17 north and Henderson Drive. Its location should take into consideration the Major Street Plan recommendation for connecting Henderson Drive and Onslow Drive.
- 22. As requirements for an Urban Renewal program and for planning purposes a housing code, a neighborhood analysis and a capital improvements study should be prepared. It is recommended in the near future.

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