

1977

## The Comprehensive Plan for Live Oak, Florida

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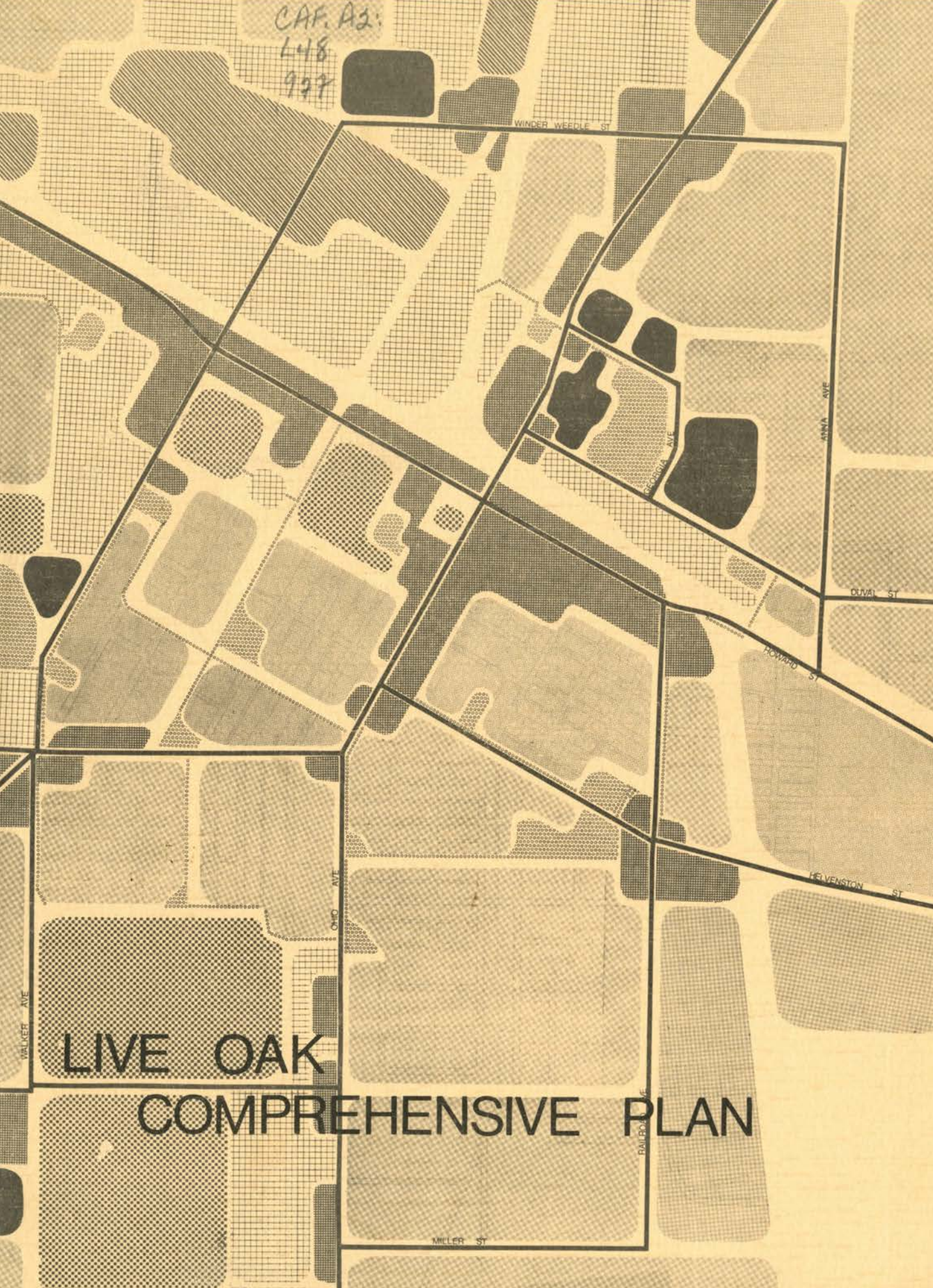
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CAF. A2:  
L48  
999



LIVE OAK

# COMPREHENSIVE PLAN

BIBLIOGRAPHIC DATA SHEET		1. Report No.	2.	3. Recipient's Accession No.	
4. Title and Subtitle				5. Report Date	
The Comprehensive Plan for Live Oak, Florida				June, 1977	
7. Author(s) The Office of Mark Gluckman Consultant for Live Oak, Florida				8. Performing Organization Rept. No.	
9. Performing Organization Name and Address Live Oak City Council Live Oak, Florida 32060				10. Project/Task/Work Unit No.	
				11. Contract/Grant No. P-1000	
12. Sponsoring Organization Name and Address State of Florida; Department of Comm. Affairs Division of Technical Assistance 2571 Executive Circle, East Tallahassee, Florida 32301				13. Type of Report & Period Covered Final	
15. Supplementary Notes None				14.	
16. Abstracts					
<p>This report is the Comprehensive Plan for the City of Live Oak, Florida. It is divided into Plan Elements which include the physiographic, socio/economic and land use data upon which the Land Use, Circulation, and Community Facility Elements are based. Included also in the Plan are the Conservation, Intergovernmental Coordination, Housing, Capital Improvement, Citizens Participation, and Historic Preservation Elements, and the Environmental Assessment.</p>					
17. Key Words and Document Analysis. 17a. Descriptors					
17b. Identifiers/Open-Ended Terms					
17c. COSATI Field/Group					
18. Availability Statement Released Unlimited Live Oak City Council				19. Security Class (This Report) UNCLASSIFIED	
				21. No. of Pages 213	
				20. Security Class (This Page) UNCLASSIFIED	
				22. Price	

THE COMPREHENSIVE  
PLAN FOR  
LIVE OAK, FLORIDA

Prepared by The Office of Mark Gluckman under contract with the State of Florida Department of Community Affairs. The preparation of this map was financially aided through a federal grant from the Department of Housing and Urban Development, under the Comprehensive Planning and Management Assistance Program authorized by Section 701 of the Housing Act of 1954, as amended.

Prepared for:

LIVE OAK CITY  
COUNCIL

Prepared by:

THE OFFICE OF  
MARK GLUCKMAN

June, 1977

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M A Y O R   O F   L I V E   O A K ,   F L O R I D A

S. T. McDowell

L I V E   O A K   C I T Y   C O U N C I L

John A. Cade	Charles R. McCall
John O. Cannon	Garth R. Nobles, Jr.
John H. Hale	

L O C A L   P L A N N I N G   A G E N C Y

Benjamin L. Gilmore  
Willard Hewiett

C I T I Z E N S '   A D V I S O R Y   C O M M I T T E E

Robert B. Dees	B. W. Helvenston III
Diane J. Kennon	Dorothy Loper
S. C. Sullivan	

U R B A N   P L A N N I N G   C O N S U L T A N T

Mark A. Gluckman  
The Office of Mark Gluckman  
LaSalle/Marco Building  
1016 LaSalle Street  
Jacksonville, Florida 32207  
(904) 398-7063

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## THE COMPREHENSIVE PLAN

### INTRODUCTION

In 1974 the Florida Legislature charged The Committee on Governmental Operations with the responsibility of establishing a policy relating to the future growth of the state. Inherent in this action was an awareness that Florida and all of its political sub-units have been, and/or will be experiencing severe growth problems in the future; and, as governmental bodies, each city and county must be prepared to face the critical issues relating to future development as it impacts the environment and quality of life of every citizen in the state. As stated in a memorandum dated January 30, 1974 from the Chairman of the Committee on the Growth Policy Resolution:

Florida is both a popular and populous place. . . . compared with the rest of the nation, Florida is the plans of a dreamland vacation and a heavenly retirement. . . .but there is concern about Florida's ability to continue its high quality of life. The quality of life is being threatened by growth. Growth itself is not the menace: the byproducts of growth are also frightening. A ruined environment, an unstable economic system, and the spectre of increased governmental controls at all levels are unsettling prospects.

Due to the importance placed on these issues, the Florida Legislature passed an Official Growth Policy Resolution which led to the subsequent adoption of the Local Government Comprehensive Planning Act of 1975. This bill legislated a statewide concern for unplanned growth and mandated that every city and county in the State of Florida prepare and adopt a Comprehensive Plan by July 1, 1979.

The Comprehensive Plan for the City of Live Oak was prepared under the guidelines and in response to the legislative intent of this Act.

## METHODOLOGY

The Methodology utilized to develop the Comprehensive Plan for the City of Live Oak is divided into four interrelated processes: (1) data collection, (2) data analysis and projection, (3) plan preparation, (4) plan review, modification, and adoption. The identification of the specific tasks within each of these four processes and the relationship of these elements to each other and to the overall planning process methodology is illustrated in Figure F-1 as shown below.

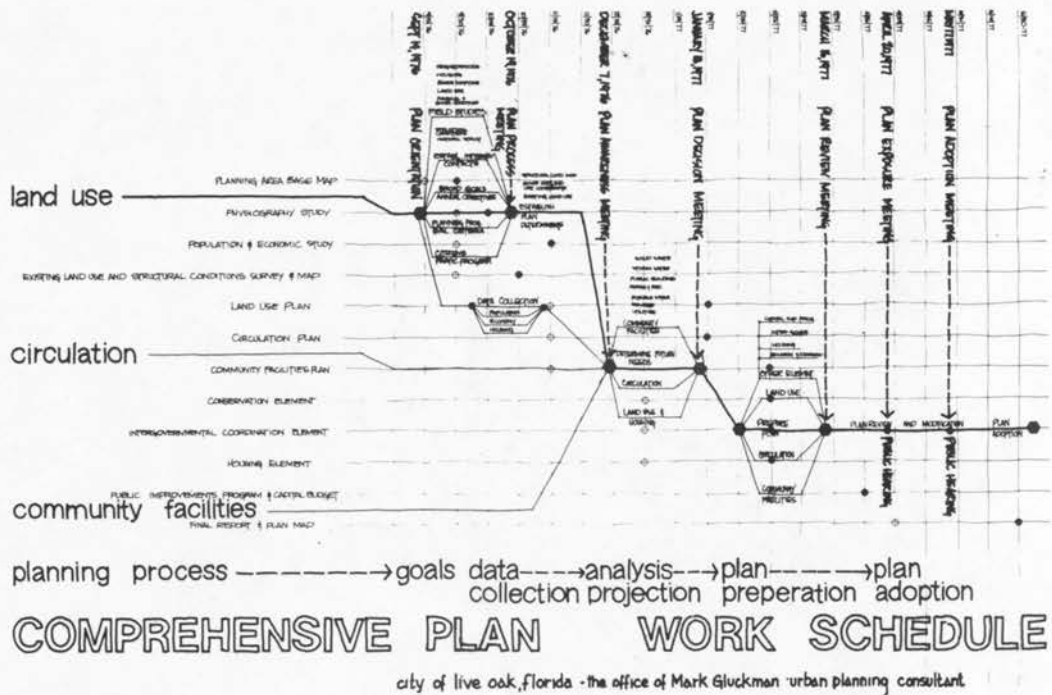


FIGURE F-1 COMPREHENSIVE PLAN WORK SCHEDULE

DATA COLLECTION - The comprehensive planning process begins with the designation of the planning area and preparation of a suitable planning area base map. Field studies are then undertaken to examine the physiographic conditions, existing land use pattern, and condition of residential structures in the city. The examination of these factors establishes the components of the physical environment, both natural and man-made, which are the foundation for the future development of the city. These factors are herein referred to as the physical plan determinants. The study of population and economic conditions reveals the social/economic plan determinants. The composite collection of all of the data provides the analytical base for the assessment of current conditions and projections of future needs.

ANALYSIS AND PROJECTION - The analysis of the existing land use pattern, population growth (or decline) and changes in economic factors establish historic growth trends. These trends are evaluated in terms of land use and population characteristics and are assessed in light of current economic conditions to determine whether these trends can be expected to continue and whether such trends are desirable. Projections relating to population and economic growth (decline) are made, and future land use needs and supporting urban services are identified.

PLAN PREPARATION - Based upon future land use requirements and the framework of physical, social/economic plan determinants, an appropriate concept plan(s) is(are) generated. The concept plan illustrates a projected pattern or spatial distribution of land uses and public facilities, and a supporting circulation framework. The plan (or plans if more than one concept plan appears viable) is evaluated in terms of economic feasibility and the impact on future development as related to the projected goals for the city. The concept plan is refined and prepared for general public exposure.

*To what degree*

PLAN REVIEW, MODIFICATION AND ADOPTION - The proposed Comprehensive Plan is presented to the general public in the form of printed documents and public meeting presentations. Feedback is solicited, and the Plan is modified as deemed appropriate by the Local Planning Agency and Citizens' Advisory Committee. The Plan is then formally presented to the legislative body for adoption. Upon adoption by the City Council of Live Oak, the Comprehensive Plan becomes a working document to guide public and private decisions relating to the future development of the city. The Plan itself becomes secondary to the planning process, which is the condition of implementing the Comprehensive Plan through construction of capital improvements, zoning and

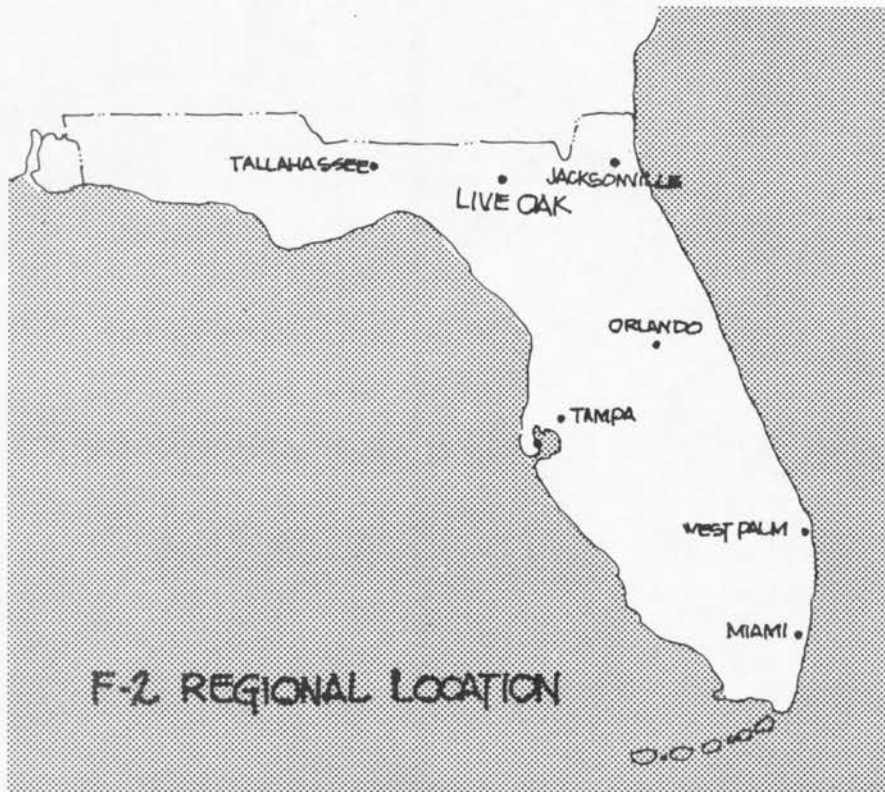
code enforcement, redevelopment incentives, and a general commitment to work toward the accomplishment of the goals established for the future development of Live Oak.

#### LIVE OAK PLANNING AREA

The Live Oak Comprehensive Planning Area is the incorporated limits of the City of Live Oak, comprising a total area of approximately 4,408 acres or seven square miles. Although certain planning elements, by virtue of their physical, social, and economic impact on areas outside of these limits, will be considered, the actual Plan elements will be limited to the geographic planning area within the political jurisdiction of Live Oak.

Live Oak is located in the north central portion of the State of Florida, midway between Jacksonville and Tallahassee, and is approximately 25 miles south of the Georgia border, as illustrated in Figure F-2 below.

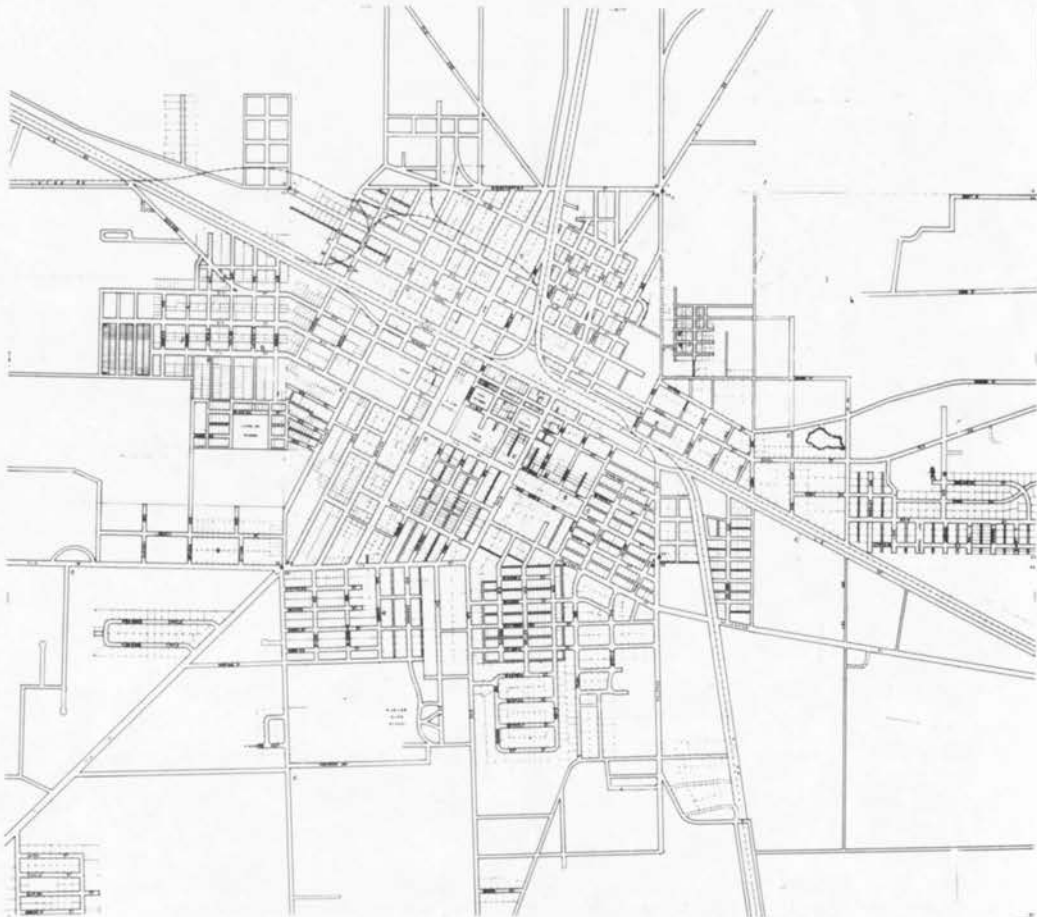
FIGURE F-2 LIVE OAK REGIONAL LOCATION



## LIVE OAK PLANNING AREA BASE MAP

*When prepared*

The Live Oak planning area base map has been drawn at a scale of 1" = 400'. All field studies and planning concepts are prepared at this scale and reduced to fit the format presented below on Map M-1.



MAP M-1 PLANNING AREA BASE MAP



## PHYSIOGRAPHY STUDY

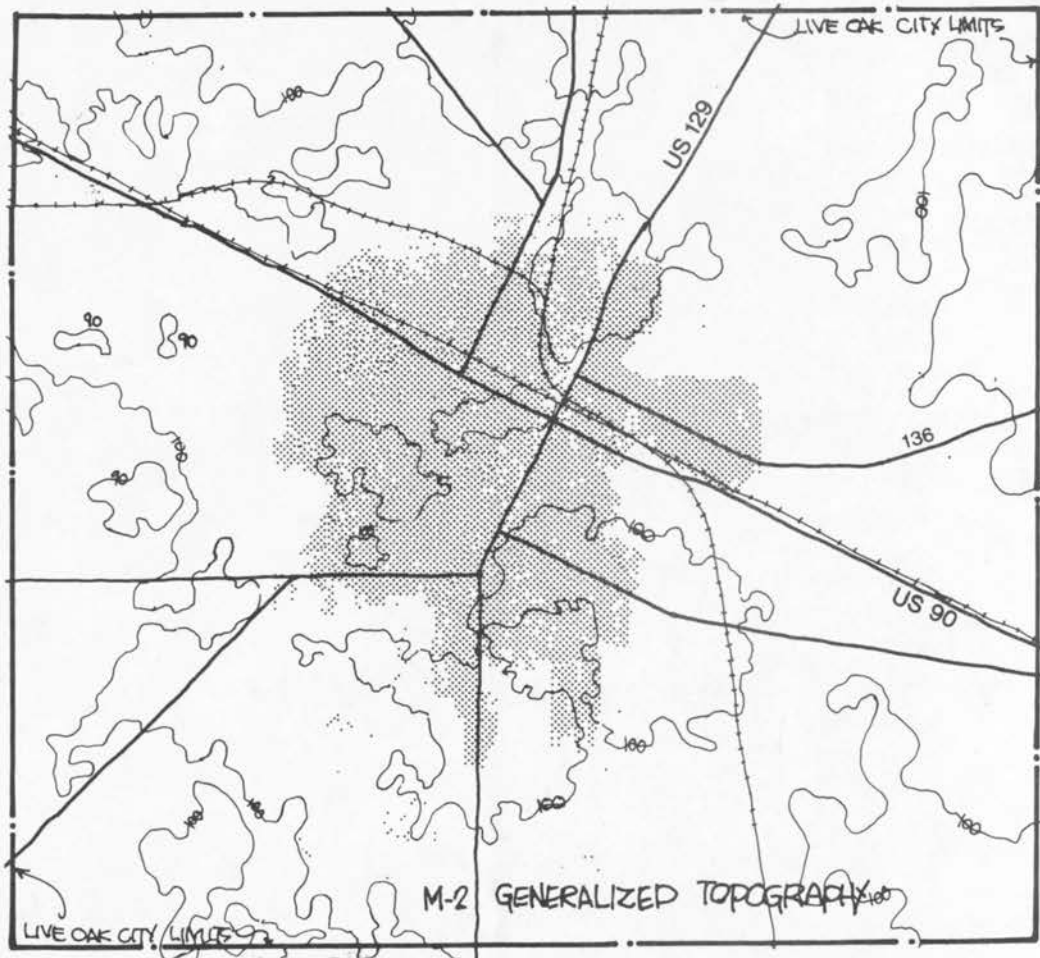
### INTRODUCTION

The physiography study is an identification and evaluation of the physical and environmental characteristics that affect future development of Live Oak. The assessment of these conditions is undertaken to determine whether there are limitations to the amount and direction of physical development and the extent to which these factors are prime considerations in the Plan preparation process.

The components of the physical environment considered pertinent to Live Oak are Topography and Flood Prone Areas, Hydrology, Geology, Soils, Natural Vegetation, and Climate. Each of these components is discussed in the following section and illustrated with appropriate maps and charts.

## TOPOGRAPHY AND FLOOD PRONE AREAS<sup>1</sup>

The topography of Live Oak is basically flat with minor variation in elevations ranging from a low of 90 feet to approximately 125 feet above mean sea level, as illustrated on Map M-2. Isolated shallow depressions occur which are subject to periodic flooding. These areas are illustrated on Map M-3.



MAP M-2 GENERALIZED TOPOGRAPHY

<sup>1</sup>Source: U.S.G.D. map - Live Oak East, Fla., N3015-W8252.5/7.5.

## HYDROLOGY<sup>2</sup>

*Source*  
Live Oak receives approximately 52 inches of rain per year, of which 12 - 24 inches infiltrates downward to the underground water aquifer. There are no well defined surface drainage patterns and no permanent streams, so that all stormwater drainage is by vertical infiltration through soils, sink holes, and drainage wells. These drainage wells are located throughout the city, as illustrated on Map M-3 and listed in Figure F-4.

Based upon borings taken in a test area north of (but near) the Live Oak city limits, groundwater was found to exist approximately 50 - 60 feet below grade or 40 - 50 feet above mean sea level. Groundwater flow was in a southwesterly direction. These conditions are believed to be typical throughout the entire city. A stratigraphic cross section illustrating this condition is presented in Figure F-3.

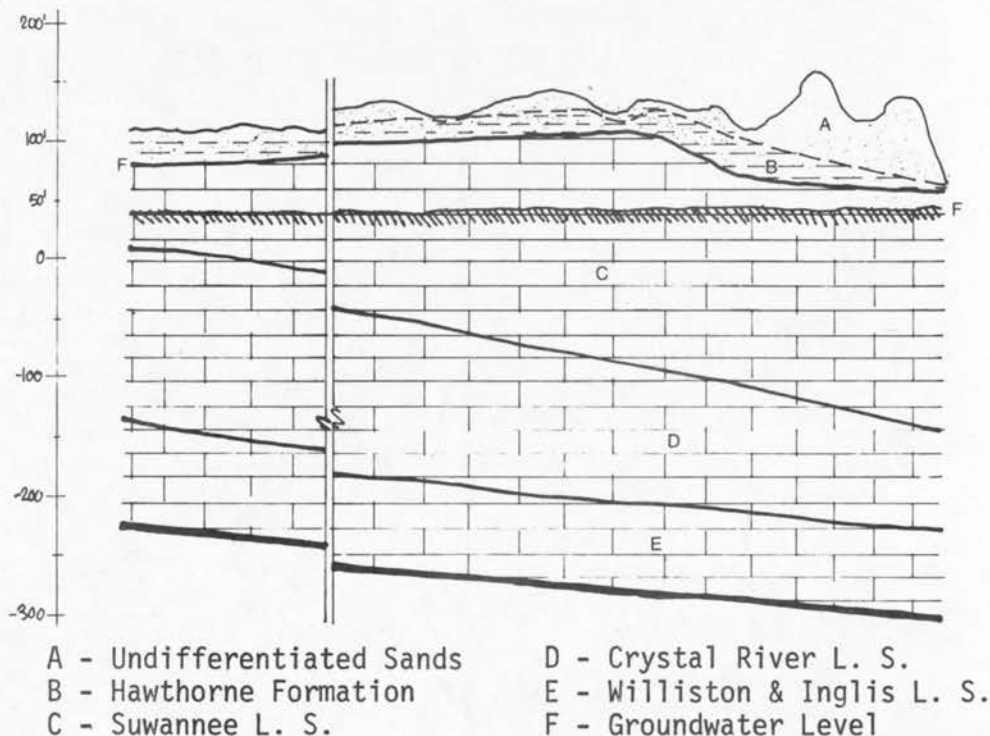
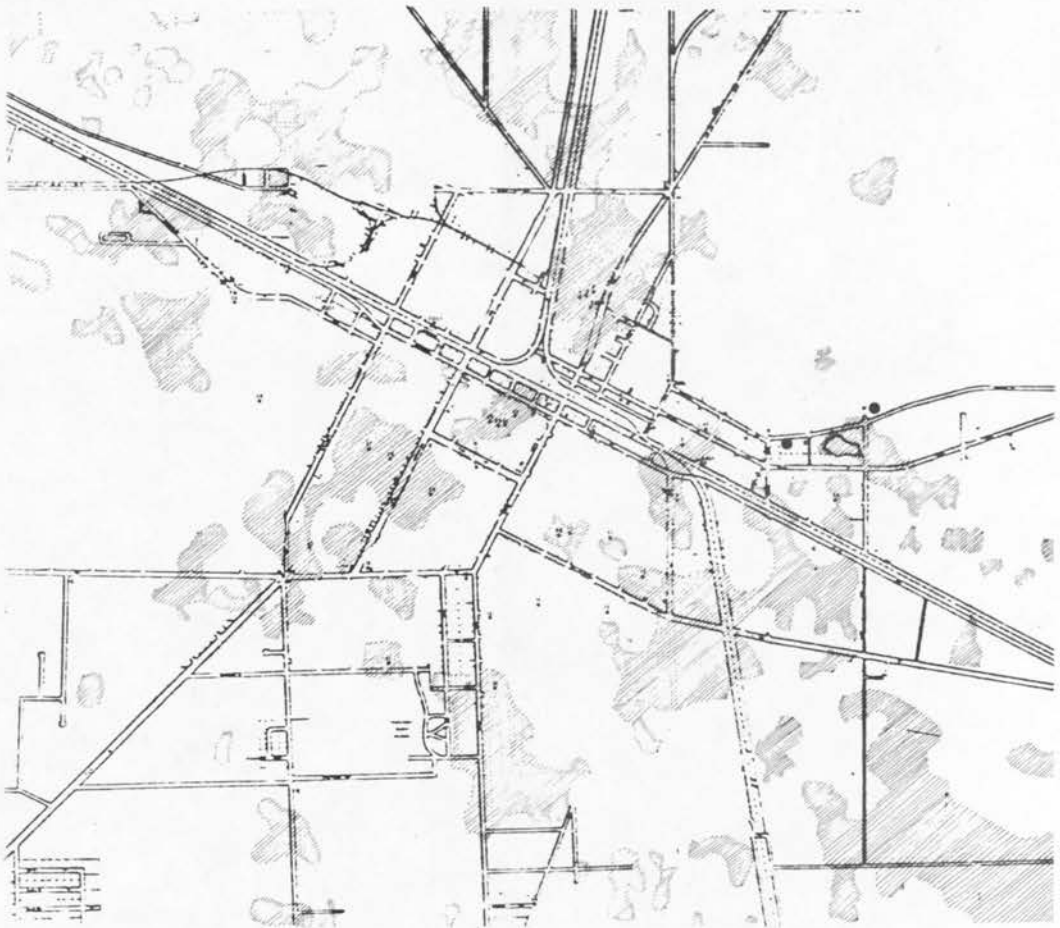


FIGURE F-3 STRATIGRAPHIC CROSS SECTION

<sup>2</sup>Suwannee River Water Management District, March, 1975, A Geologic Investigation of a Proposed Landfill, White Springs, Florida.

Department of Agriculture Soil Conservation Service and University of Florida Agricultural Experiment Stations, Soil Survey, Suwannee County, Florida, Series 1961, No. 21.

Some  
clarity



MAP M-3 FLOOD PRONE AREAS AND DRAINAGE WELLS

FIGURE F-4 LIST OF DRAINAGE WELLS

Well No.	Location	Date	Size	Top of Casing or Bx Elev	Depth in Feet		Remarks
					Casing	Hole	
DOT 1	Ammons & 5th St.	July '63	6"	90.0	---	---	Working
DOT 2	Irvin & 4th St.	June '63	12"	92.0	327	450	Working
DOT 3	Fir & Brown	1963	18"	71.0	---	---	Working
DOT 4	Mussey & SCL RR	1963	8"	94.0	430	730	Not Working
<u>CITY</u>							
1	Fir & Hillman	----	12"	----	---	305	Receives Overflow
2	Fir & Brown	----	12"	----	---	324	From DOT No. 3
3	Fir & Brown	----	8"	----	---	---	-----
4	Georgia & Bryson	----	4"	----	---	---	Good
5	Duval & Waterworks	----	12"	91.23	Abandoned '65		Good
6	Duval & Union	1898	6"	91.22 (from 37504 Survey)	300	400	Not connected Not opened
7	Duval & Mussey	----	6"	----	---	---	Caved in (Casing bent)
8	Tedder & Duval	June '62	4"	----	42	80	Good
9	Howard & Railroad	----	---	----	---	---	Can't Verify
10	Union & Howard	----	10"	----	---	426	Good
11	Van Buren & Lake Mary	1964	12"	92.36	---	125	Good
12	Nabor & Santa Fe	1962	6"	----	110	195	Good
13	Meadow & Myrtle	1962	6"	93.13	80	171 (260')	Good

Figure F-4 Continued

Well No.	Location	Date	Size	Top of Casing or Bx Elev	Depth in Feet		Remarks
					Casing	Hole	
14	Meadow & Weller	----	6"	----	80	200	Good
15	Meadow & Ohio	June '42	4"	96.88	321	401	Good
16	Marymac & Darrow	----	2-6"	----	---	200	Good
17	Ohio & Marymac	Sept '61	--	88.31	114	189 (245)	Good
18	Pine & 11th	Dec. '59	4-6"	----	6"-80'	179	Good
19	Houston & 11th	----	6"	----	---	---	Good
20	Houston & Maple	Oct. '65 Sept '59	2-6"	----	---	250	Good 267' Caved & Redrilled
21	Suwannee & 7th	----	4"	----	---	---	Abandoned
22	Suwannee & Wilbur	----	6"	----	---	175	-----
23	Suwannee & Wilbur	----	10"	----	---	285	-----
24	Suwannee & Wilbur	----	10"	----	---	185	-----
25	Suwannee & Wilbur	----	12"	----	---	385	-----
26	Scriven & 9th	----	6"	----	---	---	Caved-in Abandoned
27	Irvin & 8th St.	----	6"	----	---	135 (250)	-----
28	U.S. #90 & Woods	1959	--	----	61	210 (Drilled 122')	Good
29	5th St. & Taylor	Aug. '62	6"	99.08	103	206	Drilled 177
30	Scriven & Taylor	----	6"	----	---	---	-----
31	Winderweedle & U.S. #129	----	--	----	---	---	Good

Figure F-4 Continued

Well No.	Location	Date	Size	Top of Casing or Bx Elev	Depth in Feet		Remarks
					Casing	Hole	
32	Irvin & Liberty	----	6"	----	---	---	Good
33	Weller & Lake Mary	----	8"	90.75	129	200	Good
34	Ruby & Eva	June '64	6"	----	65	136	Good
35	Church & John	June '64	10"	----	63	200	Good
36	SCL RR & Suwannee	----	8"	100.4 Box 93.94 Casing	142 (from Survey)	196 37500)	Good
37	Hawkins & Church	July '64	8"	----	85	153	-----
38	Lafayette & 8th	1964	6"	----	91	175	-----
39	Howard & Union	----	6"	----	---	385	Good
40	Pine & Warren	May '65	16"	----	106.9	327	Good
42	Duval & Mussey	----	4"	----	212	308	Good
43	Park & Thomas	Oct. '66	6"	----	291.7	320	Good
44	Murphy Subd.	----	6"	----	---	---	-----

### GEOLOGY<sup>3</sup>

Live Oak is a part of the central Florida ridge of the Atlantic Coastal Plain. Four major geological formations exist, as illustrated in the generalized cross section found in Figure F-5. The Ocala formation of the Eocene Age is the oldest in the country and consists of soft, cavernous limestone. It serves as a vast underground reservoir for fresh water that fills the labyrinth of caves and solution pores.

The Suwannee limestone is of the Oligocene Age and overlies the Ocala formation. It is most hard and embedded with the strata of soft granular lime. This formation is honeycombed with caves and solution pores many of which have collapsed and have been filled with material from overlying strata. The Suwannee limestone is also an underground reservoir of fresh water and has influenced soil formation primarily by providing drain outlets.

The Hawthorne formation overlies the Suwannee formation. This formation is of the Miocene Age and consists of marine deposits of interbedded sand, clay, marl, limestone, fuller's earth, and phosphatic material.

The most recent formation is a surface mantle of sandy material laid down during the Pleistocene Age. It consists principally of very sandy, reworked material from the Hawthorne formation. The thickness of these formations ranges from only a few inches where they are underlain by the Hawthorne formation to 20 feet or more at lower elevations.

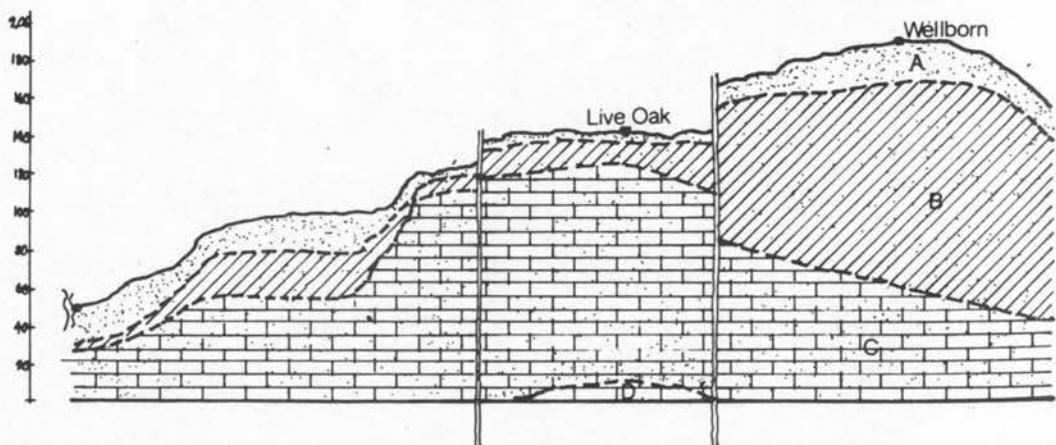


FIGURE F-5 GENERALIZED COUNTY CROSS SECTION

<sup>3</sup>Suwannee River Water Management District, and Department of Agriculture Soil Conservation Service, pp. 95 - 99.



## SOILS<sup>4</sup>

Live Oak is situated in an area of two general soil associations, as described below:

Blanton (low) - Susquehanna - Bowie association: Moderately well drained, nearly level, acid sands more than 30 inches deep to fine-textured material, and interspersed sands that are less deep.

Susquehanna - Bowie association: Well drained to somewhat poorly drained, acid soils that have a sandy surface layer 8 inches to more than 3 feet deep over a clayey sub-soil.

The more specific soil survey of the City of Live Oak is presented in Map M-4.



MAP M-4 SOIL SURVEY

<sup>4</sup>Suwannee River Water Management District and Department of Agriculture Soil Conservation Service, p. 104

FIGURE F-6 SOILS DESCRIPTIONS

<u>Map Symbol</u>	<u>Soil</u>	<u>Description of Soil</u>
Bb	Bayboro fine sandy loam	Poorly to very poorly drained soil. The loamy fine sand or fine sandy loam surface soil is less than 18 inches thick. The clay subsoil is acid, very plastic, and slowly permeable. This soil occurs on nearly level, low uplands and in depressions.
BfB	Blanton fine sand, high, 0 to 5 percent slopes	Thirty inches or more of moderately well drained to excessively drained, loose fine sand over stratified layers of sandy loam to sandy clay. Fine-textured material begins at a depth of 30 to 42 inches in the shallow phases. In some places, limestone underlies thin clayey substrata. In areas of the Blanton-Chiefland complex, limestone is found at a depth of 42 to 60 inches.
BmB	Blanton fine sand, low, 0 to 5 percent slopes	See description above.
BmC	Blanton fine sand, low, 5 to 8 percent slopes	See description above.
BnB	Blanton fine sand, low, moderately shallow, 0 to 5 percent slopes	See description above.
BnC	Blanton fine sand, low moderately shallow, 5 to 8 percent slopes	See description above.
BoB	Blanton-Bowie-Susquehanna complex, 2 to 5 percent slopes	Somewhat poorly drained to well-drained fine sand to loamy fine sand underlain by sand and clay. These soils occur on gentle to sloping upland. (See individual soils of this complex for physical properties.)

Figure F-6 Continued

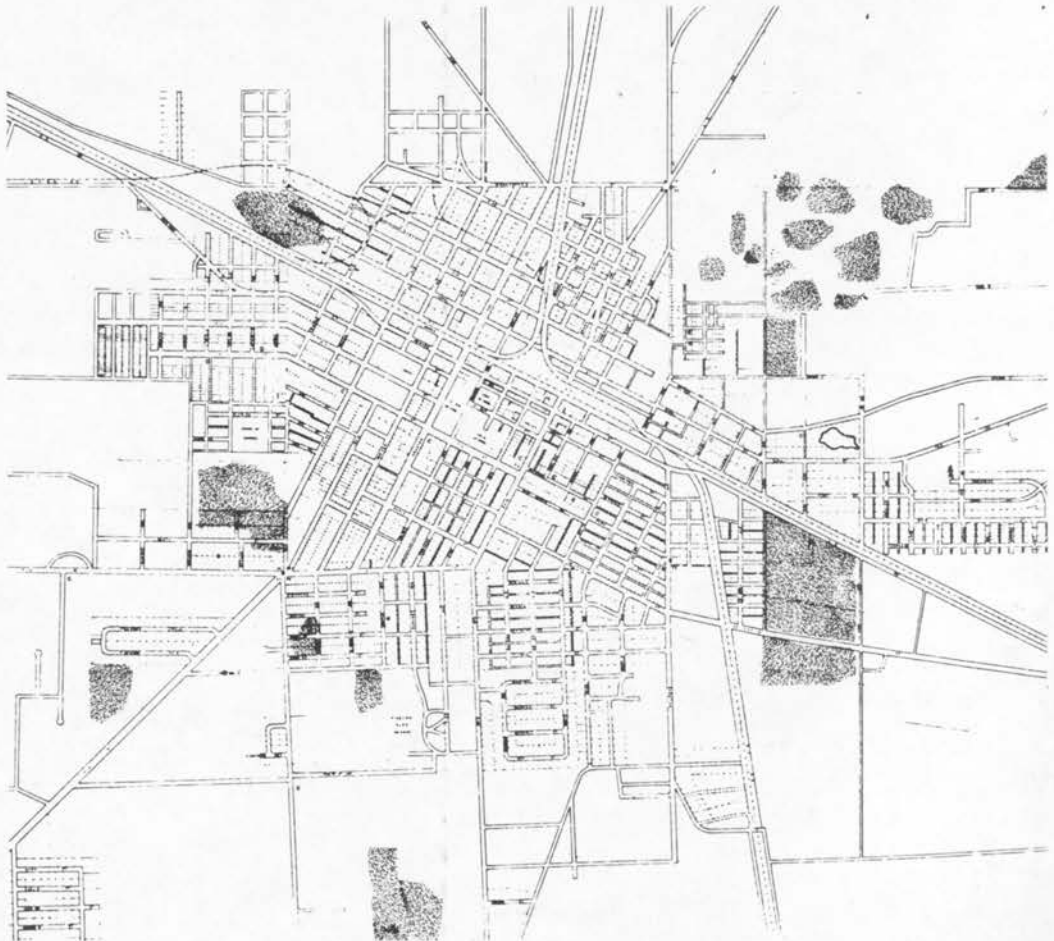
<u>Map Symbol</u>	<u>Soil</u>	<u>Description of Soil</u>
BoC	Blanton-Bowie-Susquehanna complex, 5 to 8 percent slopes	Somewhat poorly drained to well-drained fine sand to loamy fine sand underlain by sand and clay. These soils occur on gentle to sloping uplands. (See individual soils of this complex for physical properties.)
BxB	Bowie-Blanton complex, 2 to 5 percent slopes	Moderately well drained to well drained fine sands, 6 to 42 inches or more in thickness, underlain by sand or friable sandy clay loam. Blanton soils are sandy to a depth of more than 30 inches. (See individual soils of this complex for physical properties.)
Gr	Grady fine sandy loam-thick surface	Poorly drained and very poorly drained soils. A thin, fine-textured surface soil overlies slowly permeable, acid sandy clay or clay. These soils occur in depressions or in ponds. Grady, Bladen, and Coxville soils have thinner first and second horizons than Grady fine sandy loam, thick surface.
Lo	Local alluvial land	Alluvial material in depressions on uplands; thickness and texture variable.
Mp	Mine pits and dumps	Variable soil material in strip mines, pits, and dumps.
PdA	Plummer fine sand, 0 to 2 percent slopes	Somewhat poorly drained, poorly drained, and very poorly drained, strongly acid soils occurring in ponds and adjacent, slightly higher areas. The surface soil consists of more than 30 inches of sand. In the moderately shallow phase, fine-textured substrata are at a depth of 30 to 42 inches. Plummer fine sand, depressions, is covered with water during wet seasons.

Figure F-6 Continued

<u>Map Symbol</u>	<u>Soil</u>	<u>Description of Soil</u>
SfB	Susquehanna fine sand, 2 to 5 percent slopes	Less than 18 inches of fine sand or loamy fine sand over dense, very slowly permeable sandy clay and clay; soils occur extensively in gently sloping to sloping areas.
SfC	Susquehanna fine sand, 5 to 8 percent slopes	See description above.
SfC2	Susquehanna fine sand, 5 to 8 percent slopes, eroded	See description above.
SfD	Susquehanna fine sand, 8 to 12 percent slopes	See description above.
SnB	Susquehanna-Blanton complex, 2 to 5 percent slopes	Somewhat poorly drained to excessively drained fine sand and loamy sand underlain by sand or clay; soils are on gentle to sloping uplands. (See individual soils of this complex for physical properties.)
Sw	Swamp	Land type consisting of swampy soil of varied characteristics; surface layer is high in organic-matter content.

## NATURAL VEGETATION

The town is said to have obtained its name from the large Live Oaks that characterized the area and whose shade made it a favorite resting spot for railroad workers. Many of these magnificent trees still exist throughout the city. Although recent agriculture and urban development have resulted in massive clearing of this natural foliage and very few large, vegetated areas exist today, certain small, forested areas remain within the city limits, as identified on Map M-5. A detailed vegetation study was not undertaken due to the scale of the comprehensive planning effort; however, no unique or endangered vegetation was observed during other field studies.



MAP M-5 FORESTED AREAS

## CLIMATE<sup>5</sup>

The climate of Live Oak is characterized by long, warm summers and mild winters. Rainfall is abundant, with approximately half of the annual average falling during the four months of June through September.

During the summer months, the daily maximum temperature averages almost 91°F. During the winter months of December, January, and February, cold air masses from Canada cause freezing temperatures which can be expected to occur every year on the average of fifteen times. Cold spells usually last only 2 - 3 days at a time with the temperature almost always rising above freezing during the daylight hours. During the winter months the daily maximum generally ranges from 55°- 75°F. and the daily minimum ranges from 35° - 55°F.

Rainfall in the summer comes mostly in short showers and thunder-showers that occur in the afternoon or early evening. Some showers are very heavy, with 2 - 3 inches falling in an hour or two. Rain storms rarely last all day, with the exception of those associated with tropical storms. Although rainfall is distributed throughout the year, droughts may occur during any season but are most likely to occur in October and November and late in April, May, and early June. Prevailing winds are generally southerly in the summer and northerly in the winter, ranging in speed from 8 - 15 miles per hour.

## SUMMARY OF PLANNING IMPLICATIONS

*Done -*

The study of physiographic conditions of Live Oak did not reveal any major constraints to development with the exception of one possible area of concern. The Suwannee River Water Management District expressed concern with respect to stormwater drainage and the resulting impact on water quality. Due to the current practice of disposing of stormwater through drainage wells into the groundwater system, it is possible that contamination of the fresh water supply could result. Although present fresh water wells are not contaminated, other wells have been so affected and therefore closed. Testing should be undertaken to assess the extent of any possible threat to the fresh water supply. If precautionary measures become necessary, drainage wells can be converted to stormwater retention areas. Sufficient land for this possibility is considered to be a significant plan determinant.

<sup>5</sup> Suwannee River Water Management District and Department of Agriculture Soil Conservation Service. pp. 93 - 95.

The geographic formations indicate that Live Oak is situated in a recharge area; however, future development need not adversely affect this condition. Testing and monitoring of groundwater recharge should be initiated to assure the quality and quantity of a long-term fresh water supply. Physiographic conditions related to soils and natural vegetation do not create any direct constraint to development. The suitability of land for agricultural purposes and the resulting economic and land use impact are indirect considerations, however, which cannot be overlooked in planning for the future growth of the city. The climate is considered pleasant and conducive to all forms of development, including retirement. The limited number of sub-freezing days is an attraction to growth resulting from migration of Northern residents to a warmer climate which also includes seasonal changes.

## LAND USE - STRUCTURAL CONDITIONS SURVEY

### INTRODUCTION

The Land Use Survey is an identification and examination of how every lot and parcel of land in Live Oak is currently being used. Each parcel is inventoried and mapped according to a standard system of land use classifications. The map or pattern of how land is being used is the most descriptive component of the city's form and is the basis for the future Land Use Plan. The analysis of the land use pattern in terms of the rate of conversion of land from open, rural and/or agricultural to urban and suburban uses, and the geographic distribution of this pattern indicate trends which are necessary to project future land use needs. Conflicts in the land use pattern, efficiency of land utilization, adequacy of designated land uses, and the pattern of neighborhood and commercial deterioration are also significant land use considerations. The composition of these factors provides an accurate picture of the current physical condition of the City of Live Oak without which it would not be possible to make intelligent land use decisions concerning the future.



## METHODOLOGY

Existing land uses and structural conditions were inventoried from a windshield survey undertaken by The Office of Mark Gluckman during October, 1976. Information regarding the existing use and condition of structures (residential) were recorded on a base map of the city at the scale of 1" = 400'. Each land use was mapped according to the generalized classification system indicated below.

### Residential

Single-family (5 units per acre and less)  
Multi-family (more than 5 units per acre)

### Commercial

Central business, community shopping  
Neighborhood stores

### Industrial

Light industrial and warehousing (no obnoxious noise, odors, etc.)  
Heavy Industry

### Public/Semi-public

Recreation

### Agriculture

Natural, open areas - Not developed

This field data was cross referenced with aerial photographs and information relating to building permits, new water, and sewer taps. The map was also compared to a similar survey undertaken in 1963 to identify developments since that date.

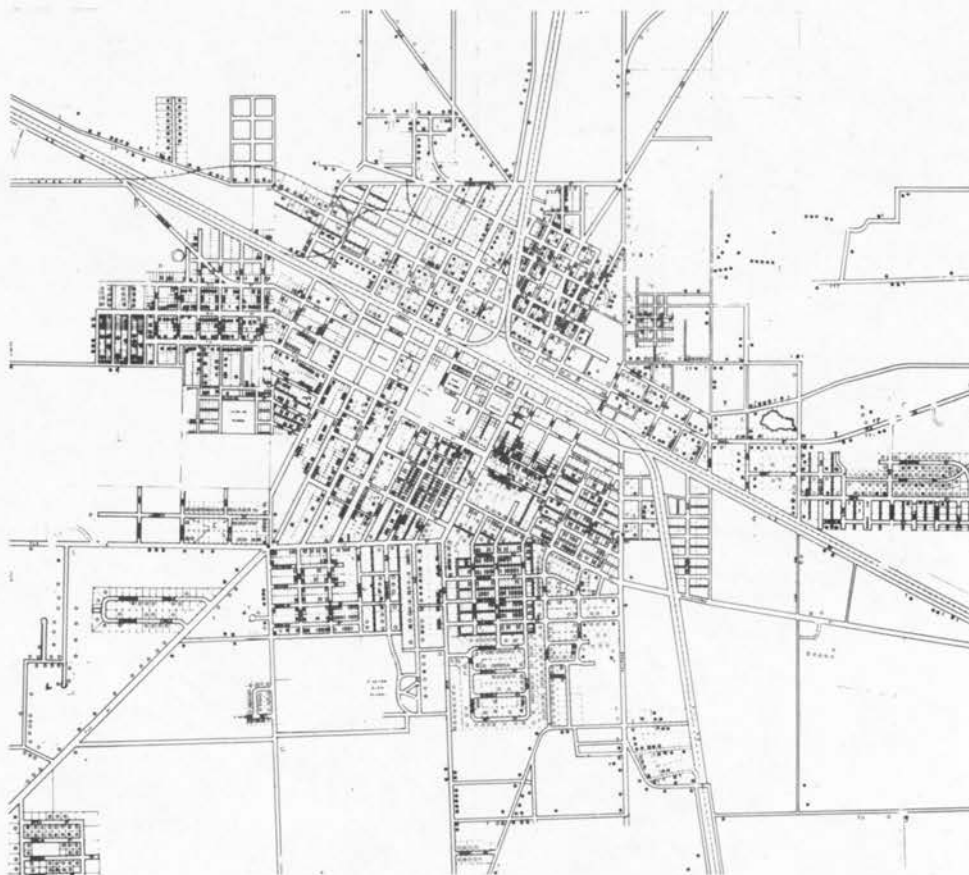
In addition to mapping existing land uses, the structural condition of residential buildings was noted, according to the subjective criteria listed below.

Sound Condition - those structures with no visual defects or only slight defects which can be repaired by the average homeowner.

Deteriorating Condition - those structures which have one or two major defects indicating a prolonged lack of regular maintenance. These buildings cannot usually be repaired by the average homeowner, but it still appears to be economically feasible to bring them into standard condition.

Dilapidated Condition - those structures that have extensive critical defects which prevent a structure from providing safe and adequate shelter for its occupants. These structures are normally beyond rehabilitation and should be demolished.

The Structural Condition Survey is presented in Map M-6 below.



MAP M-6 STRUCTURAL CONDITION SURVEY <sup>1</sup>

<sup>1</sup>Map reduction prohibits illustration of Legend. Consult large scale maps for accurate illustration of Structural Conditions.

## EXISTING LAND USE PATTERN

QUALITATIVE ANALYSIS - As identified in the Comprehensive Plan for the City of Live Oak, prepared in 1963 by the Florida Development Commission:

Live Oak, like many rural north Florida cities, was established adjacent to the intersection of major transportation routes. The intersection of two railroads directly affected the Live Oak site selection. The fact that Live Oak is the county seat and an important agricultural market has been a factor in land development patterns.

These factors establish the historical basis for the current land use pattern of the city. The fact that Live Oak remains the county seat and is still an important agricultural market center continue to be significant factors in the city's growth and land development pattern. The reduction of importance of the railroad as a mode of transportation, however, and the corresponding increased importance of the automobile and truck and resulting expansion of the highway system are becoming the dominant form determinants in Live Oak. The central business district of Live Oak continues to be centered at the intersection of U.S. 90 and U.S. 129; however, the growth of suburban commercial activity has severely weakened the economic viability of the downtown area. The location of governmental and other major commercial structures in the downtown area have created a focal point of activity; however, the development of new residential areas in the southwest section of the city, along with the new Suwannee County Educational Complex and the adjacent new commercial shopping area, have exerted intense development pressure in the southwest sector of the city.

*who says?*

This pattern is further enhanced by the completion of Interstate 10 connecting Jacksonville to Tallahassee and points west, which greatly reduced the importance of Highway U.S. 90 as a regional traffic arterial. This would also normally attract development toward the interchange, but this has not occurred due to the land ownership pattern, the location of the mine pits which separate the northern boundary of the city from the I-10 interchange, and other factors.

The intersection of U.S. 129 and U.S. 90 divides the city into four quadrants. The central business district is centered at this intersection, with commercial activity extending in a scattered pattern along these two and other arterials. The Seaboard Coastline Railroad tracks running parallel to U.S. 90 further emphasizes this pattern.

*what are they?*

Major industrial uses are scattered but located primarily in the northwest and west quadrants of the city. Residential land uses exist in all four quadrants, with a major percentage of these uses being located in the southeast and southwest quadrants of the city.

The major public buildings are the City Hall and County Courthouse, which are located in the central business district. The major recreation area is located on Fir Street, close to the downtown area, in the northeast sector of the city. Suwannee County School Board properties (vacated) are located adjacent to the downtown area, but the new educational complex is approximately one mile south and west of the downtown area.

The most recently constructed commercial development is located in the southwest sector of the city along Pinewood Way between Walker Avenue and Florida Highway 51. A second community shopping area is located east of the downtown area along Howard Street.

Agricultural lands within the city limits are located in the southeast and southwest quadrants, but these are small-scale farm operations. The Land Use Pattern is presented in Map M-7 below.



MAP M-7 LAND USE PATTERN <sup>1</sup>

<sup>1</sup> Map reduction prohibits illustration of Legend. Consult large scale maps for accurate Land Use determinations.

QUANTITATIVE ANALYSIS - A Quantitative description of the existing land use for Live Oak is presented in Figure F-7. It is not possible, nor is it significant, to provide precise calculations of the amount of land in each classification, due to the extensive research necessary to determine the exact ownership pattern. However, reasonable estimates are obtainable by identifying land use types and mapping the visual boundaries on the planning area base map. This map is then compared to the 1962 information, which provides the data for the Table of Land Use presented below.

FIGURE F-7 TABLE OF LAND USE - 1976

	<u>TOTAL</u>	<u>1962</u>	<u>INCREASE FROM 1962 TO 1976</u>	<u>% IN- CREASE 1962-1976</u>	<u>AVERAGE YEARLY INCREASE</u>
Residential	550	355.86	200	56%	4%
Commercial	95	45.90	50	108%	7.7%
Industrial	70.34	62.34	10	16%	1.14%
Public	200	111.53	90	80%	5.7%

SOURCE: The Office of Mark Gluckman &  
Department of Public Works, City of Live Oak

Whereas the gross nature of the land use calculations limits the complexity of its statistical analysis, it is interesting to note the yearly average increase or absorption rates of land for urban uses. The large increase in public land is due primarily to the new Suwannee County School Board Educational Complex on Pinewood Way. The increase in the percentage of commercial growth of the city is attributed to the general economic growth of the city and a shift to newer shopping areas. Conversion of land to industrial uses is slower than for other uses but is not inconsistent with the general growth pattern for Live Oak. The lack of new employment is evident, as discussed in the economic study.

Residential expansion is approximately 4% per year, which is relatively consistent with the population growth during this same time period. No differentiation was made between the types of residential development in the land use table; but a large percentage, estimated to be 20 - 30 percent, is in mobile home development. Very little multi-family development has occurred in the last fourteen years.

## LAND USE CONFLICTS

An examination of the emerging land use pattern reveals certain conflicts in the pattern of development which could restrain, or result in problems for, future growth. These conflicts identify specific planning considerations and provide a basis for development goals. These land use conflicts are discussed below.

RESIDENTIAL NEIGHBORHOODS - There exist a number of areas in the city which consist predominantly of dilapidated structures. In some instances, streets are not paved and urban services are limited. These areas, normally referred to as blighted or deteriorating neighborhoods, represent land use conflicts that have a strong negative impact on the surrounding residential areas. The tendency is for these blighted areas to downgrade surrounding land, which fosters a further deterioration of peripheral residential areas.

RAILROAD - The Seaboard Coastline Railroad tracks create a barrier effect which divides the city, along with the arterial road pattern, into very rigid quadrants. This subdivision of the town also relates to the location and isolation of the blighted areas, making it increasingly more difficult to rehabilitate and improve living conditions. This condition further repels new growth, reinforcing the deterioration cycle.

COMMERCIAL DEVELOPMENT - The location of the new shopping plaza on Pine-wood Way is partly a result of the conditions described above. Intensive land uses are attracted to the suburban areas, weakening the central business district and exerting pressure for the expansion of urban services. This pattern has also resulted in residential "leap frogging"-- the development of residential land outside of, rather than within, built-up areas already receiving urban services.

OTHER FACTORS - The location of the blighted areas, the barrier effect of the railroad tracks, and impact of the new commercial area has attracted a predominant amount of growth to the southwest sector, thereby disproportionately straining the need for services and public facilities in this area.

Industrial sites are scattered throughout the city and in some areas create sources of negative influence on residential areas. The resulting traffic pattern is also potentially harmful and in some instances an intrusion into residential neighborhoods.

The new shopping plaza is currently surrounded by vacant land which, because of the impact from the shopping facility, is not suitable for future, low-density residential development. Conversely, higher intensity land uses are attracted, and the area will become suitable for multi-family and business uses.

The mine pits to the north of the city limits and the blighted areas located in the northeast and northwest quadrants of the city create a major negative influence on new development in these quadrants. If this pattern is allowed to continue, it will become increasingly more difficult for the city to improve these neighborhoods and expand in the direction of the Interstate Highway. Improving its regional exposure, by this development trend, could have major economic benefits to the city.

The above-referenced land use conflicts create potential problems to the future land use pattern. At the same time, the existing land use pattern has favorable influences on the future Land Use Plan. These are discussed in the following section, Land Use Potential.

#### LAND USE POTENTIAL

In spite of some residential "leap frogging", the urban form of Live Oak is reasonably condensed and well defined. The high-intensity uses are concentrated at the intersections of major arterials and/or along these roads. And, with the exception of the new shopping plaza, the pattern of commercial development is consistent and does not intrude into residential areas.

Certain neighborhoods have been well maintained and continue to be highly desirable places to live. The natural Live Oak landscape is highly contributory to these quality environments.

The location of the new City Hall and the County Courthouse, along with other financial offices, is a positive trend toward upgrading the central business district. In spite of economic and aesthetic problems, these facilities provide the nucleus for downtown redevelopment.

The identification of the land use pattern with the geometry of the circulation framework and the strong definition of the entrances to the city create an excellent urban design potential. The enhancement of these gateways can exert a positive influence on the overall aesthetic and urban design quality of the entire city.

These factors are discussed further as the basis for Land Use Goals presented in the Land Use Plan.

# POPULATION SURVEY<sup>1</sup>

## INTRODUCTION

The population survey is an inventory and examination of the human resources of the city. The numbers of people and their quantitative and qualitative attributes will be examined, along with a review of recent trends and an analysis of the composition and characteristics of the present population. Together these factors provide the opportunity to evaluate and assess the type of future growth that can be anticipated. Of these resources, the major factors to be considered in the analysis of the population will include the following: Educational Participation and Educational Attainments, Age Ratios, Age Composition, Sex Ratios, Racial Ratios and Population Projections. These are described in the following section.

EDUCATIONAL PARTICIPATION AND EDUCATIONAL ATTAINMENTS - The levels of education within the population are a good indicator of the population's economic potential. The greater the level of education, the greater the potential earning power of the populace. Educated people can learn new skills more quickly, are more adaptable to new situations, are more willing to accept innovation, and are much less willing to follow doubtful leaders to false goals. There is one danger: i.e., some of the better educated will leave for greener pastures and greater opportunities in other areas. There exists in a small community a possibility of being over-educated, just as there is the danger of being under-educated.

<sup>1</sup>The Population Survey was prepared by Professor James Brotherton, Jacksonville University, Jacksonville, Florida, in conjunction with the Center for Urban Studies, Jacksonville University.



Educational achievement is commonly evaluated by the number of grade levels completed by the individuals of the population. Educational participation is, of course, evaluated by the number of persons enrolled in school as opposed to possible enrollees.

AGE RATIOS - In evaluating a population, age ratios are a most important consideration. The age of the individuals within the community largely determines their major types of activity. For example, are they dependent, supportive, or retired? The gainfully employed are most commonly found within the age group of 18 to 65, although this is not a sharply delineated cut-off point. The fully-dependent population is found typically to be less than fifteen years of age, with most continuing to be dependent until at least eighteen years of age. Expectations are that most retirees from the active working population will be of age sixty-five or greater. These retired people can be a valuable economic asset to the community, as their retirement income is often composed of "new" dollars to be spent and respent in the local economy.

AGE COMPOSITION - This data is very important because the planners must make provisions for the differing needs of various age groups. Schools and recreation tend to be the foremost thought when planning by age considerations. These, however, are only a part of the overall need. The aged have needs which are as important to them as schools are to the young.

SEX RATIOS - Within the population, sex ratios are of utmost importance. If there is a serious imbalance of male-to-female population, especially in the age groups in which families are most commonly formed (18 - 24), there are bound to be lasting repercussions. If there is a surplus of males, various social problems may develop. Some of these problems can be detrimental to the community. Commonly, in a small community there is a shortage of males which results from the fact that the young, high school graduate male is attracted to larger communities where he hopes to find greater economic opportunities. The sexual balance of the population can also be expected to affect the local employment situation. A large surplus of women will bring about a larger influx of women into the labor market, and possibly a resultant lowering of general wage rates.

RACIAL RATIOS - The Supreme Court has removed any legal reason for separate consideration of population by race. Nevertheless, many compelling reasons remain for knowing the composition of the population. As the planner is concerned with age and sex, he should be equally concerned with race, in order that adequate plans can be made for all members of the community. No member of the community wishes to be singled out, but each wishes to receive his or her fair share.

POPULATION PROJECTIONS - The activity of planning implies consideration of the future, whether it be twenty minutes or twenty years to come. Necessarily then, one must anticipate changes in the population. In most cases the population will increase, but determining the degree of increase and the rate of increase requires a very careful approach. Overestimating growth may lead to fiscal disaster, but seriously underestimating will create financial havoc as well as intolerably overcrowded conditions.

This portion of the study provides a realistic assessment of, and presents valid data for, each of the foregoing items. The quantitative information describing the population of Live Oak is analyzed in terms of Historical and Present Population Trends, Dependency Ratio, Sex Ratios, Educational Participation and Attainment, Population Projections, and Population Projections for 1980, 1990, and 2000. These are discussed in the following sections.

## HISTORICAL AND PRESENT POPULATION TRENDS

The population of Suwannee County and the City of Live Oak has varied in the past, at times increasing and at times decreasing. Of particular note is the fact that Live Oak has historically continued to embrace an ever-increasing portion of the county population. Suwannee County's population in 1920 was 19,789. At the same time, Live Oak's population was 3,103 or about 15.7% of the county's. Ten years later the county population had decreased to 15,731 and Live Oak's population had decreased to 2,734; but Live Oak's percentage of the county's population had increased to about 17.4% of the population. Table T-1 lists the population for Suwannee County and Live Oak for the Census periods 1920 to 1970. Also listed are the estimates for 1974 - 1975, as reported by the Bureau of Economic and Business Research, University of Florida.

The Table also shows the percentage increase of Live Oak's share of the county population. During the 1950 - 1960 decade, Live Oak annexed territory containing 2,278 people. After making allowances for this large influx of population, the figures indicate a smooth population growth rate through all of the decades since 1920.

This rate of growth has been graphed as Figure F-8.

TABLE T-1 HISTORICAL & PRESENT POPULATION

<u>Date</u>	<u>Suwannee</u>	<u>Live Oak</u>	<u>Live Oak as a % of Suwannee Co.</u>
1920	19,789	3,103	15.66%
1930	15,731 <sup>1</sup>	2,734	17.37%
1940	17,073 <sup>1</sup>	3,427	20.07%
1950	16,986 <sup>1</sup>	4,064	23.92%
1960	14,967 <sup>1</sup>	6,544* (4266)	43.72%* (28.50%)
1970	15,559 <sup>1</sup>	6,830	43.90% (6.0%)
1974	17,645 <sup>2</sup> (E)	7,155	40.55%
1975	18,866 (E)	7,237	38.36%

\* 1950 - 1960 Live Oak annexed 2,278 people

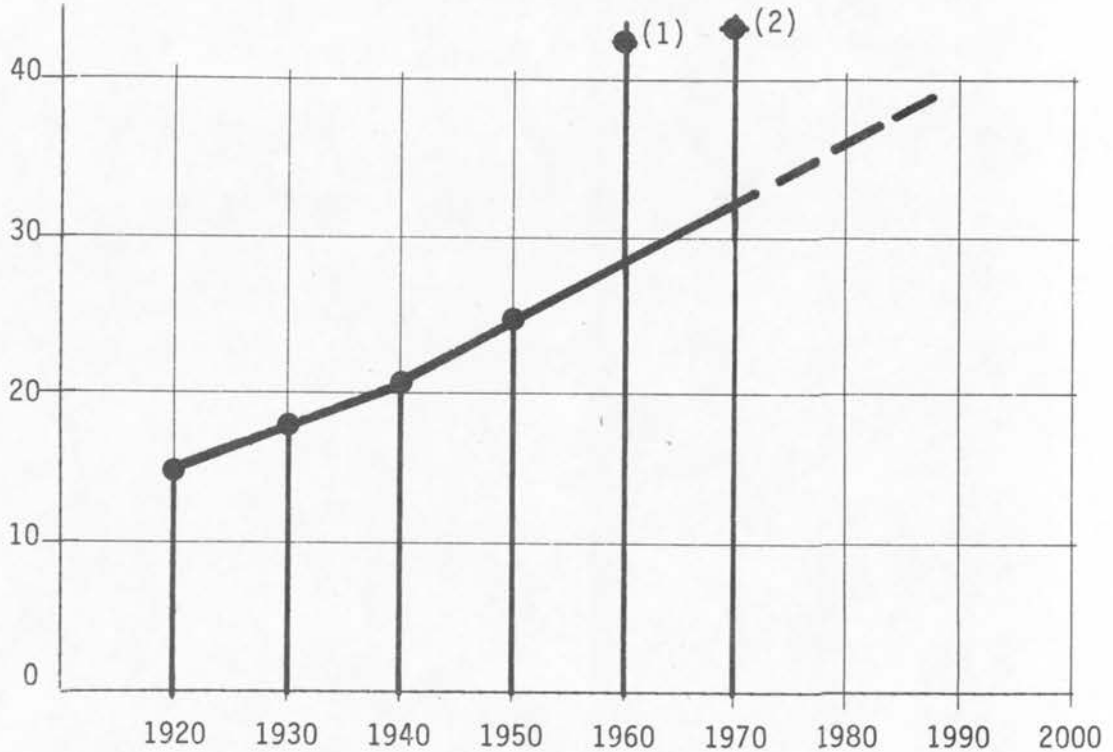
<sup>1</sup> U.S. Census 1950, 1960, 1970

<sup>2</sup> Florida State Abstract 1975 - Bureau of Economic & Business Research.

(E) - Estimate

FIGURE F-8 LIVE OAK'S POPULATION AS A PERCENTAGE OF SUWANNEE CO.

Note (1) and (2) are high because of the annexation of a group which was equivalent to 50% of the previous population.



#### DEPENDENCY RATIO

The dependency ratio indicates the portion of the population which is economically active and the labor potential to be found in a group. The working group must carry the economic burden of the community. It is this group which must develop the means to provide community facilities and support the members of the community. A basic problem in the society of the United States is to determine at which level the younger portion of the population becomes self-supporting and at which level the older members cease to be economically active. An assumption can be made that those members of this society under eighteen years of age are dependent children most of which are in school. Among those not in school is to be found the highest rate of unemployment. In making this assumption the error should not be too great as some of the population over eighteen will not be economically active for several years, if ever.

At the other end of the spectrum are those who have left the active labor force. Typically, they are considered to be sixty-five or more years of age. Many of these people are not dependent in the true sense of the word, but are termed "dependent aged". This older group may have means of their own, supplemented with various government monies, and thus be financially independent. Perhaps not until their mid-seventies will they be physically dependent.

Three definitions exist for these three major groups:

- A. Dependent Children - those under 18 years of age.
- B. Active Population - those between 17 and 65 years of age.
- C. Dependent Aged - those 65 and older.

The dependency ratio is calculated according to the following formula:

$$\frac{\text{Dependent Children} + \text{Dependent Aged}}{\text{Active Population}} \times 100 = \text{Dependency Ratio}$$

Thus, substituting values from Table T-2 on the following page, the dependency ratio is as follows:

$$\frac{2482 + 767}{3581} \times 100 = 90.86$$

A dependency ratio of 90.86 indicates that if all the active population were working (allowing for no unemployment and all males and females participating), each worker would need to support 1.9 people-- support to include the associated tax loads and all governmental services and facilities used by this particular population group.

## SEX RATIOS

In a normal population, slightly more boy babies are born than girl babies. This small imbalance continues until the age of five or so, at which time the ratio becomes even and then a slight increase toward the distaff portion of the population is evident. Ratios within 10% of being balanced are not worthy of concern, but when there are less than 90 males or more than 110 males per 100 females, the sex ratio is seriously unbalanced. Among the aged, this imbalance

can be expected because of the more favorable longevity rates for women. When this condition exists among the young adult group, however, there may be cause for concern.

The sex ratio is determined by dividing the number of men in the population by the number of women in the population. The following ratios existed in 1970.

TABLE T-2 SEX RATIOS - LIVE OAK - 1970

<u>Age Group</u>	<u>Male</u>	<u>Female</u>	<u>Sex Ratio</u>
Under 18	1255	1227	102 per 100
18 - 19	109	135	81 per 100
21 - 24	165	227	73 per 100
25 - 64	1310	1536	85 per 100
65 - 69	116	161	72 per 100
Over 69	196	294	67 per 100

The age group under 18 has a favorable ratio. The groups 65 - 69 and Over 69 are as expected, even though they are seriously unbalanced.

The real problem exists in the 18 - 19 and the 21 - 24 age groups as shown in Tables T-3 and T-4.

TABLE T-3 SEX RATIOS - LIVE OAK - 1970

<u>Age Group</u>	<u>Male</u>	<u>Female</u>	<u>Total</u>	<u>% Total</u>
18 - 24	325	410	735	
18 - 64	1635	1946	3581	52.4
21 - 24	165	227	392	
21 - 64	1475	1763	3238	47.4
Over 20	1787	2218	4005	58.6
Over 64	312	455	767	11.2

Source: U.S. Census, 1970, Table 31, Page 11-140  
adjusted to conform to table

TABLE T-4 POPULATION BY AGE GROUPS - LIVE OAK - 1970

<u>Age Group</u>	<u>Male</u>	<u>Female</u>	<u>Total</u>
All Ages	3202	3628	6830
0 - 4	320	294	614
5 - 9	369	356	725
10 - 14	357	372	729
15 - 17	209	205	414
18 - 19	109	135	244
Age 20	51	48	99
21 - 24	165	227	392
25 - 29	174	183	357
30 - 34	173	191	364
35 - 39	153	163	316
40 - 44	147	196	343
45 - 49	188	216	404
50 - 54	161	210	371
55 - 59	163	191	354
60 - 64	151	186	337
65 - 69	116	161	277
70 - 74	75	112	187
Over 74	121	182	303
-----	-----	-----	-----
Under 15	1046	1022	2068 - 30% of Total
Under 18	1255	1227	2482 - 36% of Total
Under 21	1415	1410	2825 - 41% of Total

In the 18 - 19 age group there are only four men for every five women. The ratio is even worse among the 21 - 24 age group, which has less than three men for every four women. Thus, there is a serious imbalance in the family formation ages. This indicates a serious out-migration of the young men of the community.

The imbalance to be seen in the sex ratios is even greater among the members of the black population, and it is getting worse. In 1950 the ratio was 87.8 per 100. By 1970 the ratio had decreased to about 84 men per 100 women.

Racial balances are determined by dividing the numbers of one race by the numbers of the other race and then multiplying by 100. In this case:

$$\text{RACE RATIO} = \frac{\text{Black}}{\text{White}} \times 100 = 50.1$$

This can be stated, "There are 50 black members of the population for every 100 white members of the population." The statement can also be that the population in 1970 was 1/3 black and 2/3 white.

These and other values can be ascertained from Table T-5.

TABLE T-5 COMPOSITION OF THE POPULATION BY RACIAL CHARACTERISTICS

YEAR	W H I T E			B L A C K		
	TOTAL	MALE	FEMALE	TOTAL	MALE	FEMALE
1950 <sup>1</sup>	2882	1400	1482	1180	556	624
1960 <sup>2</sup>	4445	2183	2262	2098	984	1114
1970 <sup>3</sup>	4546	2156	2390	2278	1042	1236

		MALE	FEMALE	TOTAL	SEX RATIO
1950 TOTAL 4064	BLACK	13.7%	15.6%	29.3%	87.8 / 100
	WHITE	34.4%	36.5%	70.9%	94.2 / 100
	TOTAL	48.1%	52.1%	100.2%*	92.3 / 100
	B/W INDEX	39.8	42.7	41.3	
1960 TOTAL 6544	BLACK	15.0%	17.0%	32.0%	88.2 / 100
	WHITE	33.4%	34.6%	68.0%	96.5 / 100
	TOTAL	48.4%	51.6%	100.0%	93.7 / 100
	B/W INDEX	44.9	49.1	47.1	
1970 TOTAL 6824	BLACK	15.2%	18.1%	33.3%	83.9 / 100
	WHITE	31.6%	35.0%	66.6%	90.0 / 100
	TOTAL	46.8%	53.1%	99.9%	88.0 / 100
	B/W INDEX	48.1	51.7	50.0	

<sup>1</sup>United States Census 1950: Table 38, Page 10 - 72.

<sup>2</sup>United States Census 1960: Table 22, Page 11 - 68.

<sup>3</sup>United States Census 1970: Table 31, Page 11 - 140.

\*Because of rounding, percent values may be more or less than 100%.



## EDUCATIONAL PARTICIPATION AND ATTAINMENT

The well-being and development of a community depends in large part upon the educational qualifications of its citizens. Table T-6, School Enrollment, indicates the degree to which members of the Live Oak community are availing themselves of educational opportunities.

TABLE T-6 SCHOOL ENROLLMENT - LIVE OAK - 1970

<u>AGE</u>	<u>% ENROLLED</u>
3 - 4	22.5
5 - 6	57.9
7 - 13	93.8
14 - 15	99.9
16 - 17	73.8
18 - 19	23.3
20 - 21	7.6
22 - 24	2.0
Over 24	1.4

SOURCE: United States Census 1970, Table 117, Page 11 - 449.

TABLE T-7 EDUCATIONAL ACHIEVEMENT FOR THE POPULATION TWENTY-FIVE YEARS OF AGE OR OLDER

<u>GRADE LEVEL COMPLETED</u>	<u># PERSONS</u>
No School	82
One to four years	379
Five to seven years	587
Eight years	493
Less than high school graduate	760
High School graduate	839
Some College	218
College Degree	255
T O T A L	<u>3613</u>

SOURCE: United States Census 1970, Table 117, pp. 11-449.

The information in Table T-7, Educational Achievement, can be restated in a more meaningful way as follows:

- a. 87% of the population has more than a fourth grade education.
- b. 71% of the population has more than an eighth grade education.
- c. 36% of the population has more than a high school diploma.
- d. 13% of the population has some college training.
- e. More than 7% of the population has at least a baccalaureate college degree.

In addition, the above does not account for the active enrollment in school of the three to thirty-five age group. There is a sizable number of adults (18 - 25) still in school. There are 735 people in the 18 - 35 age group. Of these, 30% (220 People) are still in school. Logically it can be assumed that most of these are in high school or college. These members of society increase the above totals and raise the median educational level for the total population.

#### POPULATION PROJECTIONS

A realistic estimate of population growth for a small area is difficult to predict with any great degree of accuracy because small variables can make large percentage changes in the expected population. The addition of one new business employing ten basic workers in a town of 6,000 people will probably result in a 2% or greater growth in the town's population.

When a town has an economic employment factor of 2.5 (low), ten jobs in basic industry will result in a total of 35 new jobs in basic and non-basic industry. If family sizes are 3.4 persons, 35 new jobs will result in a population increase of 119, or almost 2%.

Annexation of new territory can be a crucial factor in the growth of a town. Live Oak is located 2.6 miles south of Interstate 10, and the northern boundary of Live Oak is only 1.4 miles from the intersection. It appears possible that Live Oak might expand in this direction and will incorporate the intersection. If this happens, the new area will add an increased population to the city.

The United States is becoming more urbanized each year. Live Oak is no exception. Farms are becoming larger and more mechanized, and they have a lesser need for agricultural workers. Some of the present farm owners will leave the rural environment and probably retire to Live Oak as their farmlands are consolidated into larger holdings. Farm workers will be displaced from the land, and many of these can also be expected to choose Live Oak as their abode.

The natural increase caused by births exceeding deaths will not be as great as might be anticipated because of the migration of young persons. When these people finish high school and perhaps college, many of them are attracted by the greater economic opportunities offered by urban centers which are larger than Live Oak.

Historically, Live Oak has contained an ever-increasing portion of Suwannee County's population. When the county population decreased, so did Live Oak's. When county population increased, so did Live Oak's. Table T-1, Historical and Present Population, indicates this change very clearly. In 1920, Live Oak contained 15.66% of the county population. The county lost population in 1930, as did Live Oak, but the percentage of population in Live Oak was 17.35%. In 1940 the county had gained population, as had Live Oak, and the portion of population in Live Oak had increased to 20.07%. This rate of increase has been quite regular, with the exception of 1950 - 1960 during which time Live Oak annexed new territory containing 2278 people, thus resulting in a large increase in the percentage of growth. If the effect of the annexed territory is discounted, the rate of growth can be plotted and is seen to fit the pattern as can be seen in Table T-8.

TABLE T-8 LIVE OAK'S POPULATION AS PERCENTAGE OF SUWANNEE COUNTY'S

<u>Year</u>	<u>Percentage</u>
1920	15.66%
1930	17.37%
1940	20.07%
1950	23.92%
1960	43.72%*
1960	28.50% ADJUSTED
1970	43.90%*
1974	40.55% ESTIMATED
1975	38.36% ESTIMATED
1980	41.50% PROJECTED
1990	45.00% PROJECTED
2000	49.00% PROJECTED

\*Live Oak annexed territory between 1950 and 1960 which increased Live Oak's population by almost 50%.

Estimated population for 1974 and 1975 obtained from Florida State Abstract, Bureau of Economic and Business Research.

SOURCE: Center for Urban Studies, Jacksonville, University

These values have been plotted in Figure F-8, Live Oak's Population as a Percentage of Suwannee County. Also shown are projections indicating that Live Oak should contain 41.5% of Suwannee County's population in 1980, 45% in 1990, and 45% in the year 2000.

POPULATION PROJECTIONS FOR 1980, 1990, and 2000

Many excellent studies have been completed to project the estimated population of Suwannee County in years to come. There is no reason to doubt these studies, but there are differences between their various and collective forecasts. It is probable that the actual population will be within the range of the various forecasts.

TABLE T-9 POPULATION PROJECTIONS DETERMINED BY OTHER PLANNING GROUPS FOR SUWANNEE COUNTY

I. Suwannee Chamber of Commerce, using Bureau of Economic and Business Research, University of Florida.					
	<u>1980</u>	<u>1985</u>	<u>1990</u>	<u>1995</u>	<u>2000</u>
	19,300	20,000	21,000	-----	22,600
II. Economic Development Profile for Live Oak, Suwannee Co.					
	Using Bureau of Economic and Business Research Data			Using Social Sciences Advisory Comm. and E.P.A. Data	
	<u>1980</u>			<u>1980</u>	
	16,500			16,600	
III. North Central Florida Planning Region, using Bureau of Economic and Business Research data.					
	<u>1980</u>	<u>1985</u>	<u>1990</u>	<u>1995</u>	<u>2000</u>
low	19,830	20,785	21,732	22,842	23,021
high	21,155	23,481	26,213	28,753	31,373
IV. United States Environmental Protection Agency data.					
	<u>1980</u>	<u>1985</u>	<u>1990</u>	<u>1995</u>	<u>2000</u>
	16,600	-----	19,500	-----	22,400

It is not presumptuous to assume that Live Oak will continue to grow at the rate it has historically. The following approach can be used to project Live Oak's potential population:

1. Use all of the various forecasts for county population.
2. Determine the arithmetic means of the different forecasts.
3. Plot these graphically.
4. Smooth the Graph.
5. Use the computed percentage rate of growth for Live Oak against the projected county population.

TABLE T-10 POPULATION PROJECTIONS FOR LIVE OAK  
USING TABLE T-8 AND T-9

<u>From Table T-9</u>	<u>1980</u>	<u>1990</u>	<u>2000</u>
I	19,930	21,000	22,600
II	16,500 16,600	-----	-----
III	19,830 21,155	21,732 26,213	23,021 31,372
IV	16,600	19,500	22,400
TOTAL	110,615 ÷ 6	88,445 ÷ 4	99,393 ÷ 4
AVERAGE	18,435	22,111	24,848
<u>From Table T-8</u>	<u>x 41.5%</u>	<u>x 45.0%</u>	<u>x 49.0%</u>
Projected Population	7,650	9,950	12,175

SOURCE: Center for Urban Studies, Jacksonville University

Thus, Table T-10 yields the following projections:

Live Oak's population for 1980 will be 7,650  
for 1990 the population will be 9,950  
and before 2,000 it should reach 12,000.

## ECONOMIC SURVEY<sup>1</sup>

### INTRODUCTION

A city must have an economic base in order to survive. Oftentimes this economic base is thought to be the tax base; that is, the basis upon which the city receives its money from its residents through taxes and assessments. While it is true that taxes and payments of this nature are the main source of a city's income, the taxes cannot be collected unless the people of a city have an income or a capital surplus with which to pay these taxes. The economic base of a city, then, is not its tax base but its population. By studying the numbers of inhabitants of a city who have an income, the type of income, and the sources from which this income is derived, a city's financial status can be appraised.

Generally, there are four sources from which the population receives money. The number one source is salaries and wages paid to those people active in the economy. Various profits from business activities accruing to the owners of the business provide the second source of income. The third source is return on investments, which may be made within the city or at some more distant point. A fourth is represented by transfer payments from the government, such as Social Security, government pensions, or other payments such as welfare.

The people of a town have different opportunities to use their dollars. For example, a dollar can be spent with a merchant in town who in turn will respense this dollar with some other merchant in town. In effect, the one dollar will be spent many times over and will have the same effect as many dollars being spent one time only. This is defined as a multiplier factor.

Money can also flow into a town or out of a town. However, a town needs a favorable balance of trade. If more money flows out than flows in, the people eventually will have difficulty paying their taxes, as well as encountering other economic obstacles. Money flows out of town when people receive an out-of-town product or an out-of-town service. For example, a subscription for a magazine brings the magazine into town, while the dollars paid for the subscription leave town.

<sup>1</sup>The Economic Survey was prepared by Professor J. Brotherton, Jacksonville University, Jacksonville, Florida, in conjunction with the Center for Urban Studies, Jacksonville University.

On the other hand, there are many ways by which money can flow into a city. A city can export a product such as raw materials or an agricultural surplus. The city can also export labor. This does not mean the workers go elsewhere to work, although this is possible providing they commute. What is implied here is the exporting of labor in the form of value added to a product. This occurs with a product produced in town which is then sold. The product is the sum of the raw materials and the labor used to process the raw materials.

A town or city can export a service. An example of this is the use of telephones by people in the surrounding countryside. The telephone exchange is within the town and the people working at this exchange receive out-of-town dollars, which they spend to satisfy their personal needs. A town can also provide a government service, such as being the County Seat. In addition, a town can attract people with an income: for example, retired people with a pension who come from elsewhere, or tourists with "new" money.

In the average city or community, most people use existing local dollars. These people are the service people of the town--the barbers, the dry cleaners, the store clerks--and the activities are of this nature. Although they use locally existing dollars, they are heavily dependent upon receiving new dollars from outside. These new dollars are termed "basic dollars". In every town or community, there is a mixture of service-type activities and those activities which bring in new dollars. One of the important aspects of analyzing the economy of a community is to determine the basic-nonbasic ratio.

The Economic Study presents general economic factors; then it explores the agricultural sector of the economy, the financial aspects of the population and the major sources of income. The Study also attempts to establish a basic-nonbasic ratio in order to present an urban economic multiplier for the City of Live Oak.



## GENERAL ECONOMIC FACTORS

Live Oak is the county seat for Suwannee County. Live Oak is also the major community in the county which exerts an economic influence beyond the county boundaries. Live Oak, like the county, is heavily dependent upon agricultural activities and has several industries which are completely dependent upon agricultural commodities produced within the county. The county is the leading producer of broilers and meat-type chickens within the state of Florida. Ranking first of twenty-seven chicken producing counties, Suwannee County is responsible for 22% of Florida's broiler production. These chickens are processed in Live Oak.

Suwannee County is second of twenty-four counties in Florida producing tobacco. The county produces 19% of Florida's tobacco production. This tobacco is marketed through Live Oak.

In order to better understand the economic climate within the City of Live Oak, it is necessary to analyze Suwannee County's agricultural base. In 1969 the farmers of Suwannee County sold over \$13,000,000 worth of agricultural products. Their expenses in farm production amounted to over \$12,000,000. This activity provided extensive employment, either directly or indirectly, for the residents of Live Oak. This factor will be discussed in greater detail in other sections of the Economic Study.

Overall employment conditions are heavily based upon agriculturally derived employment and extractive industries such as limestone mining. Of the approximately 2,800 employed persons in Live Oak, about 23% are involved in food processing. An additional 35% of the employment is related to the limestone products industries. This factor will be further evaluated in the following sections of the Economic Study.

## AGRICULTURE

Agriculture plays a very important role in the economy of Live Oak. Suwannee County is not one of Florida's richest agricultural counties, providing only about 1% of the state's farm income. This low value is understandable because Florida has areas of specialty crops, including citrus and sugar cane, as well as regions of seasonal crops producing high-value truck crops. Suwannee County does have, however, some important crop production.

Table T-11, Agricultural Production in Suwannee County, lists some of the major agricultural products, their quantities, and shows Suwannee

County's relationship to other counties for this particular commodity. As stated previously, Suwannee County is Florida's leading producer of broiler and meat-type chickens and of corn; moreover, it is the second-leading producer of tobacco and sorghum grains, the third-leading producer of hogs and pigs, and is near the top of the list for several other products. As concerns chicken, corn, tobacco, and pork production, Suwannee County has a significant lead over the rest of the state.

TABLE T-11 AGRICULTURAL PRODUCTION IN SUWANNEE COUNTY

PRODUCT	UNITS OF SALES	RANK ORDER SUWANNEE CO. VS. OTHER COUNTIES	PERCENT OF FLORIDA PRODUCTION
Broilers and Meat-type Chickens	7,212,371*	1 of 27	22%
Tobacco	4,662,042 lb.	2 of 24	19%
Corn	41,540 a.	1 of 57	14%
Hogs & Pigs	41,748*	3 of 67	12%
Sorghum	1,236 a.	2 of 42	5%
Pecans <sup>1</sup> Wild and Seedlings	19,544 lb.	6 of 22	8%
Pecans Improved	28,016 lb.	7 of 30	3%
Peanuts	2,088,242 lb.	8 of 28	2.7%
Hay	1,653 a.	27 of 65	1.3%
Soybeans	1,799 a.	9 of 27	1.2%
Cattle & Calves <sup>2</sup>	11,832*	31 of 67	1%
Vegetables <sup>3</sup>	2,467 a.	16 of 67	1%
Wheat	115 a.	7 of 20	0.4%

\*Number of Animals

a - acres

<sup>1</sup> Suwannee County leads the state in the number of new pecan trees, not of bearing age, having 39%.

<sup>2</sup> In addition to 11,832 animals sold, Suwannee County had an inventory of 28,423 animals, placing the county 23rd of 67 counties.

<sup>3</sup> Vegetables consist of melons, squash, lima beans, black-eyed peas, green cow peas, mustard greens, and turnips, for the most part.

SOURCE: Census of Agriculture, 1969, U.S. Bureau of the Census, Volume 1, Area Reports, part 29, sections 1 and 2.

In common with the rest of the United States, Suwannee County is undergoing changes in agriculture. Farms are becoming fewer in number and larger in size, are employing far less workers, and are becoming far more commercial than ever before. Table T-12, Historical Changes in Farm Size and Farm Employment for Suwannee County, presents the changes from the year 1930 through 1970. In the past ten years there has been a decrease in the number of farms and in the number of total farm acreage. However, the existing farms are about 6% larger on the average than they were ten years earlier. The existing farms employ 47% fewer workers. Table T-12 indicates that in 1970 there was an average of 252 acres per worker. This figure, however, requires a closer analysis as Suwannee County is heavily involved in the raising of poultry, hogs, and tobacco. These are more labor-intensive activities than, for example, the raising of corn. Therefore, the best use of a value of this nature is simply as a comparison with previous years.

TABLE T-12 HISTORICAL CHANGES IN FARM SIZE AND FARM EMPLOYMENT FOR SUWANNEE COUNTY

YEAR <sup>1</sup>	FARMS	TOTAL ACREAGE	MEAN SIZE	NUMBER OF WORKERS	ACRES PER WORKER	PERCENT TENANCY
1930	1,774	212,637	126	3,374	63	42
1940	1,877	254,906	136	3,073	83	32
1950	2,009	320,084	159	2,949	109	21
1960	1,247	297,022	238	1,520	195	8
1964	1,155	284,555	246	----- <sup>2</sup>	--- <sup>2</sup>	5.6
1970	1,091	275,160	252	971	252	4.6

<sup>1</sup>There is a one-year discrepancy between number of farms and number of workers because of the published dates of the two sources of data.

<sup>2</sup>Data not available

SOURCES: Censuses of Agriculture, 1930 through 1969, Bureau of the Census  
Censuses of Population, 1930 through 1970, U.S. Bureau of the Census.

Tenancy in Suwannee County is at an all time low, being in 1970 only 4.6%. This is probably an encouraging development for the future of farming in this area. It has often been said that tenancy and soil erosion go hand in hand, the theory being that a man who owns his land is more likely to follow improved farming practices than a farmer who must pay rent or provide a share of the crop to the owner of the land.

The economic class description of farms in Suwannee County is also changing. Farms are classified from 1 - 6 and also as part-time or part-retirement farms depending upon the value of sales. Normally only the first five classes, that is Economic Class 1 - 5, are considered as commercial farms. Class 6, part-time and part-retirement farms, are considered more as non-commercial, family farms. As can be seen from the following table, Economic Classes 1, 2, and 3 have increased from 1959 - 1969; while, without exception, the rest of the farms--the smaller sized farms--have decreased in number. This is directly attributed to two factors: The first factor is that farms are becoming larger; and the second reason is that because of the inflationary prices for the past ten years some of these farms have crossed the line from one class to the next larger class.

TABLE T-13 CHANGES IN NUMBER OF FARMS BY ECONOMIC CLASS

ECONOMIC CLASS	DESCRIPTION	1959	1964	1969
1	Sales of \$40,000 and more	13	39	92
2	Sales of \$20,000 to \$39,999	58	68	86
3	Sales of \$10,000 to \$19,999	118	168	132
4	Sales of \$5,000 to \$9,999	267	223	186
5	Sales of \$2,500 to \$4,999	275	194	164
6	Sales of \$50 to \$2,499, operator less than age sixty-five, worked off-farm 100 days or less	145	162	98
part-time	Sales of \$50 to \$2,499, operator less than age sixty-five, worked off-farm more than 100 days	246	157	214
part-retirement	Sales of \$50 to \$2,499, operator age sixty-five or older	156	142	116
institutional			2	3

SOURCE: Data for 1959: Comprehensive Plan for Live Oak, 1963, Vol. 1.  
Data for 1964 and 1969: Census of Agriculture, 1969, U.S. Bureau of the Census.

It is more interesting to look at the profitability of farms. As a group, the commercial farms are showing a mean gross profit over expenses of 12%. This is not a very large profit margin because there are other costs, either real or implied, between the gross profit and the net profit. Much more serious, however, is that there are 428 Class 6 part-time and part-retirement farms, or 40% of the total farms, which as a group are not showing a profit and are showing a sizable percentage of loss. Again, these percentages of loss may be misleading in that the small farm is producing food and perhaps fuel in the form of firewood for the farms' owners and operators. After these benefits are applied against the loss, the loss would not be so great.

TABLE T-14 ECONOMICS OF FARM PRODUCTION BY CLASS OF FARM

<u>FARM CLASS</u>	<u>VALUE OF AGRICULTURAL PRODUCTS SOLD</u>	<u>FARM PRODUCTION EXPENSES</u>	<u>GROSS PROFIT OR LOSS</u>
All Farms	13,451,439	12,230,060	1,221,379
Classes 1 to 5	12,984,309	11,583,201	1,401,108
Class 6, PT & PR *	467,130	646,859	(179,729)

\*PT - Part-time PR - Part-retirement

ANALYSIS OF FARM PROFITABILITY BY CLASS

There are 660 class 1 through 5 farms.

Their income was \$12,984,309  
 Their expenses were \$11,583,201  
 Their gross profit was \$1,401,108  
 This is a mean gross profit over expense of 12%

There are 428 class 6, part-time farms and part-retirement farms.

Their income from sales was \$467,130  
 Their expenses were \$646,859  
 This is a loss of \$179,729  
 Their losses collectively were 38% on sales or  
 28% on costs of production

SOURCE: Census of Agriculture, 1969, U.S. Bureau of the Census, Volume 1, Area Reports, Part 29, Sections 1 and 2.

## IDENTIFIABLE REPORTED INCOME

Most of the income for the population can be identified, but there is always some income which is not readily apparent. This unidentifiable income consists of such things as the groceries a person raises in his own garden, unreported cash payments, the part-time worker who works a day periodically and for various reasons may be paid in cash (an income which may be unreported). This portion of income, i.e. that which cannot be readily indentified, is actually a very small portion of total income and is therefore not herein considered.

In 1969, the income of Live Oak's population was greater than \$18,000,000. Table T-15, Type of Income and Totals, shows the derivation of these monetary values. The 1970 Census for Live Oak indicated that 1,449 families received income from wages and salaries. The mean income for these families is \$9,862. Therefore, a simple calculation would show the total wages and salaries for these people would be \$14,290,038.

TABLE T-15 TYPE OF INCOME AND TOTALS - 1969

<u>SOURCE OF INCOME</u>	<u>F A M I L I E S</u>		<u>I N C O M E</u>		
	<u>NUMBER</u>	<u>PERCENT</u>	<u>MEAN</u>	<u>TOTAL</u>	<u>PERCENT</u>
Wages and Salaries	1449	82	\$9,862	\$14,290,038	79
Non-farm, Self-employed	266	15	7,778	2,068,948	11.4
Farm, Self-employed	108	6	1,421	153,468	1
Social Security	436	25	1,396	608,656	3.5
Public Assistance and Welfare	160	9	859	137,440	0.8
Other Income	495	28	1,760	826,650	4.6

There are 1760 families in Live Oak. They receive a total of \$18,085,200. This would be a mean of \$10,275.68 if the income were divided evenly.

SOURCE: U.S. Government Bureau of the Census, 1970.

Other breakdowns are non-farm / self-employed, farm / self-employed (that is, farmers who live in Live Oak but actually farm outside the city), Social Security payments, public assistance and welfare, as well as a catch-all "other income." Of these various sources,

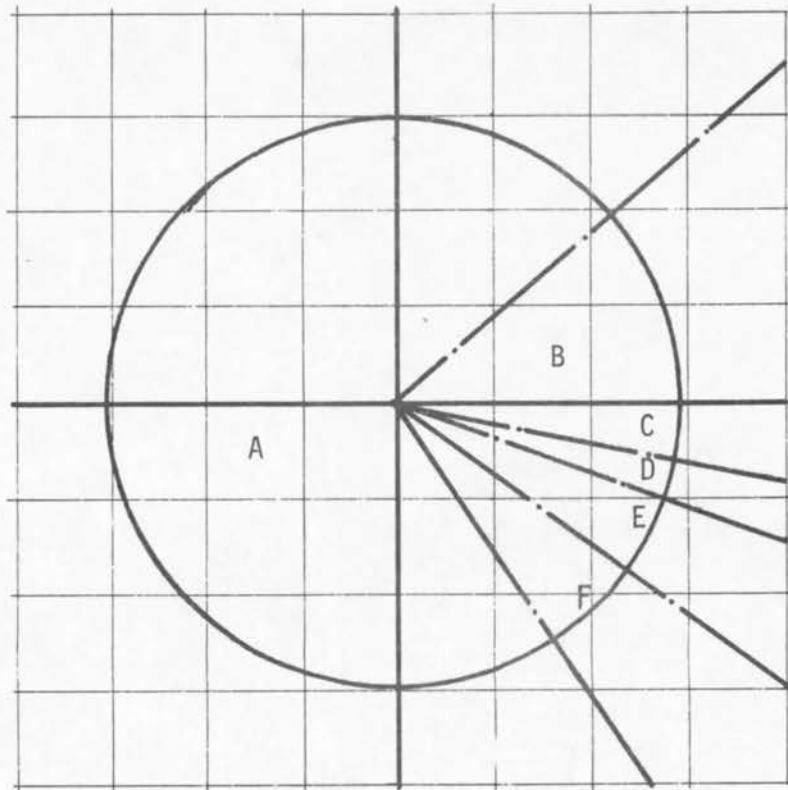
wage and salary income amounts to 79% of the total incomes. Figures such as these must be used with discretion because most families receive a mixture of income. Although they have a major income of wages and/or salary, these families probably have some money in the bank which may be paying interest; this would be an additional form of income. The general breakdown showing these various incomes has been plotted as a pie graph in Figure F-9.

TABLE T-16 TYPE OF INCOME BY PERCENT COMPARISON FOR FAMILIES

SOURCE OF INCOME	PERCENT OF FAMILIES RECEIVING THIS TYPE OF INCOME	MEAN INCOME	PERCENT OF TOTAL INCOME
<b>WAGES AND SALARIES</b>			
National	86.3	\$10,169	79.7
State	79.1	9,131	71.3
County	75.8	7,837	68.8
Live Oak	82.0	9,862	79.0
<b>NON-FARM, SELF EMPLOYED</b>			
National	10.7	8,182	7.9
State	11.0	7,724	8.4
County	12.6	6,041	10.6
Live Oak	15.0	7,778	11.4
<b>FARM, SELF-EMPLOYED</b>			
National	4.6	3,516	1.5
State	1.6	3,318	0.5
County	22.5	2,586	8.4
Live Oak	6.0	1,421	1.0
<b>SOCIAL SECURITY</b>			
National	19.7	1,626	2.9
State	27.9	1,735	4.8
County	25.5	1,428	5.1
Live Oak	25.0	1,396	3.5
<b>PUBLIC ASSISTANCE &amp; WELFARE</b>			
National	5.3	1,298	0.6
State	4.8	823	0.4
County	8.3	856	1.0
Live Oak	9.0	859	0.8
<b>OTHER INCOME</b>			
National	35.0	2,287	7.3
State	39.8	3,712	14.6
County	25.9	1,754	6.4
Live Oak	28.0	1,670	4.6

SOURCES: U.S. Bureau of the Census, 1970, Tables 94, 57, 124, and 118.

FIGURE F-9 WHERE THE MONEY COMES FROM - 1970



- A. Wages and Salaries
- B. Non-Farm Self-Employment
- C. Farm Self-Employed
- D. Public Assisted
- E. Social Security
- F. Other



## TYPE OF INCOME BY FAMILIES

There are 1,760 families in Live Oak. These families receive their economic sustenance from various sources. Eighty-two percent of the families, 1,449, receive wage and salary incomes. The mean income received by these families is \$9,862, which collectively amounts of 79% of the income for the residents of Live Oak.

Those families in which there are Social Security recipients compose the second largest group. Twenty-five percent of the families, 436, receive Social Security. The amount is not large, being only slightly more than 3% of the Live Oak income, but numerically this is an important group of people.

Monetarily, the second largest group is represented by those with a non-farm, self-employment income. Fifteen percent of the families receive 11% of the Live Oak income.

Nine percent of Live Oak's families, 160 families, receive public assistance payments or public welfare payments. This sum amounts to less than 1% of the monies received in Live Oak. Twenty-seven percent of the families, 482, in Live Oak have incomes which are rated at lower than poverty level.<sup>1</sup>

The dollar value is not the important point in this regard. Rather, one should note the number of families existing at poverty level because of implications for the community. Persons at the lower end of the income spectrum tend to receive a larger portion of the city services (compared to a proportionate amount of taxes paid), which must be paid for with monies which the city must obtain from some other source. These people do spend money and this money does help to keep the economy flowing, but they also receive a disproportionate share of the city's services.

<sup>1</sup> Poverty level is not a fixed dollar point because economic needs for a family are dependent upon many variables. The age of the recipient, whether he is a farm or a non-farm resident, and the number of children he has all have bearings on the economic necessities for a family. The amount of dollars used to determine poverty thresholds may vary from \$1,478 for a family with a female head 65 years old and living on a farm, to as much as \$6,116 for a non-farm family of seven or more persons. (These values were for 1969.) The poverty income level is revised annually to allow for changes in the cost of living as reflected in the consumer price index.

INCOME COMPARISON: LIVE OAK AND SUWANNEE COUNTY

Income data for Live Oak compared to similar income data for Suwannee County is presented in Table T-17 below.

TABLE T-17 INCOME COMPARISON BETWEEN LIVE OAK AND SUWANNEE COUNTY

Income Bracket	NUMBER OF FAMILIES		PERCENT OF FAMILIES		IMPLIED INCOME	
	In County	In Live Oak	In County	In Live Oak	For County	For Live Oak
\$ 500	283	83	71	29	\$ 100,000	\$ 41,500
1,500	343	162	53	47	271,500	243,000
2,500	410	164	60	40	615,000	410,000
3,500	370	134	64	36	826,000	469,000
4,500	333	113	66	34	990,000	508,500
5,500	309	131	58	42	979,000	720,000
6,500	285	135	53	47	975,000	877,500
7,500	306	160	48	52	1,095,000	1,200,000
8,500	245	99	60	40	1,241,000	841,500
9,500	196	90	54	46	1,007,000	855,000
11,000	345	167	52	48	1,958,000	1,837,000
13,000	269	135	50	50	1,742,000	1,755,000
20,000	255	143	44	56	2,240,000	2,860,000
37,500	67	24	64	36	1,612,500	660,000
50,000+	20	20	0	100	0	1,000,000

NOTES: The income bracket is the mean of the census table brackets.

Implied income is a mathematical computation and may not be exactly the same as the real income in these brackets.

County mean income is \$8178 per family for 4,036 families for a total of \$33,006,408 for 1969.

Live Oak mean income is \$10,287 per family for 1,760 families for a total of \$18,105,120 for 1969.

SOURCE: United States Census for Florida, 1970, tables 118 and 124.

It is interesting to note several factors about this data: Live Oak has 43% of the county's families but 54% of the county's income. Live Oak has a larger number of families receiving greater income than does the county. For example, Live Oak has 29% of the families making less than \$500, whereas the county has 71% of the families in this bracket. Live Oak has 51% of the families which make in excess of \$10,000 each and has 100% of the families making more than \$50,000 per annum.

## WORK FORCE PARTICIPATION

In 1970, Live Oak had a population of 6,830 people. Sixty-seven percent of this population was age sixteen or over; that is, 4,613 were of the age at which they could be considered as potential members of the work force. However, not all are members of the labor force for various reasons: perhaps they are attending school, perhaps they are at the age in which they have retired, perhaps they have financial means sufficiently great to enable them not to be members of the work force, perhaps they are unemployable because of a handicap, or perhaps their spouse or the family unit of which they are a member has sufficient income to enable them not to work. There are many more reasons why some adults are not members of the work force.

The labor force is normally considered to include those people who are working or those who are actively seeking work if they are not employed at the time. Part of the definition of an unemployed person is that this person is willing to work and is seeking work. Of the potential labor force, then, we find that only 2,762 people are members of the actual work force. This is 60% of the total potential labor force, or about 40% of the total population, as can be shown in Table T-18 below.

TABLE T-18 LIVE OAK EMPLOYMENT STATUS

POPULATION	M A L E		F E M A L E		T O T A L	
	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT
Total	3202	46.8	3628	53.2	6830	----
16 and Over	2086	65.1	2527	70.0	4613	67.5
Age 16	1577	75.6	1185	46.9	2762	40.4
In Labor Force	1526	----	1168	----	2694	39.4
Employed	51	----	17	1.4	68	----
Unemployed	----	3.2	----	1.4	----	2.46
% Unemployed	509	----	1342	----	1851	27.1
Not in Labor Force	283	----	919	----	1202	17.6
Under 65-Not in Labor Force	226	----	423	----	649	9.5
Over 65-Not in Labor Force	9	----	10	----	19	----
Age 14 to 16 in Labor Force						

SOURCE: Table 117, General Social and Economic Characteristics, Census of Population, 1970, U.S. Bureau of the Census.

In today's American society, children less than 16 years of age are not normally considered as part of the potential labor force. To the previous totals, we should add in the case of Live Oak, another nineteen members of society as part of the work force. There were, in 1970, nine boys and ten girls between the ages of 14 and 16 who were members of the labor force.

#### CHARACTERISTICS OF THE WORK FORCE BY SEX

Table T-19, Characteristics of the Live Oak Work Force by Sex, illustrates the trends of employment participation in Live Oak. Although values for 1950, 1960 and 1970 have been entered on the Table, these tables are not directly comparable numerically because different guidelines were in effect for the different years. During the 1950 and 1960 Census, members of the population 14 and over were considered as potential members of the work force. However, in 1970 only members of the population 16 and over were considered potential members of the work force. This in itself would not create any serious problems because only nine boys and ten girls were found within this age group to be members of the work force in 1970. Moreover, the 1950 values are not numerically comparable with those of 1960 and 1970 because in that first decade Live Oak annexed territory containing the equivalent of 50% of the population.

TABLE T-19 CHARACTERISTICS OF THE LIVE OAK WORK FORCE BY SEX

	1 9 5 0		1 9 6 0		1 9 7 0	
	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE
16 and Over	1349 <sup>1</sup>	1571 <sup>1</sup>	2113 <sup>1</sup>	2354 <sup>1</sup>	2086 <sup>2</sup>	2527 <sup>2</sup>
Labor Force	1098	506	1574	857	1577	1185
% in Labor Force	81.4	32.2	74.5	36.7	75.6	46.9
Employed	1057	484	1527	806	1526	1168
Unemployed	38	22	47	51	51	17
% Unemployed	3.5	4.5	3.1	6.3	3.3	1.4
Not in Labor Force	251	1065	539	1497	509	1342
TOTAL	1604		2431		2762	
Male/Female Ratio	68/32		68/35		57/43	
Growth			51%*		13.6%	

\* 1950 - 1960 Live Oak annexed fifty percent more people.

<sup>1</sup>(>14)

<sup>2</sup>(>16)

An examination of percentage trends reveals several interesting factors. First, there is a smaller percentage of potential male workers engaged in the work force. The percentage in 1950 was 81% and in 1970 slightly more than 75%. For female participation, the values have gone in the other direction. In 1950, only 32% of potential female workers were employed, whereas by 1970 47% were working. The unemployment rate among males has remained about the same, in the vicinity of 3% or slightly more. For women, the rate has dropped from 4.5% to 1.4%. This unemployment rate for women, being 1.4%, appears to be low but in reality is not because there is good reason to believe that a woman who becomes unemployed is apt to withdraw from the work force in a small community.

Another value of interest shown on Table T-19 is the male/female ratio as work force participants. The ratio has been increasing on the female side for the last twenty years. This can be attributed to several causes: First, there is an imbalance in the sex ratio in Live Oak. Secondly, more women are willing to enter the labor market. Thirdly, increasing costs have made it desirable for many families to increase the family income. Finally, the modern family has more needs and desires and more places to spend money than it had ten or twenty years ago. New appliances and new ways of doing things have created an increased drain on family finances.

#### CHARACTERISTICS OF THE WORK FORCE BY OCCUPATION

Table T-20 presents occupations by general groups of workers in Live Oak. These are compared with the United States' urban workers in the same occupation groups and, again, with those urban workers in small cities, i.e. cities the size of Live Oak. Several interesting points can be noted.

Those jobs which are considered to be the better-paying jobs such as professional, technical, and kindred do not have as many workers in Live Oak as the over-all urban average nor even as many as the small town average. Live Oak has only 60% as many persons in the professional-technical field as exist in the urban areas in general, and only 70% as many as the average for small cities. The figures for previous decades have not been included in this report, but Live Oak has not improved in this respect from 1960 - 1970.

At the other end of the employment spectrum, Live Oak has three to four times as many private household workers as other, similar-sized cities. Other factors can be noted: Live Oak has farmers, farm managers, and farm laborers to a greater extent than those entities used for comparison. This, of course, indicates that these owners and workers live in town but work farms out of town. Also, Live Oak does have more transport operatives; this is due to the mining and quarrying industry in the area.

TABLE T-20 COMPARISON OF OCCUPATIONAL POSITIONS WITHIN  
LIVE OAK AND THE UNITED STATES - 1970

OCCUPATION	L I V E	O A K		UNITED STATES ALL <sup>1</sup>	URBAN SMALL TOWN <sup>2</sup>	FLORIDA ALL
	NUMBER 1970	PERCENT 1960 1970				
Professional, Technical & Kindred	261	9.4	9.7	16.2	13.8	13.0
Managers (except farm)	255	12.9	9.5	8.7	9.0	8.9
Sales Workers	229	8.3	8.5	7.8	6.8	8.1
Clerical Workers	378	10.9	14.0	19.9	14.8	16.8
Craftsmen, Foremen, & Kindred	331	12.9	12.3	13.2	14.3	13.4
Operatives (except Transport)	267	----	9.9	12.6	15.8	7.9
		13.8 <sup>3</sup>	14.8			
Transport Equipment Operatives	132	----	4.9	3.6	3.9	3.4
Laborers (except farm)	176	8.3	6.5	4.2	5.0	4.8
Farmers & Farm Managers	38	0.9	1.4	0.2	0.6	0.6
Farm Laborers	109	3.7	4.0	0.4	1.4	2.3
Service Workers (except Household)	342	8.5	12.7	11.7	12.5	11.6
Private Household Workers	176	8.6	6.5	1.5	2.1	2.2
Other <sup>4</sup>	---	1.8	----	----	----	7.0

<sup>1</sup>Urban United States.

<sup>2</sup>Urban Places of 2,500 to 10,000.

<sup>3</sup>Were not separate in 1960.

<sup>4</sup>Not always listed.

SOURCE: Data computed and derived from United States Census Tables 1960 and 1970.

## CHARACTERISTICS OF THE WORK FORCE BY INDUSTRY

It is significant to compare a community with other communities and with the United States in order to determine the strengths and weaknesses of the community's economic condition. In considering such a comparison, three sets of values were computed to see how many jobs should be within each of the major fields of endeavor. Table T-21, Division of Jobs by Industry within the United States, presents these results.

TABLE T-21 DIVISION OF JOBS BY INDUSTRY WITHIN THE UNITED STATES

(Number of Jobs per Hundred)

	<u>ALL U.S.</u>	<u>URBAN U.S.</u>	<u>SMALL TOWN</u>	<u>LIVE OAK</u>
Construction	5.9	5.4	6.2	6.9
Manufacturing	25.9	25.3	25.6	14.8
Transportation	3.7	3.8	3.0	1.9
Communications	3.1	3.3	3.2	5.7
Trade	20.1	21.0	21.2	21.6
Financial	8.1	9.2	5.7	8.1
Professional	17.6	18.8	19.0	18.0
Public Admin.	5.5	5.9	5.0	4.2
Other	10.0	7.3	11.0	19.0

SOURCE: Derived and computed from United States Census data for 1970.

Of the three sets of values computed, the first shows the distribution of jobs for the total United States, disregarding rural or urban separations. The second set of values was determined for only the urban United States; the third set of values was determined for cities sized between 2,500 - 10,000. Surprisingly, these three sets of values are very similar despite the differences between urban and rural areas and between large and small communities. For example, construction activities within the United States vary from only 5.4 to 6.2 jobs per 100 workers. Manufacturing is within 1% of being the same in every group. Financial activities do show quite a variation, from 5.7 to 8.1 or a difference of 30% within the one grouping "financial."

The division classified as "other" includes agriculture, mining, and various other activities. This group has considerable variation between the urban United States and small town United States. There are 7.3 jobs per 100 for the urban United States, and there are 11 jobs per 100 for small town United States. This is a difference of about 33%. However, the difference between figures for Live Oak and the United States--urban and rural-- is only 9%. This need not be surprising when one considers that a small town has many of the attributes of a rural area. For example, the group "other" includes extractive workers--miners, farmers, etc.--and in small towns these people often do not live in the town but work in the nearby areas.

If Live Oak's population is compared with that of the United States, we find that Live Oak contains .00336% of the United States' population. Noting that in 1970 the United States had 76,553,599 jobs, we can take the index number just determined and see that Live Oak should have 2,572 jobs if Live Oak were to have simply its share of the U.S. jobs. Live Oak does have 2,694 workers; this is 122 more workers than Live Oak's "share." It is significant to determine where the surplus workers are located and whether they are in the high-paying or low-paying occupations. Table T-22, Division of Jobs by Industry within Live Oak, is an effort to present such information.

TABLE T-22 DIVISION OF JOBS BY INDUSTRY WITHIN LIVE OAK

	<u>PERCENT IN SMALL CITIES</u>	<u>LIVE OAK'S SHARE</u> (2562)	<u>LIVE OAK HAS</u> (2694)	<u>SUR- PLUS</u>	<u>DEFI- CIT</u>
Construction	6.2	159	185	+ 26	----
Manufacturing	25.6	656	398	----	-258
Transportation	3.0	77	50	----	- 27
Communications	3.2	82	153	+ 71	----
Trade	21.2	543	582	+ 39	----
Financial	5.7	146	218	+ 72	----
Professional	19.0	487	484	----	- 3
Public Admin.	5.0	128	113	----	- 15
Other	11.0	282	511	+229	----
TOTAL	<u>99.9*</u>	<u>2560*</u>	<u>2694</u>	<u>+437</u>	<u>-303</u>

\* Rounding



Table T-22 uses the percentages for small-town America rather than overall America, feeling the small town is perhaps slightly more comparable to Live Oak's situation. Using this table, Live Oak's share of the jobs would be about 2,562. Live Oak actually has 2,695, or a difference of 133. How are these jobs divided? Examining the next column, we find that Live Oak has 26 extra jobs in the field of construction, 71 extra jobs in communications, 39 extra jobs in the area of trade, 72 extra jobs in financial areas; and in the field "other" there is the largest surplus, an extra 229 jobs. The classification "Other" contains jobs which are normally considered non-urban in nature: those which are extractive such as mining, and those which require large amounts of land such as farming. This category also contains private household workers. Live Oak does have some extractive industry nearby and does have farmers and farm laborers living within the city, thus it is not surprising that there are surplus workers in this group.

There are several areas in which a deficiency of job opportunities exist. The most serious shortage is in the field of manufacturing. As a single generality, manufacturing normally would pay higher wages than those occupations listed under the category "Other". Therefore, although Live Oak does have an attractive employment picture as concerns total jobs, there could be an improvement in the wage structure.

Live Oak should make every effort to increase the number of job opportunities in manufacturing. This would help to keep the young males in the community. Higher wages would provide more sustenance for the economy and increase the economic multiplier. Basic jobs are most apt to be found within the manufacturing sector, thus increased manufacturing could favor the basic-nonbasic ratio.

#### MAJOR EMPLOYERS IN LIVE OAK

Live Oak's jobs are found in four areas: agricultural processing, extractive industries, service industries, and manufacturing. The following breakdown of employing industries has been developed from materials obtained from the Suwannee County Chamber of Commerce.

##### Agricultural Processing

Goldkist Poultry - poultry processing	560 Employees
MuMullen Food Bank - canned vegetables	50 Employees
Suwannee Packing Co. - meat processing	41 Employees
Badcock Corporation - warehousing	60 Employees

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### Extractive Industries

Occidental Chemical - mining	1040 Employees
Florida Rock Industries - lime rock	7 Employees
	<hr/>
t o t a l	1047

### Service (communications)

North Florida Telephone Co.	192 Employees
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### Manufacturing and Construction

Jayco Industries - shirts	176 Employees
Associated Forest Prod. - furniture	31 Employees
Suwannee Block and Building	28 Employees
	<hr/>
t o t a l	235

### BASIC - NONBASIC MULTIPLIER

It is always difficult to determine a basic-nonbasic economic multiplier for any community, and the smaller the size of the community the more difficult this problem becomes because of small variables which create large percentage changes.

Information sources for Live Oak have indicated that previous researchers have determined basic economic multipliers with ratios as low as 1:0.67 and 1:1.2. These are extremely low basic multipliers for any community within the United States. Because of its technical advancement, the United States has fairly high economic multipliers even in small towns. As estimated by Hans Blumenfeld, the United States itself has a basic-nonbasic ratio of about 1:20. (See Hans Blumenfeld, "The Economic Base of the Metropolis," Journal of the American Institute of Planners, Vol. 21, No. 4, 1955, p. 117, Fall.)

A single job providing "new" dollars will provide the base for more than one additional job. This must be qualified. If a single new job is obtained, there will be very little difference in the jobs available in town simply because the existing services will absorb the profits from the single new job. When dealing in the basic-nonbasic concept, one is talking in terms of the total jobs rather than an individual job.

Agriculture cannot be given an overly large position in the average small city in spite of its visual impact. There are two reasons for this assessment. First, the people in the small city are also consumers and do use the products of agriculture. Secondly, most of the agriculturalists of the country do not live in cities and many of their expenditures are within the county complex and mail order purchases. Urban population dollars leave the city when agricultural commodities are purchased for city consumption.

City basic-nonbasic ratios can vary greatly. To quote Raymond E. Murphy, "A suburb would be likely to have a basic-nonbasic ratio very different from that of a central city. It would, for example, tend to have a low nonbasic component, since most of the residents are employed elsewhere and bring money into the community, whereas much of the nonbasic activity may be furnished by the neighboring city." <sup>1</sup>

Another important consideration in dealing with small towns is that much of the economic activity is dependent upon such things as transfer payments--that is, pensions, Social Security, public assistance, and welfare--and these support the service activities within the town in the same manner, although not to the same degree, as do the basic jobs or activities. It is very difficult for a person in trade, normally a service activity, to determine what portion of the income for that activity is received from "new dollars" or "transfer payment" dollars. Table T-23 presents data indicating Live Oak's basic-nonbasic ratios. Notice the ratio is rather high: 1:4.8. It must be remembered that this multiplier ratio includes those who are retired and those who are no longer in the work force but have an income either through an accumulation of capital or present income such as Social Security and welfare.

It would be incorrect to say that one new job provides 4.8 additional jobs in service for Live Oak, but it would be correct to say that if things continue as they have in the past, if tourists come to Live Oak, if additional people retire in Live Oak, if Live Oak grows at the same rate it has been growing and attracting the same groups of people, basic industry can be used as a guide to say that one job in basic industry will indicate 4.8 additional jobs within the community.

<sup>1</sup>The Urban Economic Base and Related Concepts. The American City: An Urban Geography, McGraw-Hill Inc., 1974, p. 95.

TABLE T-23 DETERMINATION OF BASIC-NONBASIC RATIOS

INDUSTRY	TOTAL FOR <sup>1</sup> UNITED STATES	LIVE OAK <sup>2</sup> HAS	LIVE OAK'S <sup>2</sup> SHARE	BASIC ACTIVITY
Construction	4,572,235	185	154	31
Manufacturing	19,837,208	398	667	--
Transportation	2,828,389	50	95	--
Communications	2,357,712	153	79	74
Trade	15,372,880	582	517	65
Financial	6,233,274	218	210	8
Professional	13,511,204	484	454	30
Public Admin.	4,201,652	113	141	--
Other	7,639,045	511	257	254
		<u>2694</u>		<u>462</u>

$$\frac{\text{Live Oak Population 1970}}{\text{United States Population}} = \frac{6,830}{203,210,158} = .00003361$$

Live Oak Total Activity	2694
Live Oak Basic Activity	- 462
Live Oak Nonbasic Activity	<u>2232</u>

Basic-Nonbasic Ratio = 462:2232  
 Basic-Nonbasic Ratio = 1 : 4.8

<sup>1</sup>U.S. Census data, 1970.

<sup>2</sup>Table T-22, This Report.

## LAND USE PLAN

### INTRODUCTION

The Land Use Plan is the foundation element of the Comprehensive Plan. It establishes the basic pattern of how land is to be used and visually exemplifies the goals and objectives for the future growth of the community.

## METHODOLOGY

The Land Use Plan is based on an analysis of the natural and man-made systems as they impact and affect the suitability of land for specific types of development. The suitability of specific types of land uses influence the pattern of future growth and are herein referred to as form determinants. The synthesis of these natural and man-made form determinants creates a framework within which a specific pattern of land uses is then designed to best accomplish the stated goals and objectives for the community.

The methodology utilized to design the Land Use Plan, therefore, begins with the identification of the natural and man-made form determinants. These have already been discussed in the background studies. Through means of an overlay process, the synthesis of the form determinants is accomplished and a visual or graphic framework of land use criteria is created. The interrelationship of these land use criteria with socio/economic data and other specific goals and objectives provides the basis for the Land Use Plan.

The Plan actually emerges from an accumulation of land use criteria related to suitability, as determined by the existing system of man-made and natural components of the city and assigned priorities by the communities' goals and objectives.

## STATEMENT OF GOALS

*Done*  
The following Goal Statements were accepted as the general guide for the preparation of the Land Use Plan.

- I. To Encourage and Promote the Orderly Growth of the City.
- II. To Promote the Efficient and Wise Use of Land.
- III. To Create an Efficient Transportation Framework.
- IV. To Provide an Adequate and Convenient System of Community Facilities.
- V. To Preserve the Natural Assets and Instill a Sense of Pride in the City.
- VI. To Provide Adequate Recreation Facilities Convenient to all Residents.
- VII. To Promote the Development and Redevelopment of the Urban Core as the Focal Point and Heart of the City.

- VIII. To Promote Diversity of Development for Maximum Opportunity of Residential Choices and Economic Benefit of the Residents of Live Oak.
- IX. To Provide a System of Utilities that Meets the Needs of the Current Population and is Adequate for the Anticipated Future Growth.
- X. To Create an Overall City Design that Incorporates the Physical Assets and Aesthetic Character that Enhances the City as a Unique and Desirable Place to Live.

#### GOALS AND OBJECTIVES

In order to provide a more effective guide to the preparation of the Land Use Plan, specific objectives have been identified. These are listed below under categories of Plan Elements which have been noted as special areas of concern by citizens of Live Oak.

#### URBAN PATTERN

##### I. To Encourage and Promote the Orderly Growth of the City.

Objective: to create a logical and efficient framework for development (based on the existing natural and man-made systems) that illustrates the desirability of specific types of development for any given area within the city.

to create a pattern of development which recognizes the natural system and emphasizes and encourages compatible land uses and isolates those uses which are incompatible.

#### LAND USE

##### II. To Promote the Efficient and Wise Use of Land.

Objective: to use only that land needed and desirable for development and to conserve the rest for future needs.

to develop those lands serviced or capable of being served feasibly by utilities and to discourage leapfrogging of development into remote areas of the city.

to create viable residential neighborhoods which have a strong visual identity and are free from traffic and incompatible land use intrusion.

to permit commercial land uses in existing shopping facilities or on adjacent land where the need exists, in the downtown district or along major arterials where traffic can be safely accommodated and the existing aesthetic character of development is not negatively affected.

to encourage industrial growth in industrial parks and areas designated for industrial use due to the availability of utilities, rail and highway access and compatible land uses.

## CIRCULATION

### III. To Create an Efficient Transportation Framework.

Objective: to create a system of roadways designed for the safe and efficient movement of traffic through and within the city.

to create a hierarchy of circulation routes which separates and provides for regional, community, and local traffic needs.

to create a framework of roadways which minimize traffic intrusion into residential neighborhoods.

## PUBLIC FACILITIES

### IV. To Provide an Adequate and Convenient System of Community Facilities.

Objective: to improve or develop the public facilities necessary and feasible to support the present population and anticipated growth of the community.

to locate community facilities so they are convenient and accessible to population concentrations.

## ENVIRONMENT AND NATURAL RESOURCES

### V. To Preserve the Natural Assets and Instill a Sense of Pride In the City.

Objective: to preserve existing forested areas to the maximum extent feasible.



to create water retention areas as an alternative to the existing system of stormwater disposal wells.

to beautify entrances to the city through signage, landscape treatment, and aesthetic features.

#### RECREATION

VI. To Provide Adequate Recreation Facilities Convenient to all Residents.

Objective: to expand and improve existing recreation areas in order to maximize utilization of facilities.

to construct new recreation areas to make additional facilities more available and convenient to all residents.

to preserve small open spaces and create mini-parks throughout the city.

#### CENTRAL BUSINESS AREA

VII. To Promote the Development and Redevelopment of the Urban Core as the Focal Point and Heart of the City.

Objective: to create additional parking in the central business area.

to encourage the beautification and aesthetic treatment of the streets, storefronts, and alley.

to encourage the renovation and/or removal of vacant, deteriorating, and unsafe structures in the central business area.

#### HOUSING AND ECONOMY

VIII. To Promote Diversity of Development for Maximum Opportunity of Residential Choices and Economic Benefit of the Residents of Live Oak.

Objective: to plan for the expansion of the water, storm drainage, and sewerage systems.

to provide urban services to lands in close proximity to developed areas.

to establish water retention areas as an alternative to the existing system of drainage wells.

## URBAN DESIGN

- X. To Create an Overall City Design that Incorporates the Physical Assets and Aesthetic Character that Enhances the City as a Unique and Desirable Place to Live.

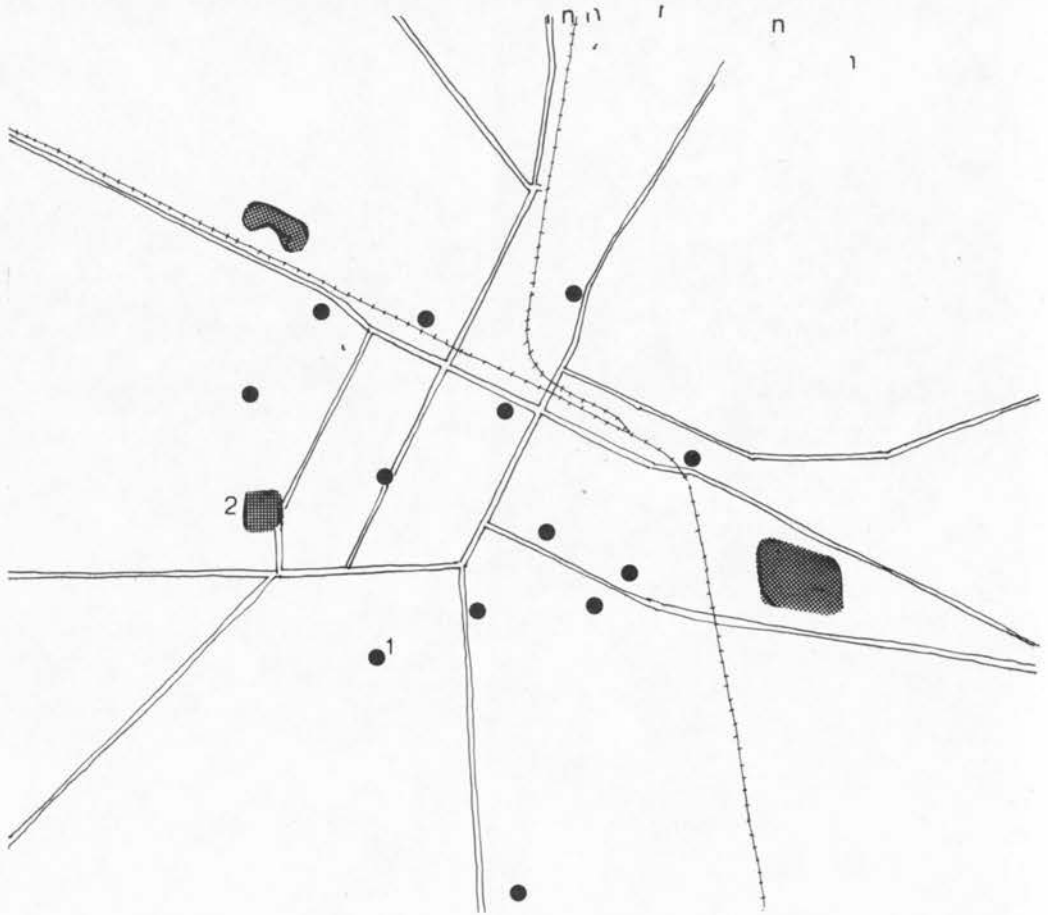
Objective: to improve and beautify the entrances to the city.  
to establish landmarks and areas of identification at points of major activity.  
to link the parks and open spaces, creating a continuous flow of open space and recreation areas.

## NATURAL FORM DETERMINANTS

The study of physiographic conditions (natural systems) did not reveal any major constraints to development. Certain conditions were found to exist, however, which could result in potential problems to the current and future development of Live Oak. First is the possible contamination of the fresh water supply due to the comingling of surface run-off water and ground water. Since disposal of stormwater run-off is through a system of injection wells, and, since the city's fresh water supply comes from subsurface water, it is possible that contamination could result. Since the normal direction of ground water flow is southwest, which is opposite from the location of the fresh water wells, contamination to the presently utilized wells has not resulted. Under extreme environmental conditions, however, this situation could change. As an alternative to this drainage system, surface water retention areas could be utilized. These areas could also serve as recreational and aesthetic open spaces throughout the city and be utilized as active mini-parks during dry periods.

The second significant natural factor is the rarity of large forested areas within the city. Since the city obtained its name from the existence of these natural resources, it was determined that a conscious effort should be undertaken, where feasible, to preserve these "urban forests" for future generations. Several forested areas which remain have also been designated as prone to flooding and from this standpoint are not particularly suitable for development. These "urban forests" might serve ideally as special-use park sites. The extent to which each site would be developed for active or passive recreation would be determined by the actual conditions of each site.

These natural form determinants are illustrated on the Hydrology Map M-3 and the Forested Area Map M-5. The synthesis of these factors is presented on Map M-8 below.



MAP M-8 NATURAL FORM DETERMINANTS

- 1 Significant Drainage Wells
- 2 Significant Forested Areas

## MAN-MADE FORM DETERMINANTS

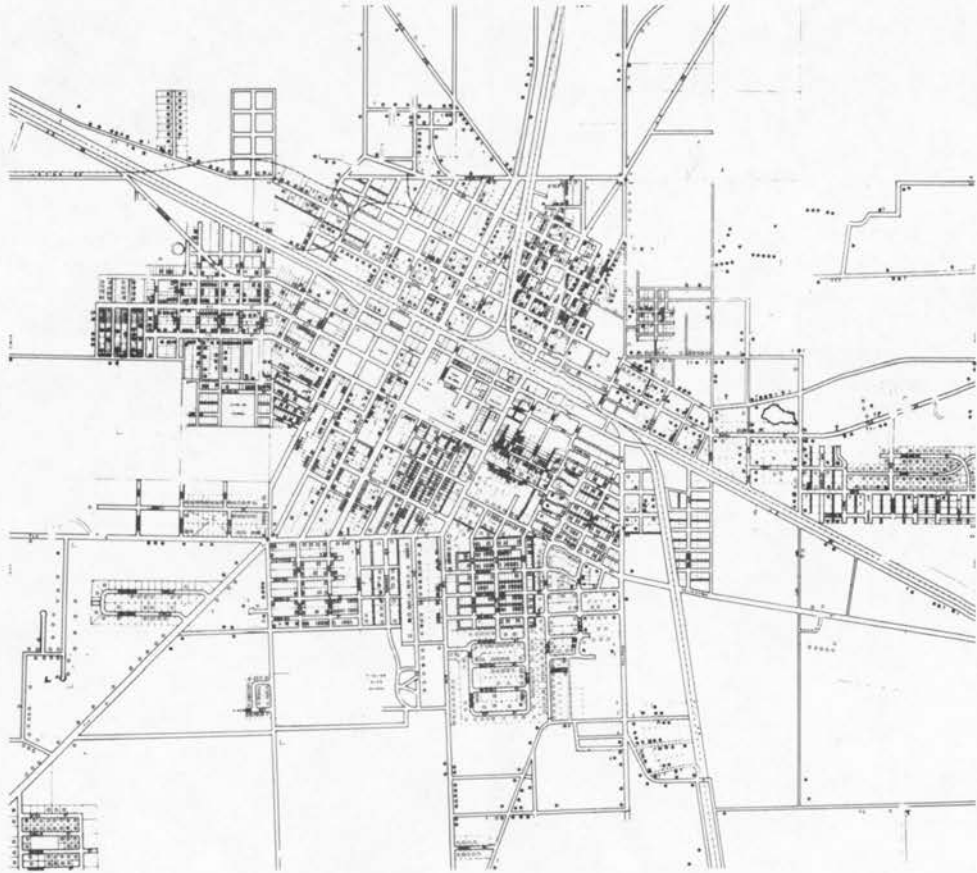
The man-made factors which impact the urban form that are deemed to be significant include the existing land use, structural conditions of houses and blighted neighborhoods, zoning pattern, water and sewer distribution service, railroads, and roads. These are further described below.

EXISTING LAND USE PATTERN - Due to the size, intensity of activity, and attraction to or detraction from other land use, certain developments are considered to be dominant in the urban pattern. These developments tend to generate traffic and/or activity which normally attracts similar land uses. This is often the case with commercial and industrial developments. These developments can have a negative influence on surrounding residential development; and they are therefore designated as mutually incompatible. The commercial land uses deemed significant are located in the downtown area, the new shopping plaza in the southwestern section of town on Pinewood Street, the commercial development at the intersection of 11th Street, Walkers Avenue and Highway 51, the commercial development at the intersection of Ohio Avenue and Winderweedle Road, and the commercial development along arterial streets.

The industrial developments deemed significant are located in the northwest sector of the city in the general area bounded by 2nd Street, King Street, and Irvin Avenue. These uses adjoin the SCL railroad track spur. Other isolated industrial and employment centers are located in the western and northern parts of town.

The major public uses of land are the recreation area at 2nd Avenue, the vacant school buildings in the downtown area, the hospital, the armory and agricultural coliseum, and the new Suwannee County Board of Public Education Complex on Pinewood Street in the southwestern sector of the city. These are illustrated on the Land Use Map M-7.

STRUCTURAL CONDITIONS AND BLIGHTED NEIGHBORHOODS - Blighted neighborhoods are defined as those in which the majority of residential structures are dilapidated. The Structural Conditions Map M-6 illustrates these conditions. Five residential areas are considered to be blighted neighborhoods. These are illustrated on Map M-6.

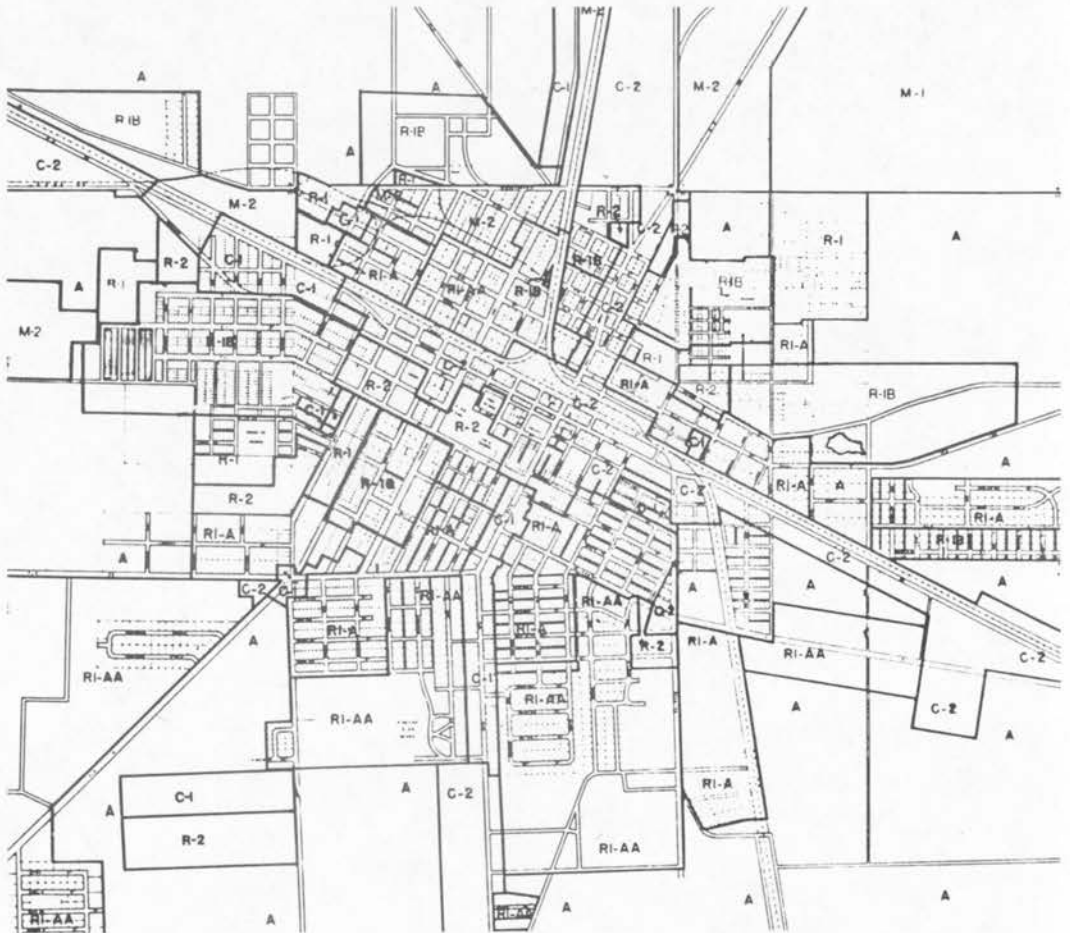


MAP M-6 STRUCTURAL CONDITIONS  
(SHOWING BLIGHTED NEIGHBORHOODS)

ZONING PATTERN - The existing zoning pattern strongly emphasizes the major arterial roadway system in the city. The commercial zones are centered in the downtown area at the intersection of U.S. 90 (Howard Avenue) and Ohio Street, and along the arterials. Multi-family residential zoning is generally close to the downtown area

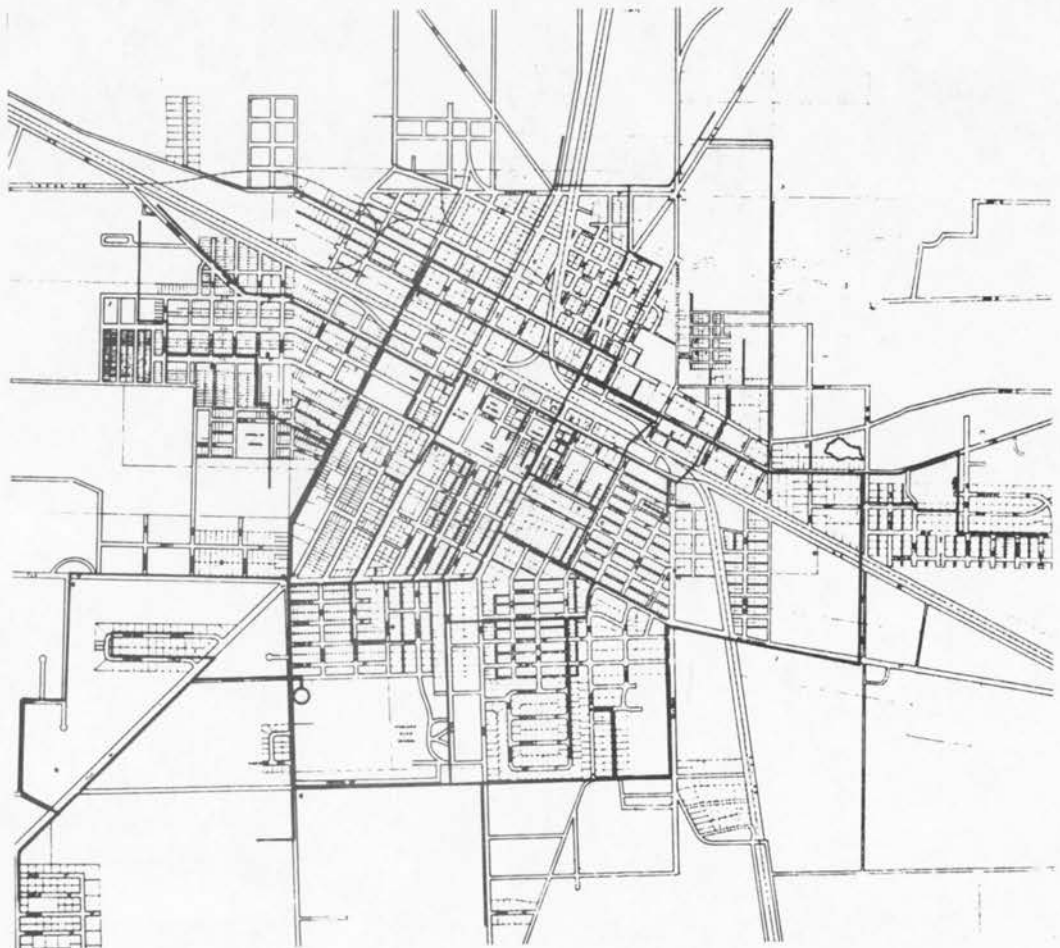
coinciding, in some cases, with blighted neighborhoods. The remaining lands radiating outward from the center of town are generally zoned for different classifications of single-family and agricultural use.

Exceptions to this general pattern are the large commercial zones along Howard Avenue at the eastern and western city limits and the large commercial zone for the new shopping plaza on Pinewood Street. The complete zoning map is illustrated on Map M-9 below.



MAP M-9 ZONING MAP

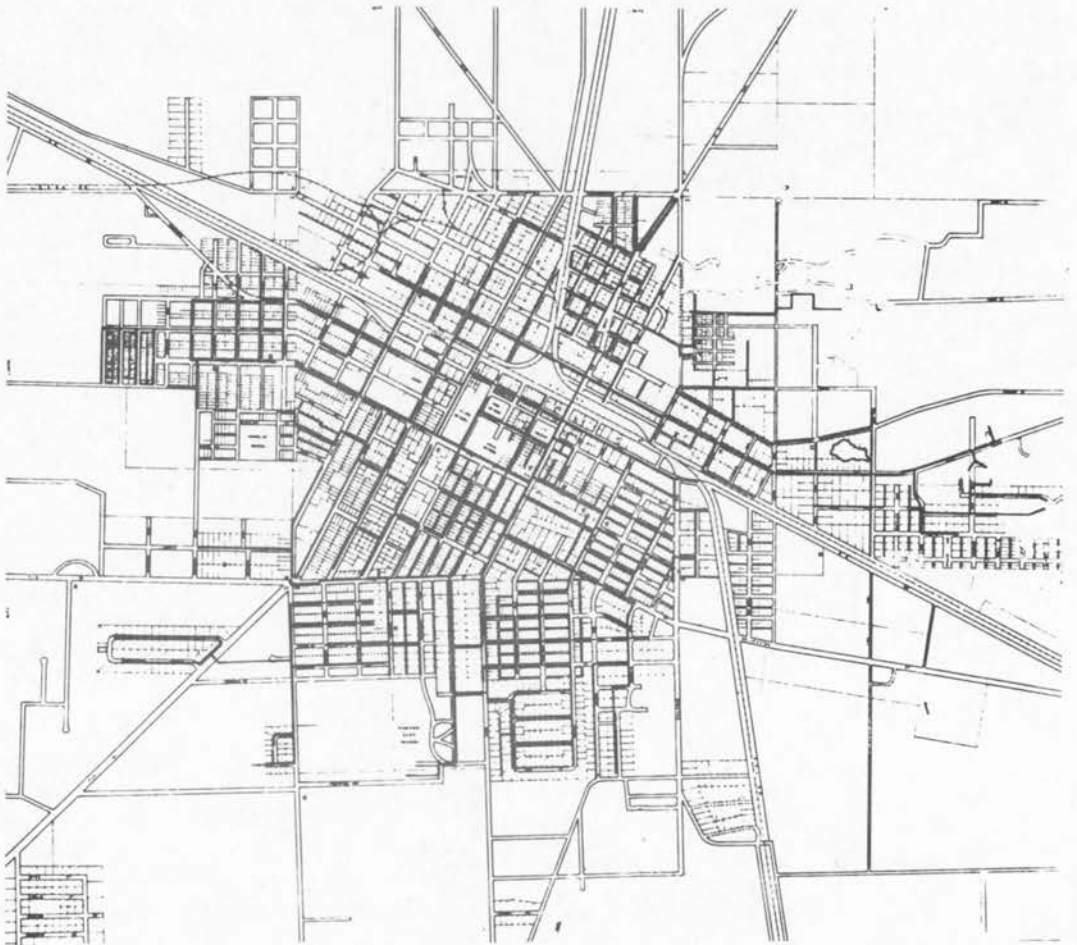
WATER SERVICE - The city is currently served by a municipally-owned loop system which provides adequate water service to most of the developed portions of the city. With the exception of remote areas in the extreme northeast and southeast sections of the city, all vacant land is within an area to which existing lines could feasibly be extended. This is illustrated on Map M-10 below. The current capacity of the water system will accommodate approximately 17,500.



MAP M-10 WATER SERVICE MAP

SEWER SERVICE - Sewer service is provided by a municipally-owned central disposal system. Generally speaking, the entire urbanized area is provided with sewer service and lines can be extended to include those areas immediately adjacent to the urbanized portion of the city. This is illustrated on Map M-11 below.

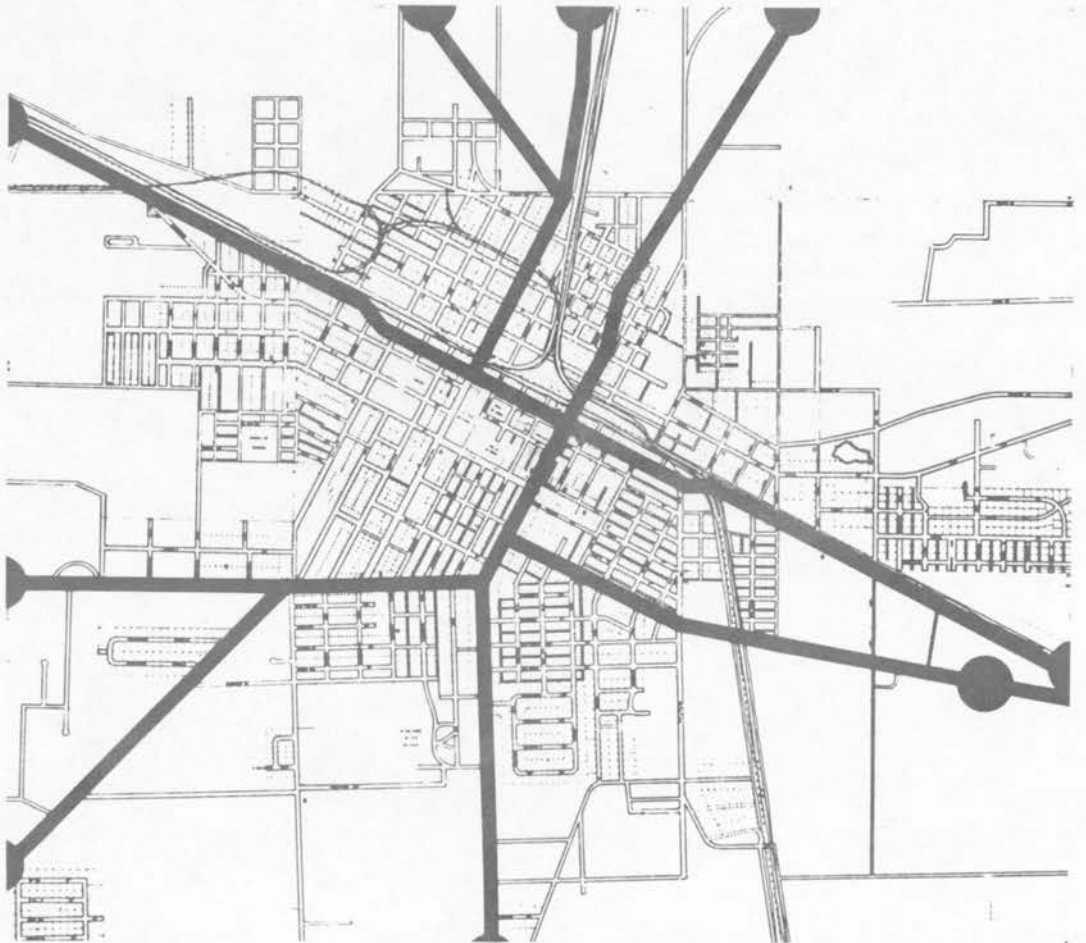
The sewer system has a current capacity to serve a population of approximately 7,500.



MAP M-11 SEWER SERVICE MAP



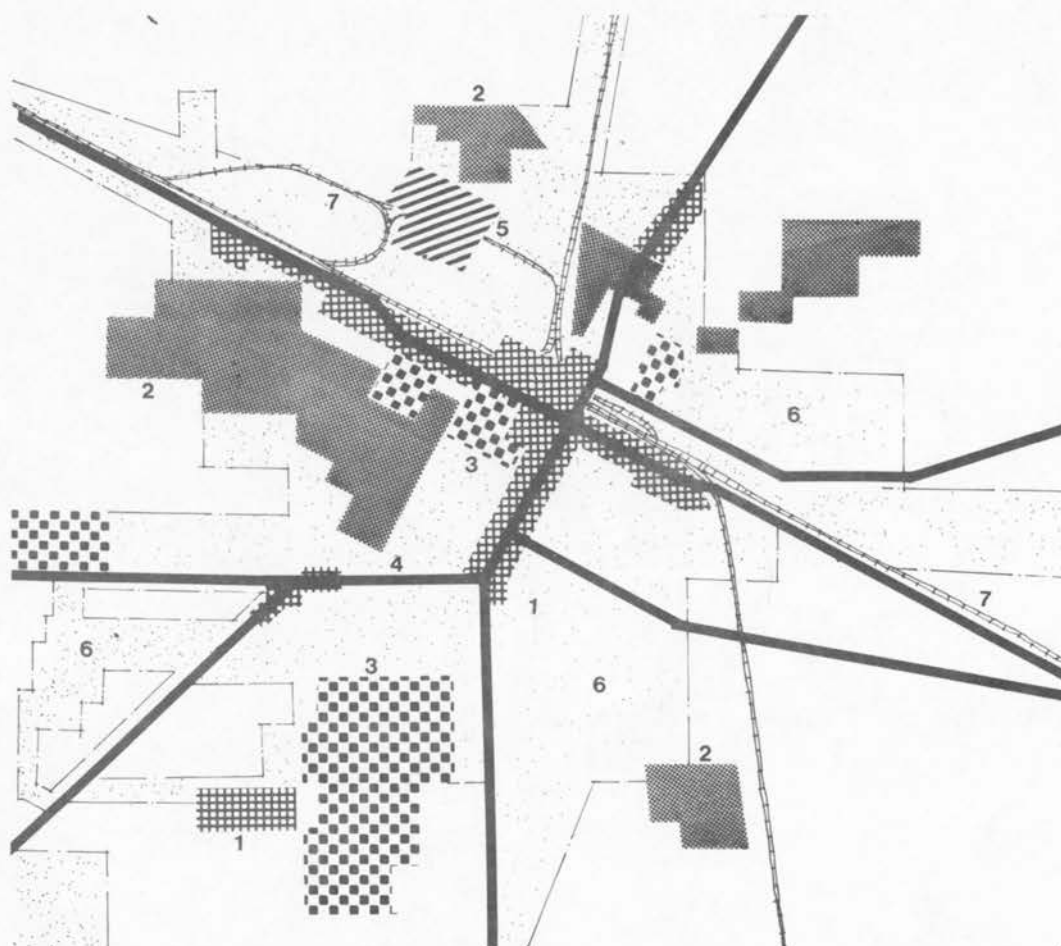
TRAFFIC PATTERN - No traffic counts were available for streets within the city limits. However, average daily traffic counts, available for the state highways at the point that they enter the city limits, provide an accurate measure of external traffic influences. If it is assumed that some of the people outside the county work in the city and that some people in the city work outside of the city and/or county, then the traffic through the city is a reasonable indicator of the relative traffic volume on the local streets. Changes in the traffic volume indicate trends of the traffic pattern. These are presented in detail in the Circulation Plan, and summarized on Map M-12 below.



MAP M-12 ARTERIAL STREETS

RAILROAD - The railroad, due to its barrier effect, divides the city into quadrants. Moreover, it serves as a barrier to the downtown area, forming its northern boundary; and it further isolates the southeastern portion of the city. The location of the railroad has attracted industrial and warehouse activity to the northeast section of the city relatively close to the downtown area. This has been a factor in the deterioration of the residential neighborhoods on the perimeter of this district. Since it is expensive to provide additional railroad crossings, it is likely that the railroad will continue to have a similar barrier effect on the emerging urban pattern of the city.

The synthesis of the man-made form determinants is illustrated on Map M-13 below.



MAP M-13 MAN-MADE FORM DETERMINANTS

- |                          |                    |
|--------------------------|--------------------|
| 1 Major Commercial Areas | 5 Industrial Areas |
| 2 Blighted Neighborhoods | 6 Urbanized Area   |
| 3 Public Lands           | 7 Railroad         |
| 4 Arterial               |                    |

## PRELIMINARY LAND USE PLAN

In a rapidly growing community, land use and circulation needs can be projected in meaningful terms and the Land Use Plan can be designed to provide the physical framework within which future development can take place. In Live Oak, where population growth is not anticipated to increase rapidly, and land use and circulation needs are less quantifiable, the Land Use Plan is more logically a framework of land use suitabilities that guides public and private development decisions. The plan, rather than projecting future land use needs for a specific point in time, is a visual framework, indicating where it is desirable for different types of development to take place in order for the community to grow in a logical manner towards the accomplishment of stated goals. This plan is described below and illustrated on Map M-14. Special attention is directed to two Land Use categories described below.

Residential - Residential uses are herein classified as either single-family or multi-family, depending on the density per acre of land. Single-family is considered to be five units per acre and less with detached dwellings constructed on individual lots. Multi-family use exceeds this density and includes structures which contain more than one dwelling per structure or lot.

Special Use - This category of land use is a special planning designation applied to lands that, because of unusual conditions, do not lend themselves to the above descriptions. These are lands which are non-conforming to the most desirable use but already extensively developed and cannot be removed or greatly changed. These lands may be suitable to a certain use, but due to existing land use conditions cannot be so designated. It is a transition zone which requires special examination of each condition and may therefore include one or more of the above use categories.

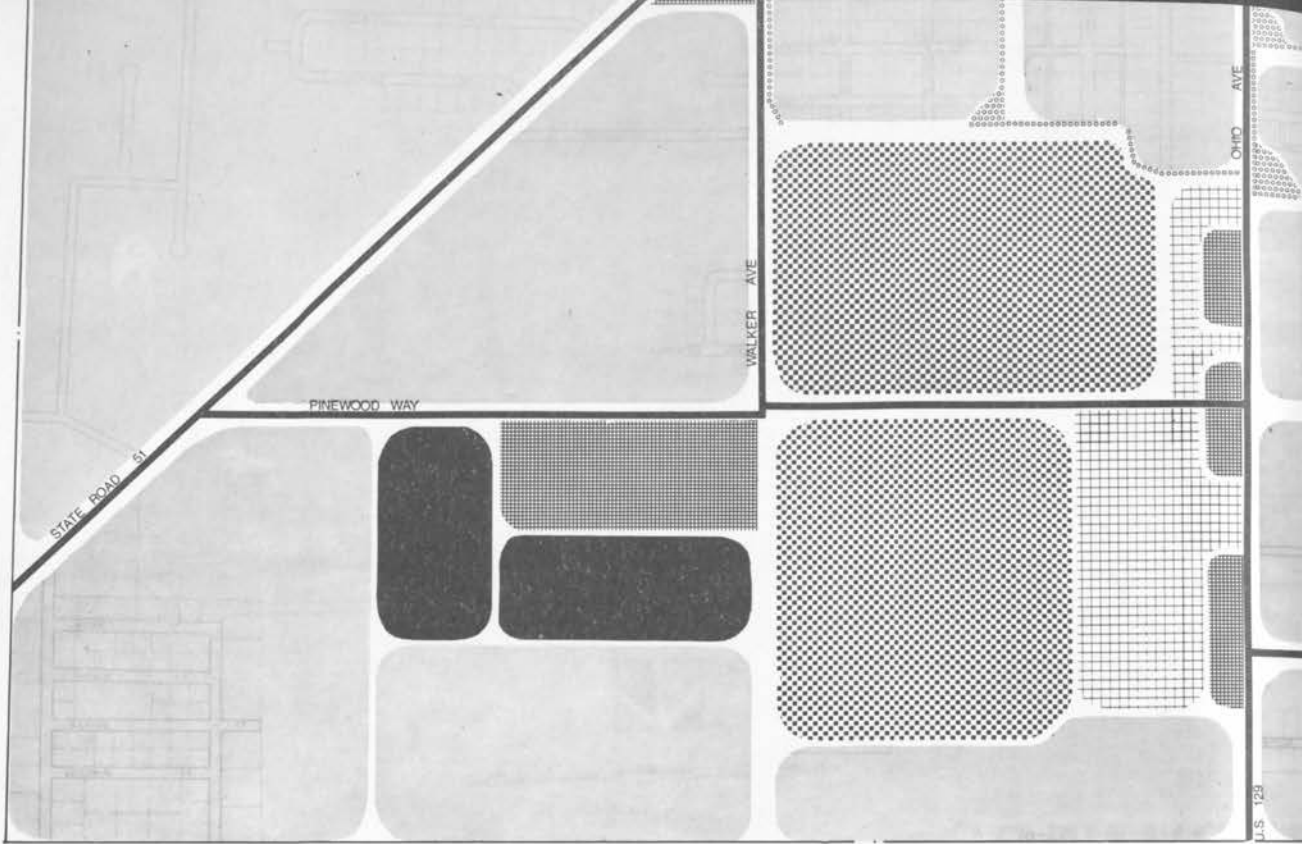




# ENSIVE PLAN

- RESIDENTIAL - Single Family
- RESIDENTIAL - Multiple Family
- COMMERCIAL
- INDUSTRIAL
- PUBLIC USE
- RECREATION & OPEN SPACE
- UNDESIRABLE USE





# LIVE OAK COMPRE

Prepared by The Office of Mark Gluckman under contract with the State of Florida Department of Community Affairs. The preparation of this map was financially aided through a federal grant from the Department of Housing and Urban Development, under the Comprehensive Planning and Management Assistance Program authorized by Section 701 of the Housing Act of 1954, as amended.





URBAN PATTERN - The overall pattern of development is proposed to be a centralized urban form concept with the downtown business section as the focal point of activity. Development radiates outward from the intersection of Ohio Avenue and Howard Street, with higher intensities of land uses following, and occurring along, the major arterials. Growth is proposed to be desirable in all quadrants as summarized below:

- A. Northeast - limited residential development is proposed for vacant land currently served by the water and sewer system. Commercial development is proposed along Ohio Avenue extending northeast toward I-10.
- B. Northwest - limited residential development is proposed north of the SCL Railroad track adjacent to existing residential property in the western portion of the quadrant. Industrial growth is proposed in areas adjacent to the existing industrial development and along the SCL Railroad tracks, extending north toward I-10.
- C. Southwest - residential development, including multi-family, is proposed for vacant land adjacent to the shopping plaza on Pinewood Way. A new, special-purpose recreation site is proposed along Walker Avenue, adjacent to the existing Suwannee County Middle School.
- D. Southeast - limited residential and commercial development is proposed adjacent to and consistent with the existing pattern of land uses. A new multi-family, federally-assisted project located on East Howard Avenue has been announced and is planned for immediate construction.

More specific recommendations for land utilization are presented below:

Central Business Area - It is proposed that the vacant school buildings be studied for adaptive use potential. Recommendations might include a senior citizens' complex involving residential, recreational, commercial, health care, and other uses. New parking areas designed in conjunction with pedestrian activities (parks, shops, etc.) are proposed to become the focal point of this redevelopment.



Commercial - Land suitable for commercial development is proposed adjacent to existing shopping areas in the downtown sector and along major arterials. Suitable land for concentrations of business and shopping arterials outside of the downtown area are proposed at the existing shopping plaza on Pinewood Way, at the intersection of 11th Street, Walker Avenue and S.R. 51, the intersection of Winderweedle and Houston Street, and Winderweedle and S.R. 129.

Industrial - Land suitable for industrial uses is proposed in the northwest quadrant adjacent to existing industrial areas, and the corridor along the SCL Railroad tracks extending north and near the western city limits' line.

Park and Open Space - One new, special-purpose community park is proposed in the southwest sector on Walker Avenue. A system of mini-parks is proposed throughout the city which utilize storm-water retention basins or ponds as active and passive recreation areas. These are discussed in greater detail in the Community Facilities Element. A special recreation area is proposed for the downtown sector in conjunction with the adaptive use project.

Residential - Multi-family residential development is proposed adjacent to the downtown area, the new park in the southwest sector, and the existing park in the northeast sector of the city. Other multi-family development is deemed to be suitable as illustrated on the Land Use Plan. Single-family residential uses are proposed throughout the city as discussed above and illustrated on the Land Use Plan.

## CONCLUSIONS

The Land Use Plan for Live Oak establishes a distribution of land uses based on the existing pattern of development that minimizes the intrusion of incompatible uses, thereby supporting neighborhood preservation while encouraging planned commercial and industrial growth. The plan further strengthens the importance of the downtown sector as the heart of the city and introduces a new urban design potential.

## CIRCULATION PLAN

### INTRODUCTION

The Circulation Plan is the framework of streets, highways, and transit facilities that permits the movement of goods and people through and within the City of Live Oak. It is based upon the Land Use Plan and incorporates those vehicular and pedestrian needs established, or that can be reasonably anticipated to result, from the pattern of development proposed. These needs are examined and identified in the Plan described herein.

## METHODOLOGY

The Circulation Plan is designed to support the Land Use Plan. General traffic patterns are projected, and a system of roads and related facilities is designed to accommodate the circulation needs as assigned priorities by the specific goals and objectives of the community.

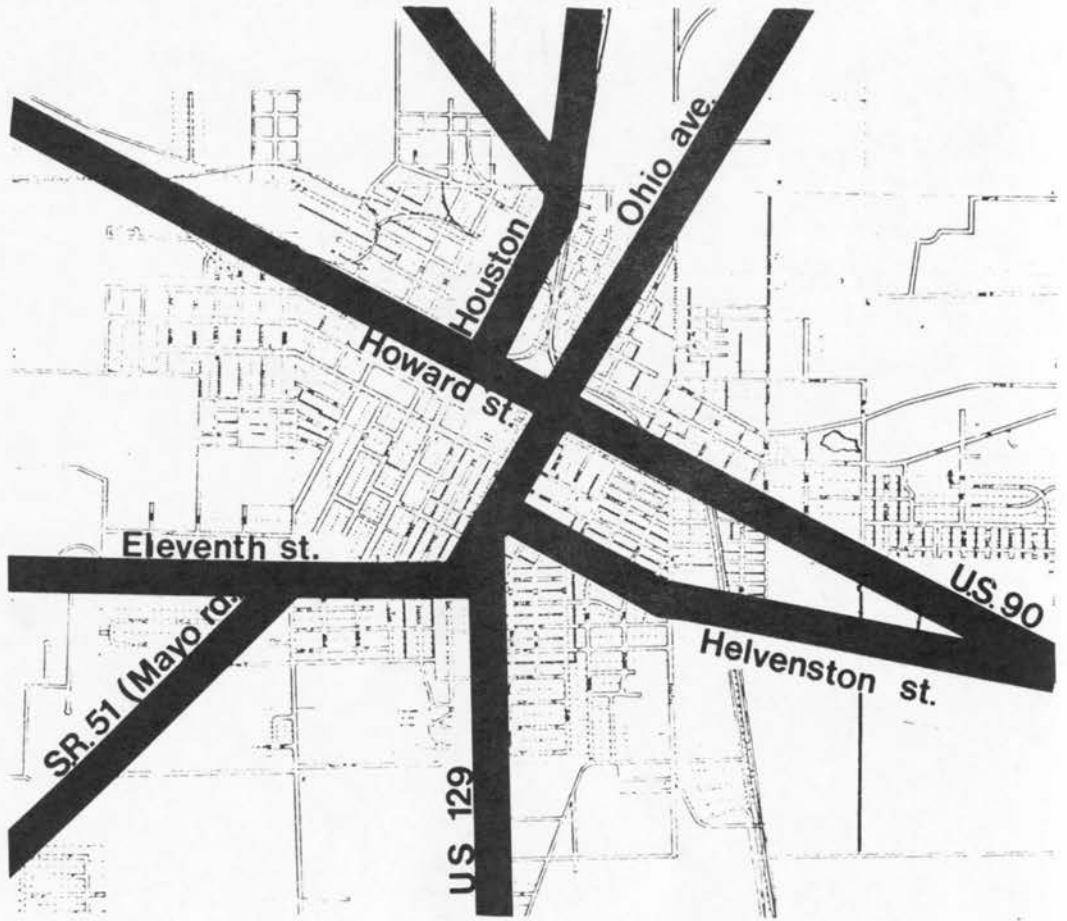
The methodology employed to design the Circulation Plan begins with an examination of existing facilities. Trends and/or specific circulation problems are then identified and analyzed, and the circulation framework is designed.

## EXISTING STREET PATTERN

Streets provide for the movement of cars, buses, trucks, etc., through the city and from point to point within the city. Streets also provide access to property and serve as a storage area for vehicles. The volume of traffic a specific street can accommodate and the purpose for which the street is designed determines its importance and designated function within the circulation framework. Major streets whose primary purpose is the movement of vehicles are designated as Arterial Streets. A distinction is made between major and minor arterials to indicate different levels of traffic volume. The existing major arterials in Live Oak are illustrated on Map M-12 on the following page.

Collector streets are designed to carry traffic from minor or neighborhood streets to the arterial streets. Collector streets also connect arterials and normally carry smaller traffic volumes than arterials. Their purpose is both to carry traffic and to provide access to property. Neighborhood streets provide access to property and normally carry low traffic volumes.

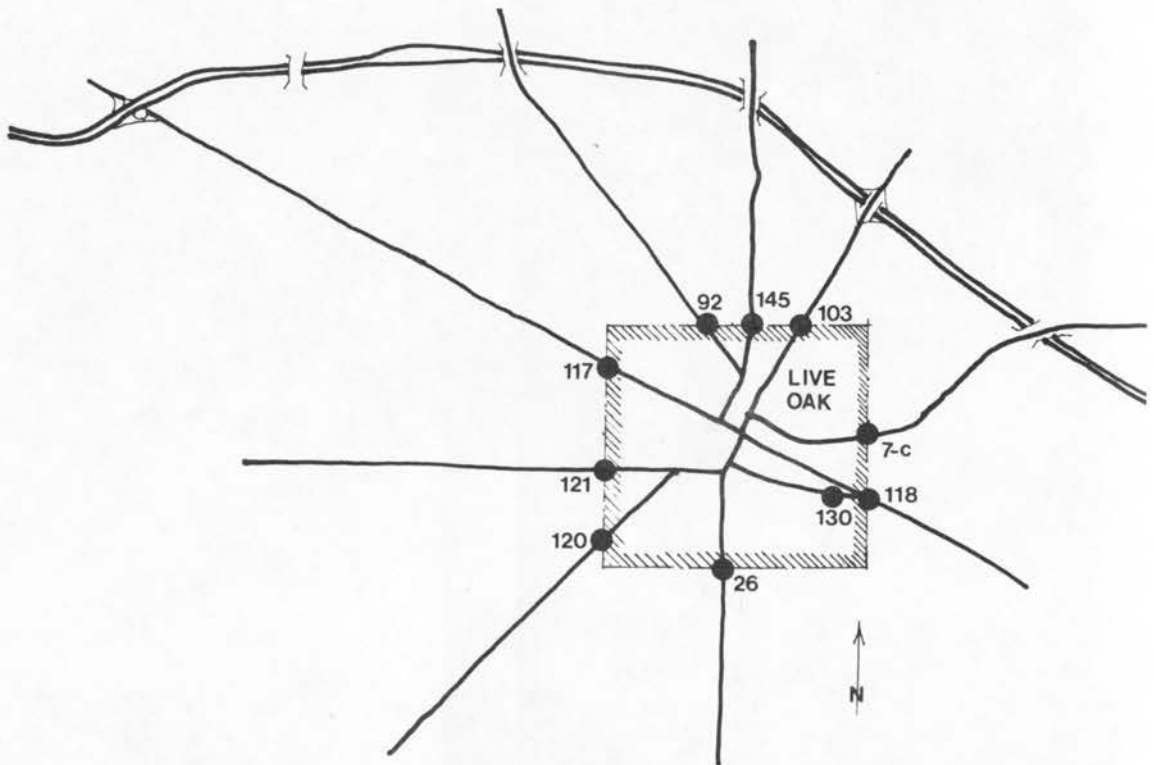
In Live Oak, certain streets are clearly neighborhood, others appear to be collectors, but the distinction between a collector and a neighborhood street is minor and difficult to detect. In these cases, no differentiation is identified.



MAP M-12 ARTERIAL STREETS MAP

## EXISTING TRAFFIC PATTERN

Traffic volume on specific streets identifies the Traffic Pattern in a community. Changes in the Average Daily Traffic (ADT) volume on any specific street identify growth trends which indicate where it might be necessary to improve existing streets and/or construct new streets. Table T-24 presents Traffic Volume Trends on the major arterials in Live Oak at points illustrated on Map M-15 below.



MAP M-15 TRAFFIC STATIONS ON MAJOR ARTERIALS AT CITY LIMITS

NOTE: Numbers identify traffic stations listed on page 88.

TABLE T-24 TRAFFIC VOLUME TRENDS ON MAJOR ARTERIALS AT CITY LIMITS

<u>STATION</u>	<u>LOCATION</u>	<u>1962</u>	<u>1971</u>	<u>1976</u>	<u>CHANGE</u>
7C	Duval at E c.l.	790	1425	1110	+ 320
26	Ohio at S c.l.	1395	1541	3380	+ 1985
92	SR 249 at N c.l.	350	539	745	+ 395
103	Ohio at N c.l.	2100	4481	3820	+ 1720
117	U.S. 90 at W. c.l.	3000	3139	4035	+ 1035
118	U.S. 90 at E c.l.	3460	4042	4150	+ 690
120	SR 51 at W c.l.	1325	2169	3555	+ 2230
121	SR 136 at W c.l.	480	1022	2085	+ 1605
130	Helvenston at E c.l.	475	680	925	+ 450
145	Houston at N c.l.	---	---	800	---

SOURCE: Department of Transportation, Lake City

The Traffic Volume Trends indicated on Table T-24 above clearly illustrate the direction of growth in the southwest and west sectors of Live Oak, as evidenced by the large increase in ADT on Ohio Avenue at the south city limits, SR 51 at the west city limits, and on SR 136 at the west city limits. This finding supports the trends identified in the Land Use Study.

The only other major increase in ADT volumes is on Ohio Avenue at the north city limits line. This is caused by the opening of I-10 in 1968 and its completion to Tallahassee; this represents more of a regional than local pattern modification.

Traffic volume increases on major arterials within city limits at stations illustrated on Map M-16 further define the existing traffic volume.

MAP M-16 INTERNAL TRAFFIC STATIONS ON ARTERIALS WITHIN CITY LIMITS

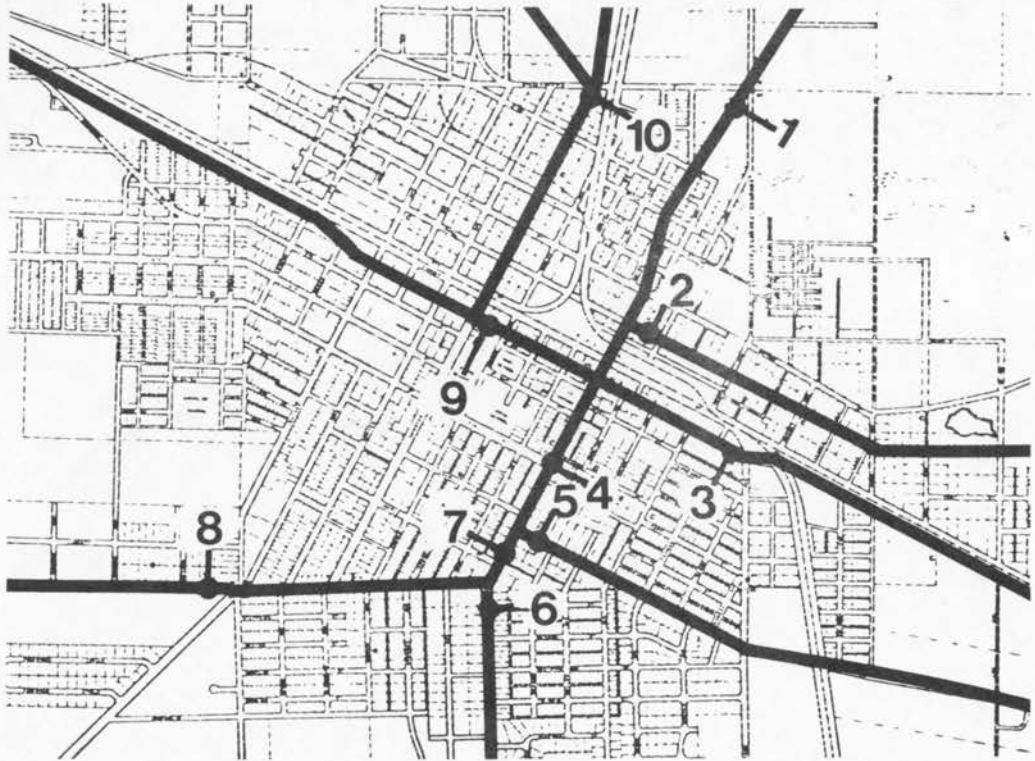


TABLE T-25 TRAFFIC VOLUME INCREASES ON MAJOR ARTERIALS WITHIN CITY LIMITS

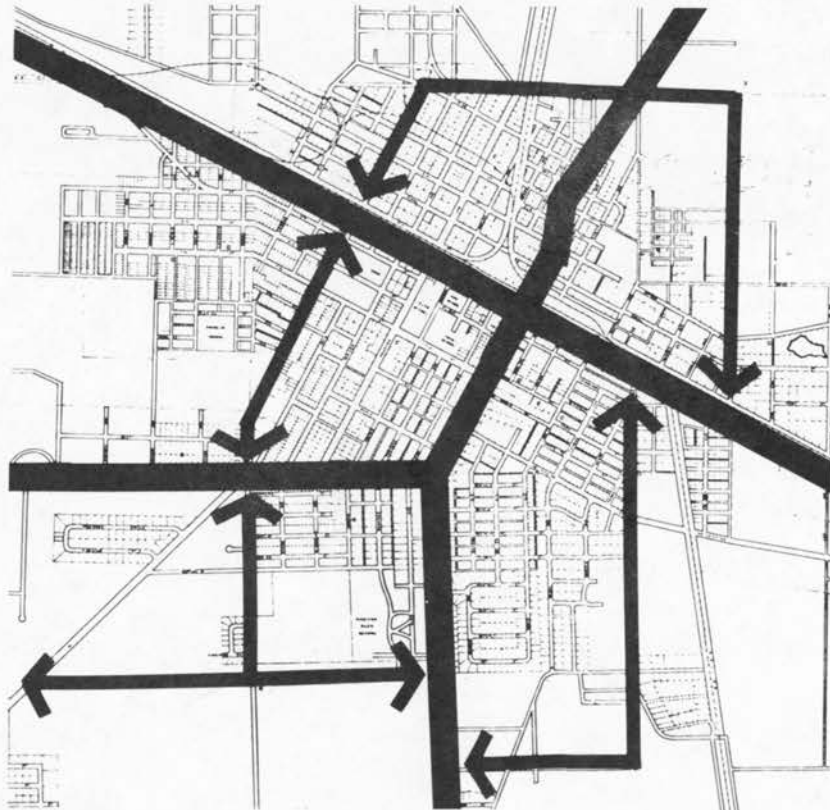
Station #	1962	1976	Change from 1962 - 1976
1	2235	5215	+ 2980
2	1385	3500	+ 2115
3	4050	8340	+ 4290
4	7145	9705	+ 2560
5	2290	3590	+ 1300
6	2600	6190	+ 3590
7	3575	10660	+ 7085
8	1475	3140	+ 1665
9	6850	7585	+ 735
10	1500	2950	+ 1450

SOURCE: Department of Transportation, Lake City

## PROJECTED STREET NEEDS

Traffic on West Eleventh Street, State Road 51, and Ohio Avenue south of Howard Street has increased during the past five years. This is a result of new development in the county south, southwest, and west of the city. The continuation of this pattern of development will result in a traffic demand into and through the downtown area to Interstate 10 and points north, as well as east to Lake City. That portion of the traffic which is regional should be separated from the local demand, thereby minimizing congestion and lowering the level of service on local streets. Alternative arterial routes can be provided by Walker Avenue and Railroad Avenue west and east, respectively, of the downtown sector. Evidence of this need can already be seen by the increased traffic on Walker Avenue.

In addition, traffic north and south to and from I-10 is projected to increase, causing a need for an alternate street around the central business sector connecting to U.S. 90 at points east and west of U.S. 129. This arterial pattern will also provide a truck by-pass facility from the Interstate to U.S. 90 at points east and west of downtown traffic congestion. These needs are illustrated conceptually on Map M-17, and described further in the preliminary Circulation Plan.



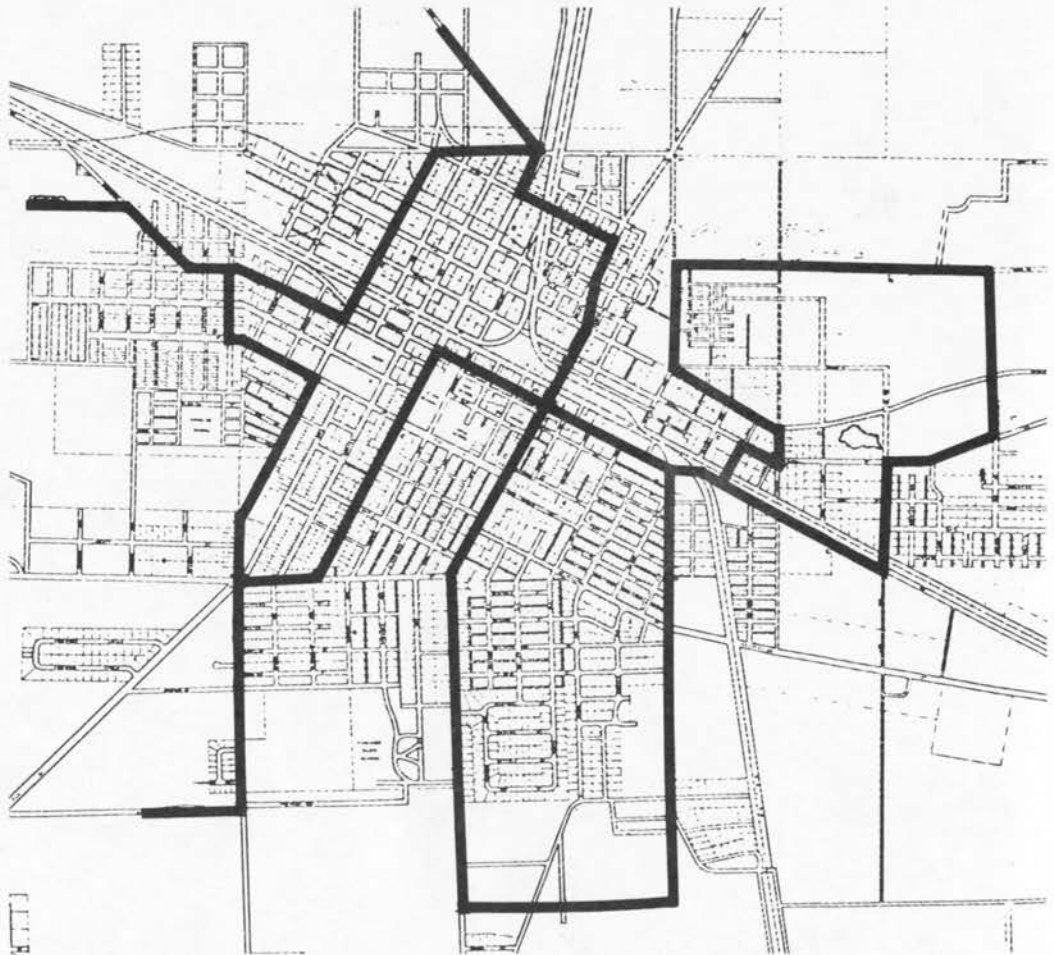
MAP M-17 PROJECTED STREET NEEDS



## PUBLIC TRANSPORTATION

The Suwannee Valley Transit Authority provides bus service within the City of Live Oak and to points within, and outside of, the county. Special transit programs are also provided for medical and rural services as described below.

LIVE OAK TRANSIT SERVICE - Bus service within the city limits of Live Oak is provided from 9:00 a.m. to 3:30 p.m., Monday through Friday. A single bus completes the route illustrated below on Map M-18 each hour, according to a designated schedule.



MAP M-18 PUBLIC TRANSIT ROUTE

WORK BUSES - A special bus is provided every day between Live Oak, Jasper and Lake City. This provides a form of commuter service to and from Live Oak for people from other communities who require public transportation to get to work in Live Oak.

The work bus completes a morning and evening route each day, five days a week.

✓ OTHER PUBLIC TRANSPORTATION - A health bus provides transportation for medical reasons from rural areas to Live Oak, Lake City, and Gainesville. A Paul Revere Route provides a special transit bus in the rural areas for personal needs and includes door-to-door service.

#### OTHER CIRCULATION FACTORS

Other transportation factors such as airports, railroads, commercial buses, and trucking are not herein considered a part of the Live Oak Circulation Plan because they are geographically outside of the planning area jurisdiction, and for this reason their impact only remotely affects the future growth of the city. These factors are more logically regional considerations relating directly to the Suwannee County Plan.

#### ✓ PRELIMINARY CIRCULATION PLAN

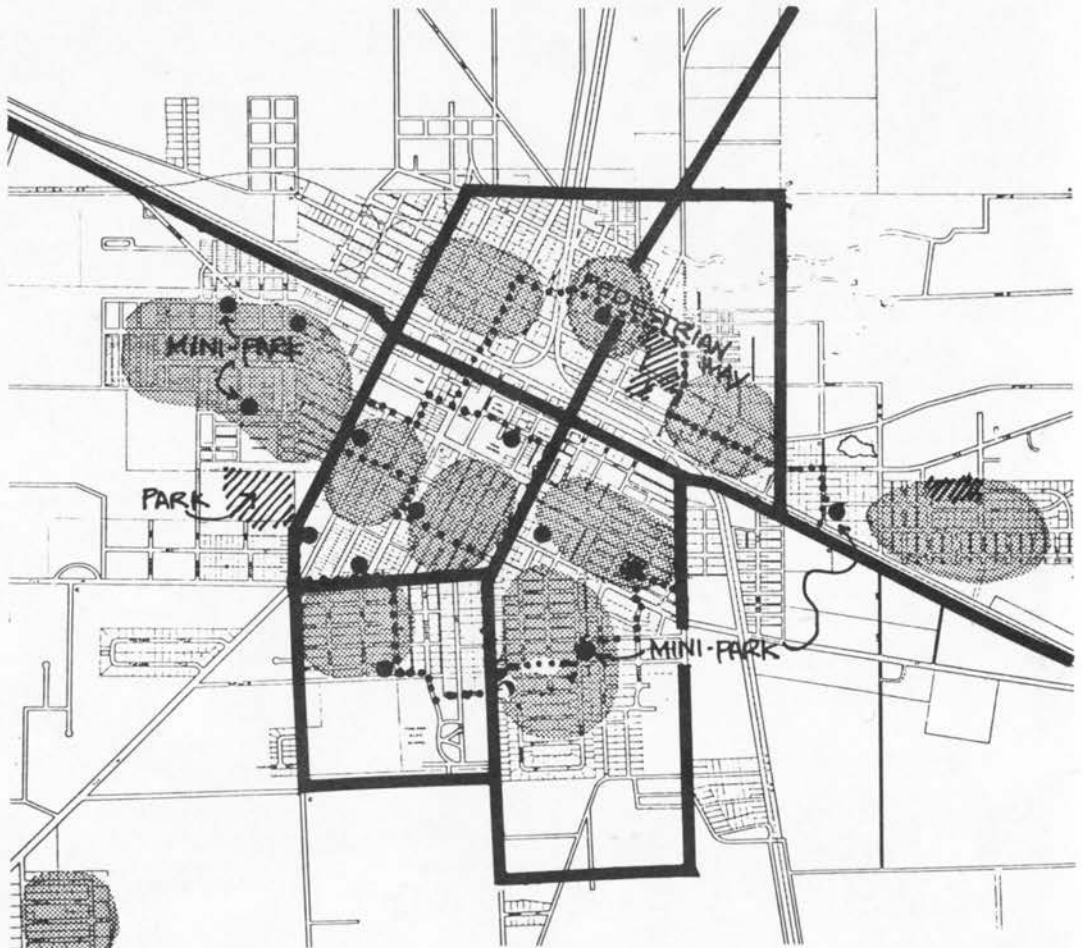
Streets and highways are the basic element of the Circulation Plan. Since no interstate highway passes through the city, arterial streets are the primary component of the Plan. Secondarily, transit service, walkways, and bicycle paths support the arterial system by providing alternative mode opportunities. More importantly, in Live Oak these alternative facilities are special-purpose and, in the case of walkways and bicycle paths, oriented more toward recreation and open space than circulation needs. Nonetheless, these facilities are significant long-range considerations and are, therefore, an integral part of the Circulation Plan described below.

ARTERIAL LOOP - An internal arterial loop is proposed to consist of Walker Avenue, Pinewood Way, Miller Street, and Railroad Avenue as the southern component. The northern component would consist of Walker Avenue extended to Winderweedle, which would be extended to Eva Street, then to Duval and Lee Avenue, connecting to U.S. 90 east of downtown Live Oak.

COLLECTOR AND LOCAL STREETS - Improvements to existing collector and local streets are projected to consist primarily of traffic maintenance through signalization, control of on-street parking, and access as needed to meet specific demands and alleviate points of traffic congestion.

PEDESTRIAN SYSTEM - A system of walkways and bicycle paths are proposed to connect the mini-parks and major recreation facilities. These paths, in the form of dual use of sidewalks and a specially marked portion of existing streets and newly constructed paths, will provide a continuous flow of open space as well as an alternative to the automobile in these limited instances. It is intended that this pedestrian system would serve primarily as a recreation facility and secondarily as a contributing factor in the Circulation Plan.

This is illustrated on Map M-19 below.



MAP M-19 CIRCULATION PLAN

## COMMUNITY FACILITIES ELEMENT

### INTRODUCTION

The Community Facilities Element is the designation of those public facilities and services that are both necessary and desirable for the safety, welfare, and maintenance of a high quality of life for the citizens of Live Oak. The demand for these services and facilities changes over time due to fluctuation in the population, the need to replace outmoded facilities, and the desire to increase one's standard of living. The Community Facilities Element examines the components of these future demands and recommends replacement and/or new construction as appropriate to satisfy future needs.

The ownership, operation and maintenance of facilities and the delivery of services may be by a private company as in the case of electricity, telephone, and certain other utilities, a governmental agency(s), or an independent board. In all cases, however, they are provided for the benefit of the community and are referred to as Community Facilities. The Community Facilities Element of the Comprehensive Plan, therefore, presents a framework of future needs for urban services upon which Capital Improvement decisions and priorities related thereto can be made. The Community Facilities Element is also a guide upon which private companies can relate their service demand projections.

## METHODOLOGY

The methodology utilized to prepare the Community Facilities Element is a three-step process as illustrated in Figure F-10. First, the current plant and facility capacities are identified. Secondly, the future demand for service is projected on the basis of anticipated population growth and in accordance with planning standards. Thirdly, this information is synthesized to determine deficiencies or surpluses which are then evaluated with respect to goals and objectives. To assure that the projected service demands are not unrealistic from a practical standpoint, interviews with specific departments of the city and county and private companies involved in the delivery of these services were held to review planning data. Each department or private company was requested to provide information concerning the age and useful life of facilities and to indicate (based upon recent trends, problems, and priorities) their projections of future needs. This data was studied and adjusted to relate to planning projections and the preliminary Land Use and Circulation Elements, and it became the basis for the Community Facilities Element.

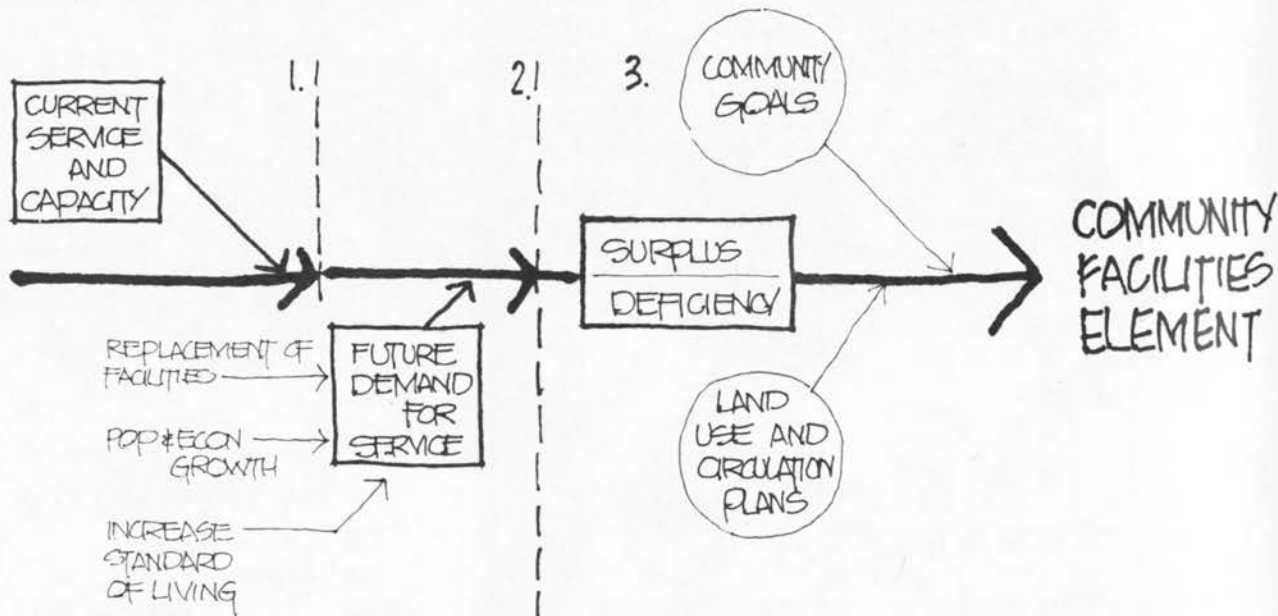


FIGURE F-10 COMMUNITY FACILITIES ELEMENT

Those facilities and services that comprise the Live Oak Community Facilities Element include Potable Water, Sanitary Sewer, Stormwater Drainage, Solid Waste Disposal, Recreation and Open Space, Police, Fire, Schools, Health Care, Utilities, Library, and Cultural Activities.

## POTABLE WATER

Live Oak obtains its fresh water supply from the Floridan aquifer. Withdrawal is made from the groundwater system from two wells which are located on Duval Street east of Ohio Avenue. These wells provide sufficient capacity to meet current demand. In addition to the two operating supply wells, the municipal water system consists of a treatment plant, ground storage, chlorination facilities, elevated storage, and a water distribution system.

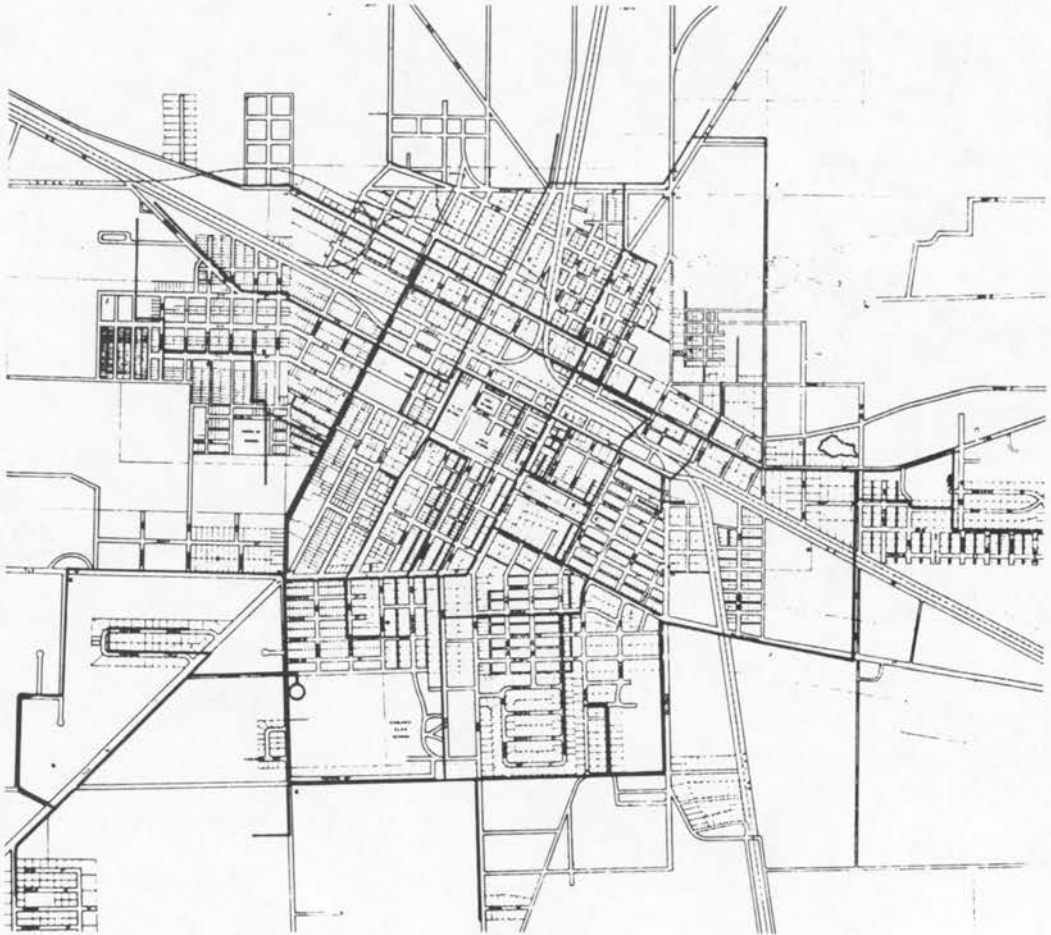
EXISTING FACILITIES - In 1959 the City of Live Oak constructed a water treatment plant consisting of aeration facilities, chemical feeders, a coagulation basin, and rapid sand filters. This plant has not been operated for quite some time, and it appears to need major repairs before it could be restored to service. At present the city is supplying its water from two wells, bypassing the water treatment plant, chlorinating the well water, and pumping it to ground storage and elevated storage tanks.

The city has long range plans to renovate the water treatment plant to use some or all of these facilities. An engineering study of its water system will be required to determine its adequacy for present and projected future water supply requirements and the ability of the system to meet primary drinking water standards established in accordance with the Safe Drinking Water Act. No timetable for the commencement of this study has been established as of this date.

The municipal water system serves 2,394 customers or an equivalent population of 7,493. The system has the capacity to serve an average of 17,445 persons or 5,576 customers.

FUTURE DEMAND - Based upon the general standard of 130 gallons per person per day (estimate from current consumption rates), the current systems have the capacity to meet the future demand resulting from a population growth to 12,000 people. Certain distribution lines will have to be replaced and others enlarged, however these factors can only be determined by an engineering study of the entire system.

Map M-20, Potable Water Supply, illustrates these factors on the following page.



MAP M-20 POTABLE WATER SUPPLY

#### SANITARY SEWER

Live Oak owns, operates and maintains a municipal wastewater treatment plant and sewer system which provides sanitary sewer service for most of the developed areas within the present city limits.

EXISTING FACILITIES - The wastewater system consists of approximately 53 miles of gravity collection lines, 9 lift stations, and a modified trickling filter plant rated at 0.75 mgd. The average flow at the wastewater treatment plant at the present is 0.55 mgd. During periods of heavy rainfall, however, this flow has increased to more than 1.0 mgd, which is the practical limit of the plant flow meter.

The wastewater treatment plant consists of a trickling filter plant including primary clarifier, trickling filter, and secondary clarifier. This plant was modified in 1974 to 1975 to provide a facultative pond and sand filter as additional treatment. In July 1976 the facultative pond was severely damaged by a sinkhole failure and as of this date has not been restored to service. The present treatment facilities of the plant consist of a conventional trickling filter plant, sand filters and chlorination. The treated effluent is discharged into a sinkhole.

The wastewater treatment plant is covered by a state operating permit and an NPDES permit, both of which specifically allow discharge into a sinkhole. The state permit expires on October 23, 1978. The NPDES permit expires January 29, 1981. It has been strongly indicated by the Department of Environmental Regulation that drinking water standards must be met by the plant effluent if the discharge to the sinkhole is to be allowed to continue upon renewal of the permit. Since this is economically impractical, the city is taking steps necessary to consider alternative methods of disposal.

On March 1, 1977, the city applied for a 201 Facilities Plan Grant (Step I under PL 92-500). This plan, estimated to cost \$59,500, will present a comprehensive plan for regionalization of the wastewater system and will consider alternatives to the present method of disposal such as spray irrigation, deep well disposal, and percolation ponds. It is expected that this plan will be completed by mid-1978. This same plan will investigate the infiltration/inflow of the present gravity collection system to determine if it is more economical to treat present infiltration/inflow or to rehabilitate the sewer system to exclude these extraneous flows, at least in part.

The present gravity collection system serves 1,821 customers or an equivalent population of 5,700. The system has the capacity to serve a population of 7,500 or 2,396 customers.





MAP M-21 WASTEWATER SYSTEM

FUTURE DEMAND - Based upon current flow rates of approximately 100 gallons per day per person, the system will have to increase its capacity to meet the anticipated future demand. In addition, the level of treatment will have to be improved and collection lines and pumping

stations will have to be constructed in areas of new development as demand warrants and as determined by detailed engineering studies.

Although the capacity of this system is a major concern, of greater importance is the uncertainty of whether there is any potential threat of contamination to the fresh water system. It is known that the location of the drainage wells and the direction of groundwater flow in relation to the fresh water wells is such that contamination is not currently a problem. This is subject to change under extreme environmental conditions and as additional demands are placed on the system.

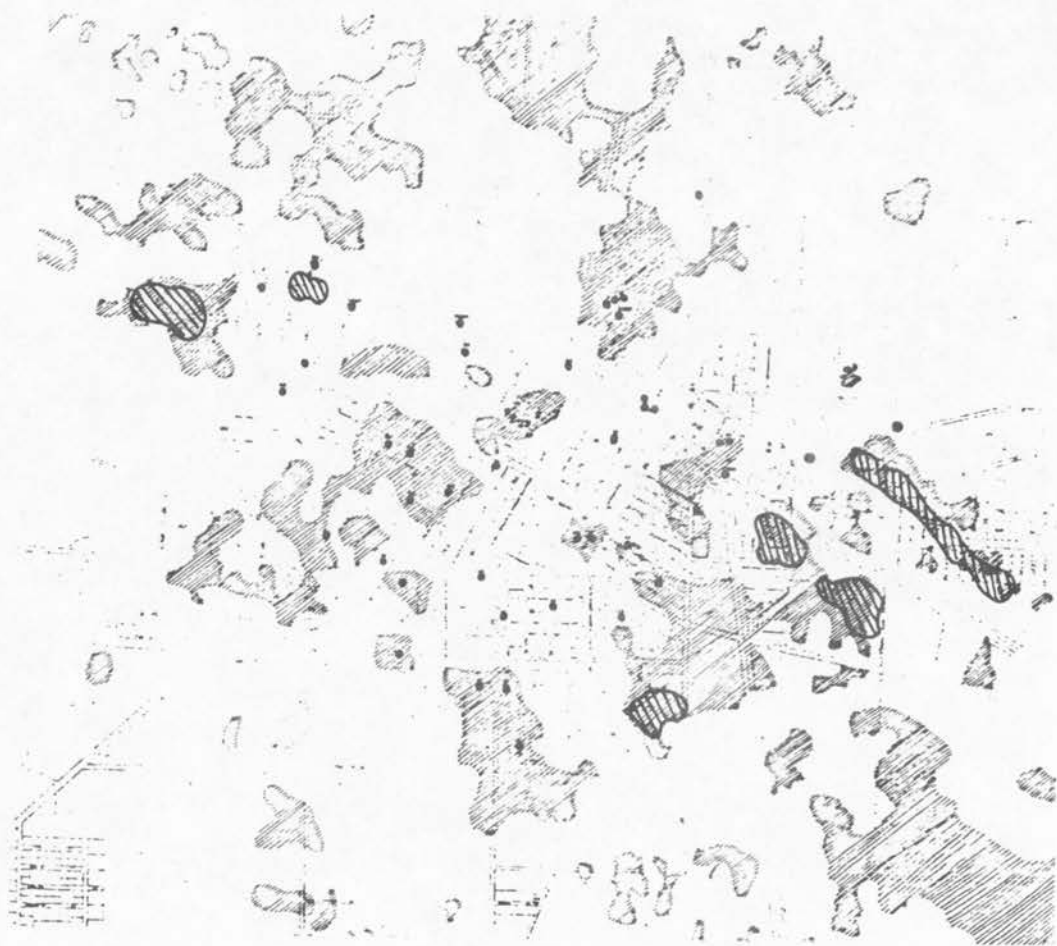
#### STORMWATER DISPOSAL

The City of Live Oak is located in the midst of a "topographic bowl" with no defined surface water drainage patterns. All stormwater is discharged through dry wells into the groundwater system.

EXISTING FACILITIES - There are currently 47 wells within the city limits, of which 43 are operational. Four wells are operated by the Department of Transportation, with the remaining wells being the responsibility of the City of Live Oak. Some of these wells have catch basins or ponds which retain water much of the time, others are simply a dry well covered by a metal grate. This system currently disposes of the stormwater in an adequate manner, with the exception of those areas illustrated on Map M-22. The ultimate capacity of this system is not known at this time.

FUTURE DEMAND - Based upon a general concern for the possible contamination of the fresh water supply, it is strongly recommended that an alternative drainage system be developed. In lieu of constructing an extensive pumping and collection system, it is recommended that a series of water retention ponds be created in areas adjacent to selected drainage well sites to serve as part of the drainage system. These sites, in addition to retaining water for slow infiltration into the groundwater system, can be designed as mini-parks to serve a recreational purpose as well.

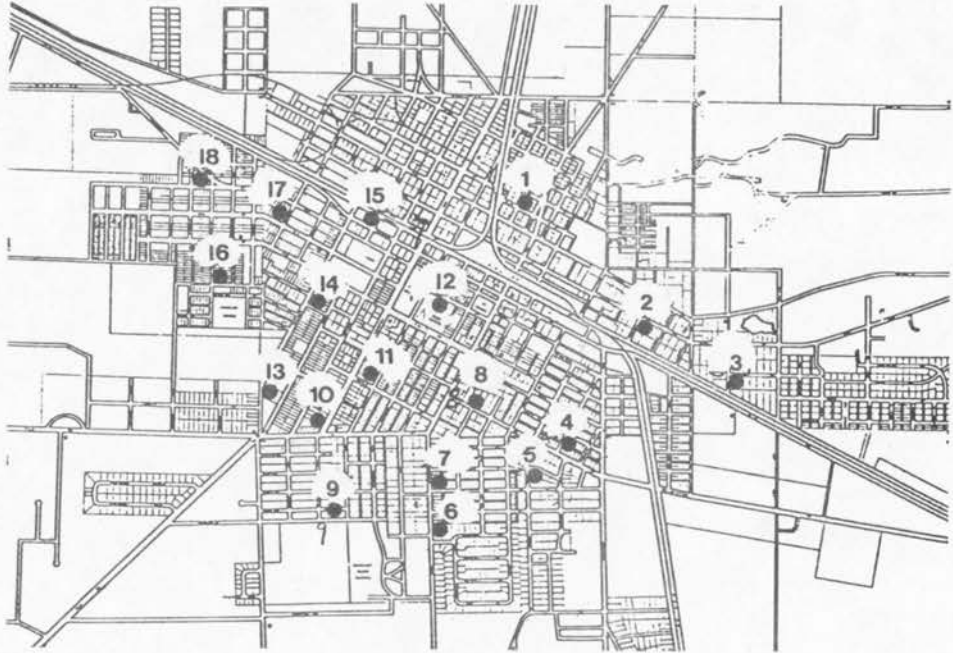
An examination of many of the existing drainage wells revealed that in all cases investigated there is sufficient vacant land adjacent to the well site to permit this type of facility. These areas, which are subject to flooding, have not been developed for this reason. In certain instances these properties are owned by the public, in others they are privately owned but unusable without drainage provisions.



MAP M-22 DRAINAGE WELLS

- Drainage Wells
- ▨ Designated Flood-Prone Areas
- ▩ Actual Flood-Prone Areas

The well sites selected because of their water retention potential and relationship to existing and future land use patterns as future sites of water retention ponds are illustrated on Map M-23 on the following page.



MAP M-23 STORMWATER RETENTION SYSTEM

<u>Site Number</u>	<u>Well Number</u>	<u>Location</u>
1	1, 2, 3	Fir & Brown Streets
2	4 D.O.T.	Mussey & SCL RR
3	34	Ruby & Eva
4	12	Nabor & Santa Fe
5	13	Meadow & Myrtle
6	16	Marymac & Darrow
7	15	Meadow & Ohio
8	33, 11	Weller & Lake Mary
9	37	Hawkins & Church
10	19	Houston & 11th St.
11	35	Church & John
12	4, 25	Suwannee & Wilbur
13	32	Irvin & Liberty
14	27	Irvin & Eighth
15	2 D.O.T.	Irvin & Fourth St.
16	38	Lafayette & Eighth
17	1 D.O.T.	Ammons & Fifth
18	29	Fifth & Taylor

## RECREATION AND OPEN SPACE

Recreation and Open Space have been identified as a top priority element in the Comprehensive Plan. Although some may feel that recreation is not absolutely necessary for the safety and welfare of citizens in the same terms as are police and fire protection, the citizens of Live Oak have expressed their feelings that Recreation and Open Space are equally important to their well-being and desired quality of life.

EXISTING FACILITIES - Recreation facilities are operated and maintained by the Live Oak Recreation Department which is a joint but independent board receiving its financial support from both the city and the county. The main recreation area provides facilities for Baseball, Softball, Tennis, Handball, Racquetball, and Swimming. Additional parks and recreation facilities are illustrated on Map M-24.



MAP M-24 EXISTING PARKS

Developed Parks

a. 11.2 acres

Undeveloped Parks

b. 3.3 acres

c. 1.4 acres

d. 1.8 acres

The Suwannee County Development Authority has recently completed the first phase of a special-purpose recreation campground consisting of 543 acres known as the Suwannee Springs Recreation Project. This facility offers overnight camping and related activities--fishing, etc. The Suwannee River State Park is also available to citizens of Live Oak and is located approximately 15 miles NW of the city on the Suwannee River.

FUTURE DEMAND - Twenty acres of parks per each one thousand people is the general recreation standard utilized to determine future needs. This is distributed among neighborhood, community, urban, and regional parks as identified below.

Neighborhood Parks - Neighborhood parks are the small recreation areas designed to meet specific neighborhood needs. Typically, they should be within walking distance of the neighborhood they serve and include facilities such as play apparatus for preschool - aged children, passive landscape areas for relaxation, and active areas for softball or little league fields, open field games, tennis, etc. The general standard for neighborhood parks is 2.5 acres per 1000 people.

Community Parks - A community park is a larger recreation area serving more than one neighborhood. Typically, these parks would be driven to and would be developed with more specialized games, lighted ballfields, handball and racquetball facilities, etc. The general standard for community parks is 2.5 acres per 1000 people.

Urban Parks - Urban parks are usually resource-based (sited on a special resource i.e. beach, lake, etc.), and designed to serve an entire community. The general standard for urban parks is 5 acres per 1000 people.

Regional Parks - Regional parks are also resource-based and designed to serve more than a single county. They are generally large areas including facilities for camping, hiking, and the like. The general standard for regional parks is 10 acres per 100 people.

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Based upon these general recreation standards, the future demand for recreation in the City of Live Oak is anticipated to be approximately 42 acres as indicated in Table T-26.

TABLE T-26 FUTURE RECREATION DEMANDS

	EXISTING ACREAGE	NEEDED TO MEET STANDARD	FUTURE DEMAND	TOTAL NEEDS FOR THE YEAR 2000
Neighborhood Parks	6.5	12.25	11.25	23.50
Community Parks	11.2	7.55	11.25	18.80
Urban Parks	543.0*	-----	22.50	-----
Regional Parks	1838.0**	-----	45.00	-----
TOTAL	2405.8	19.80	90.00	42.30

\*Suwannee Springs Park

\*\*Suwannee River State Park

In addition to the concern that existing facilities do not meet general recreation standards for neighborhood and community parks, the single active community park is not located centrally to the growth area of the city; since it cannot be relocated without considerable expense and/or creating a recreation void in that part of the city, a new major active recreation facility along with other open spaces is proposed.

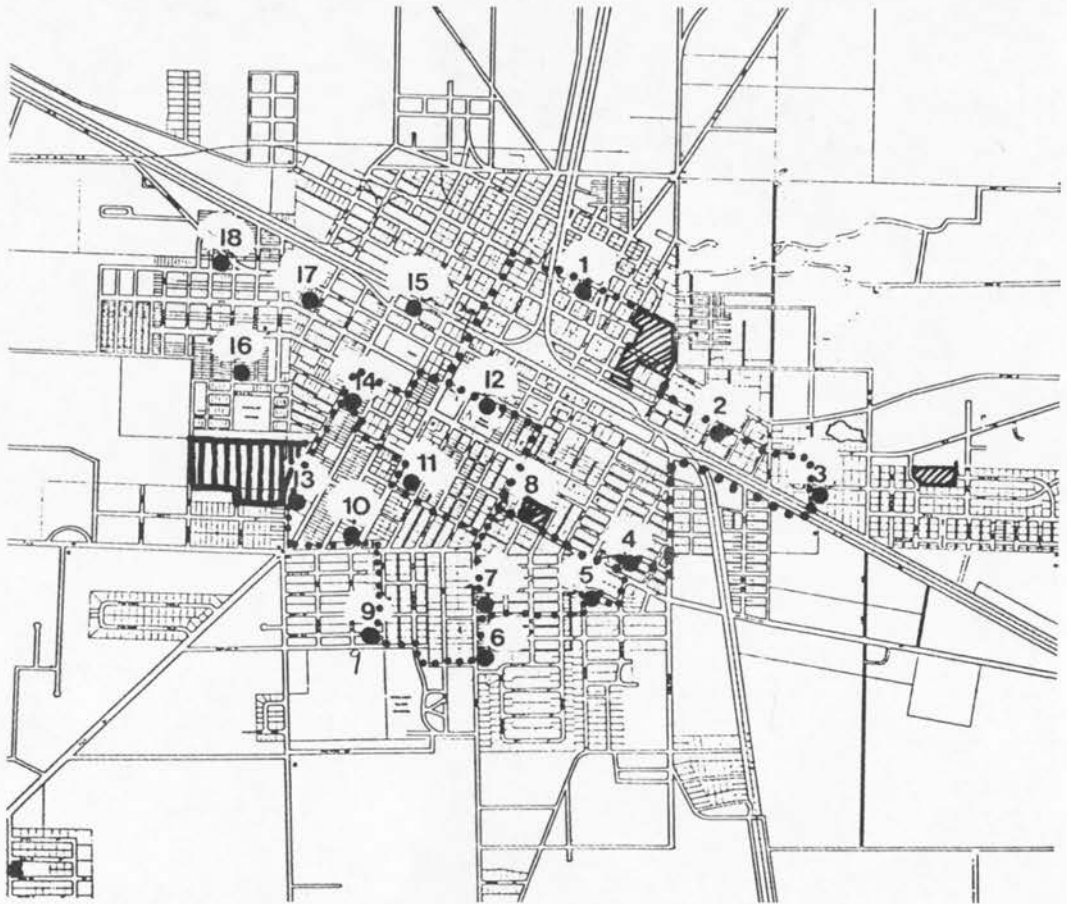
PROPOSED RECREATION FACILITIES - The new recreation facilities proposed to meet the current recreation deficiencies and anticipated future demand are illustrated on Map M-25 as described below.

Neighborhood Parks - 18 new mini- and neighborhood parks are proposed. Each of these recreation areas is proposed to serve the dual purpose of recreation and stormwater impoundment. During normal times the parks would be utilized for recreation purposes; however, during periods of excessive rainfall, they would become flooded, thereby serving a water retention purpose. Some of these parks would be designed to retain water at all times; others would only be flooded periodically.





Community Parks - A new 15-acre community park is proposed on Walker Avenue in the southwest sector of the city. This particular tract is designated for recreational use because it is one of the few large forested

areas in the city and portions of the property are subject to flooding. More importantly, it is located in a growth area which currently has no recreation areas. This park would contain facilities for active sports such as little league, softball, tennis, swimming, racquetball, and similar sporting events.

The proposed park and open space system is illustrated on Map M-25 below.



MAP M-25 PROPOSED PARK AND OPEN SPACE SYSTEM

-  Proposed Neighborhood (Mini-park)
-  Proposed Community Park
-  Existing Parks
-  Pedestrian Way



## SCHOOLS

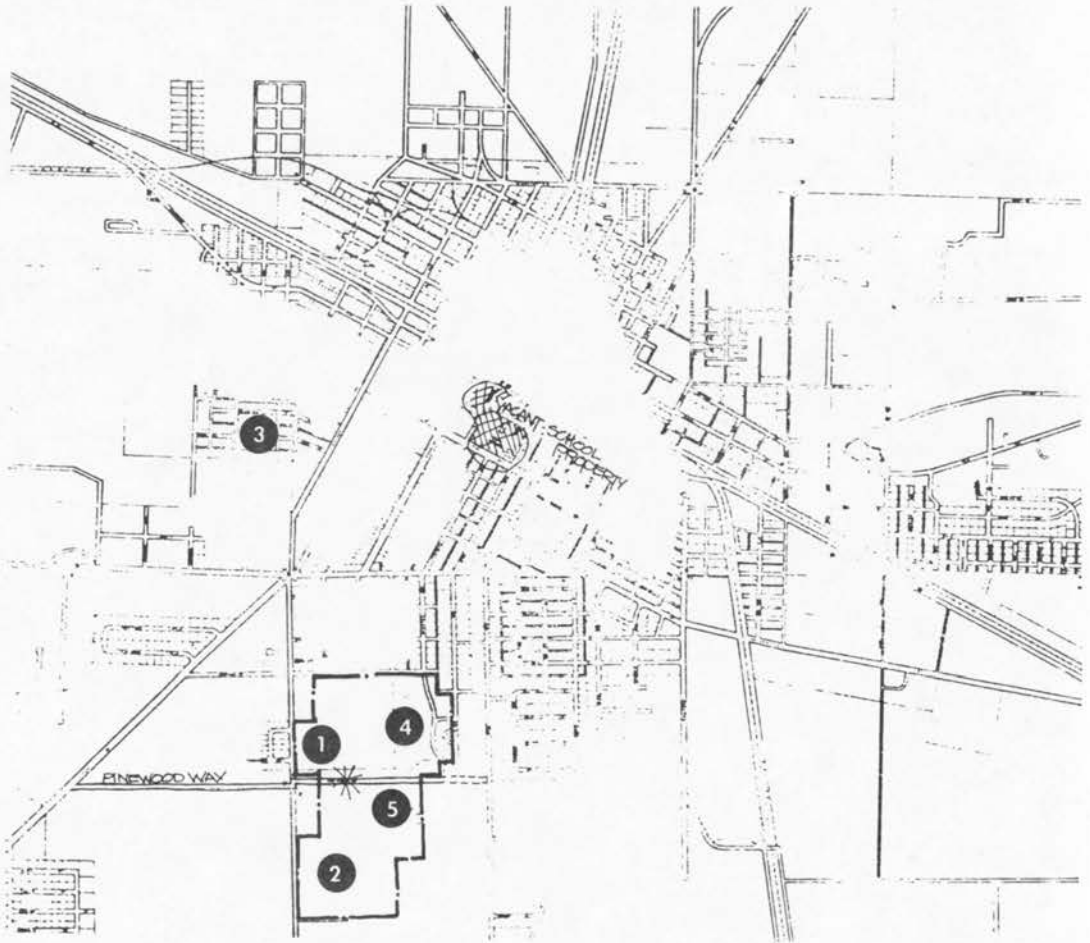
The Suwannee County School Board is responsible for the planning and administration of the public education system in Suwannee County. All of the school facilities are located in Live Oak at the school campus on Pinewood Way and the Douglas Middle School on Fifth Street. Construction of a new elementary and vocational high school have recently been completed. Since the City of Live Oak has no jurisdiction and no direct responsibility in planning, operation, maintenance and construction of same, schools are included in the Community Facilities Element in order to provide coordination of decisions resulting therefrom with Land Use and Circulation Plans.

EXISTING FACILITIES - All of the Suwannee County School facilities are located in Live Oak as illustrated on Map M-26. The capacity of these schools is presented in Table T-27.

TABLE T-27 SUWANNEE COUNTY SCHOOLS

NAME	GRADES	CURRENT NUMBER STUDENTS	STUDENT CAPACITY
Suwannee County Elementary School -- N & S	K-6		1740
Suwannee County Elementary School -- West	K-6	2160*	1110
Suwannee Middle School	7-8	704	1080
Suwannee High School	9-12	1317	1440
Suwannee Vocational- Technical High School	----	114	420

\*Elementary population has not yet been divided between two schools.



MAP M-26 SUWANNEE COUNTY SCHOOLS

- |                               |  |
|-------------------------------|--|
| 1. Suwannee County Elementary | 4. Suwannee High School                          |
| 2. Suwannee County Elementary | 5. Suwannee Vocational-<br>Technical High School |
| 3. Suwannee Middle School     |  |

FUTURE DEMAND - The Suwannee County School System has been experiencing a growth of 50 - 100 students per year. This growth rate is expected to continue or possibly decline slightly. Since the present facilities are almost at capacity, and capacities are being exceeded in certain instances, new facilities will have to be

constructed to meet future demand. A new school survey for Suwannee County is scheduled for 1978 to determine this need.

Separate from the consideration of student capacity are two issues which are significant to the Comprehensive Plan for the City of Live Oak. The first concern relates to Pinewood Way, which bisects the school campus, and the safety of the school children. Pinewood Way is an important component of the city-wide circulation system and is recommended to be upgraded to arterial status. Traffic on this street will therefore increase, creating a potential circulation and safety hazard during school hours, specifically when students are entering or leaving the school campus. Future plans include the relocation of the elementary school presently sited on property north of Pinewood Way to the south side of this arterial. This action would permit the combination of activities between schools without requiring the crossing of Pinewood Way but would not improve the general safety condition. Future plans for Pinewood Way must include sidewalks, pedestrian crosswalks, and careful consideration of ingress and egress of school buses, private cars, and service vehicles with respect to external traffic and school administration.

A second issue involves the joint use of facilities. Based upon the need for recreation facilities in the city and the normal use of school facilities during the afternoon and evening hours, it is recommended that a plan be devised for joint use of certain school facilities. The absence of recreation facilities in the southwest sector of the city, which is the major growth area, is further justification of the need for such a program.

In addition to the joint use of certain school facilities, there are vacant properties in the downtown area which could possibly be adapted to productive use. These facilities have not been examined for structural soundness but are well located with respect to both the primary commercial area of the city and the Suwannee County Hospital. A multi-use project combining education, recreation, parking, and care for senior citizens would contribute significantly to the revitalization of the downtown area and expand the educational potential of the Suwannee County School System.

#### SOLID WASTE DISPOSAL

The Live Oak Department of Public Works provides solid waste and trash collection service. Pick-ups are made four days per week and transported to the Suwannee County landfill site which is located south of the city on Highway 129. The site is approximately 40 acres and, at

current rates, has sufficient capacity to meet the demands of Suwannee County residents, including the City of Live Oak, for an estimated ten-year period.

## POLICE

Police protection is provided by the Live Oak Police Department which has eleven (11) officers and six (6) cars. At least one car is constantly patrolling during the daylight hours, with support personnel on call from the Police Office in City Hall. During other hours, calls are transferred directly to the Suwannee County Sheriff's Department.

Live Oak is not a high crime area. During 1976 the major type and number of arrests dealt with traffic or traffic-related citations, as presented in Table T-28.

TABLE T-28 ARRESTS IN LIVE OAK IN 1976

D.W.I.	42
Larceny	19
Forgery	1
Disorderly Intoxication	30
Simple Assault	2
Aggravated Assault	2
Vandalism	3
Breaking and Entering	11
Disorderly Conduct	6
Gambling	6
Weapons Possession	2
Prowling	3
Shoplifting	29
Resisting Arrest	4
Traffic Violations	<u>599</u>
T O T A L	759

SOURCE: Live Oak Police Department

Based upon the current level of crime protection and the general standard of one police officer for each 800 - 1000 people, it is anticipated that an additional three to five officers and one or two cars will be sufficient to meet the future demand for police service.

## FIRE

The Live Oak Fire Department provides fire protection service from two stations. Station Number One is located in the City Hall Building, Station Number Two is located on Ohio Avenue south of the SCL Railroad tracks.

EXISTING FACILITIES - The Fire Department is composed of ten (10) men plus the chief, one assistant chief, one captain, one lieutenant, and twelve volunteers. The fire fighting equipment includes one Class A pumper truck, two Class B pumper trucks, a four-wheel truck, a salvage truck, and a 5,000 gallon tanker. Station Number Two has one Class A and one Class B pumper truck. Fire protection service in the city has been more than adequate, as evidenced by the fact that the number of fires has lessened in the past four years as indicated in Table T-29.

TABLE T-29 FIRES ATTENDED FROM 1973-1976

<u>Year</u>	<u>Number of Fires</u>	
1973	345	
1974	333	<u>SOURCE: Live Oak Fire Department</u>
1975	242	
1976	232	

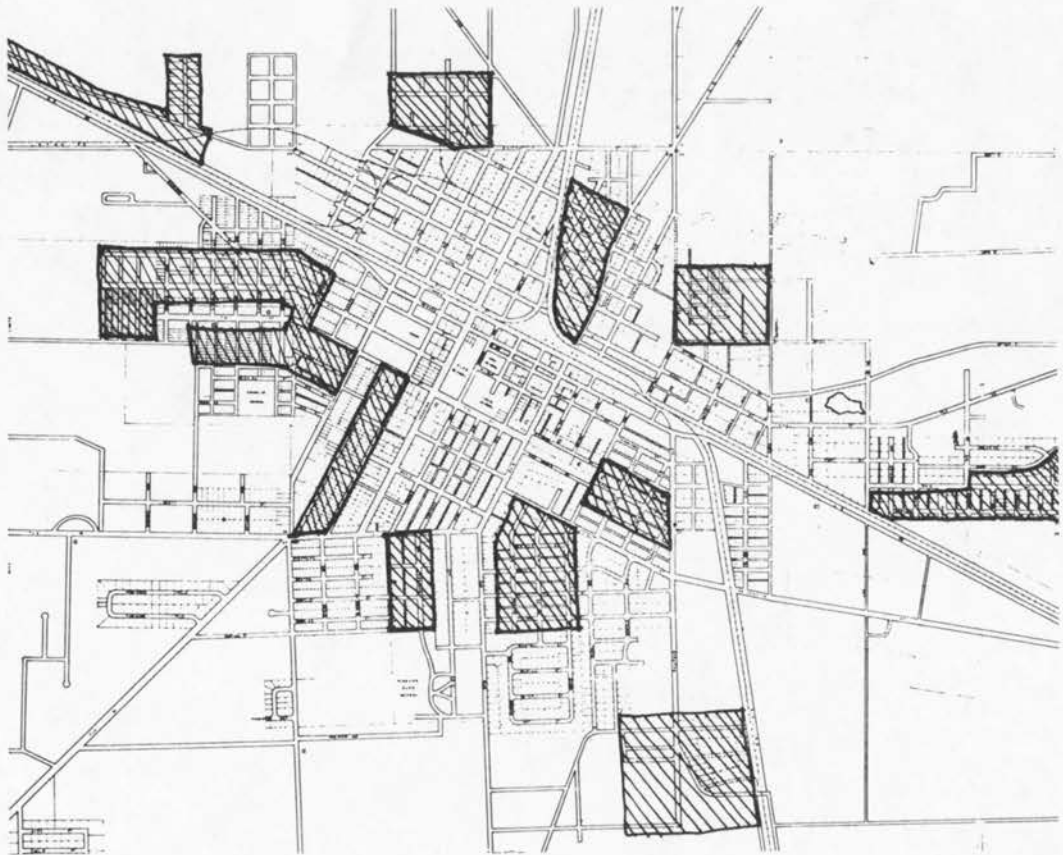
FUTURE DEMAND - The major concern in meeting future demand for fire protection service is the replacement of outmoded equipment, as identified in Table T-30.

TABLE T-30 SCHEDULE OF FIRE EQUIPMENT NEEDED

- 1977--One new pumper (replace 1953 Seagrave)  
1250 GPM--Commercial Chassis
- 1978--Relocate Fire Station No. 2  
City Property on S. Walker Ave. or in this area  
3 Bays, Living Quarters (9 men), Rec. Area, Storage  
75' x 75' Building
- 1979--One new pumper (replace 1956 Ford)  
1000 GPM--Commercial Chassis
- 1980--One new Mini-Pumper 4WD (Replace Dodge 4WD-PW)
- 1982--Relocate Central Fire Station  
4 Bays, Living Quarters (14 men), Rec. Area, Storage  
90' x 75' Building

Secondarily, it would be highly desirable to expand the living facilities in Station Number One and to relocate Station Number Two closer to the growth areas of the city. This would reduce the response time, thereby improving the protection service.

Thirdly, there are certain areas of the city which do not have adequate water hydrants. These areas are illustrated on Map M-27 below.



MAP M-27 AREAS NEEDING FIRE PROTECTION

## LIBRARY AND CULTURAL ACTIVITY

Library services are provided by the Suwannee River Regional Library System. Its main building is located in Live Oak, with community libraries in seven other participating counties. Bookmobile services are also available throughout the Suwannee River region, including the City of Live Oak.

In addition to the distribution of books, the library is currently involved in a limited adult literacy program and provides institutional services to schools, Dowling Park, and the County Jail. The library also sponsors a summer reading program for children.

Other cultural activities are sponsored by the Suwannee County School Board, Dowling Park, and the Women's Club of Live Oak. The Garden Circles also sponsor cultural activities from time to time.

## MEDICAL SERVICES

Medical services are provided by the Suwannee County Hospital which is located in Live Oak. The hospital is a Joint Commission-approved sixty bed, seven bassinet general hospital with a current in-patient census average of 25 patients per day. The hospital facility has adequate space for the anticipated growth, if it can attract qualified physicians to expand its patient capacity to the approved limits.

One problem in attracting physicians to Live Oak is the lack of attractive office space adjacent to the hospital campus. This problem stems, to a certain extent, from the mixture of commercial uses in the areas surrounding the hospital property. Some of these are deteriorated and very unsightly. Careful zoning and control of land use in the vicinity would assist in overcoming this problem.

## UTILITIES

TELEPHONE SERVICE - Telephone service is provided by the North Florida Telephone Company, which is located in Live Oak. This company has been experiencing a 3 - 4% growth in Suwannee County for the past few years and has recently completed construction of a new toll-switching system which will meet the demands for telephone service for at least five years. In addition, the equipment is designed, and space exists, to expand the capacity of the facility to meet future demand as warranted.

ELECTRIC SERVICE - The Florida Power and Light Company provides electric power to the City of Live Oak. Power is provided by a 69 KV transmission line from Lake City. Florida Power and Light has experienced a growth rate of 2 - 3% during the past five years and currently has sufficient capacity to meet the anticipated future demands.

Due to the current plant capacities and expansion capabilities of the companies providing electric and telephone service to Live Oak, no major easements or land purchases are required for utility rights of way or facility sitings. Florida Power and Light has filed plans in accordance with the Florida Electrical Power Plant Siting Act, Part II, Chapter 403 of the Florida Statutes.

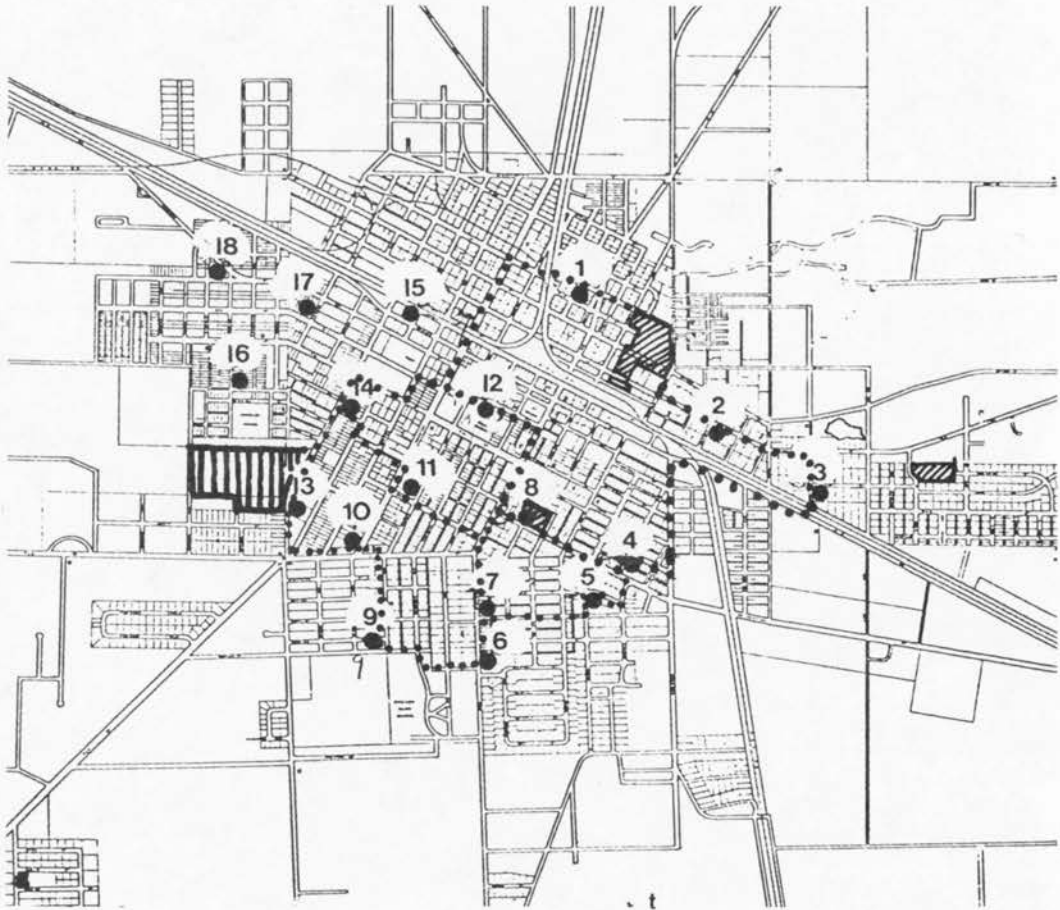
NATURAL GAS - Live Oak purchases natural gas from The Florida Gas Transmission Company and resells it to city residents. The municipal system is composed of approximately 32 miles of service line which currently serves 1,451 customers.

Service can be expanded within current contract rates to meet present and future demand. It is anticipated that beyond these capacities additional supply can be obtained, depending on the natural supply and governmental distribution policy.




## CONCLUSIONS

The Community Facilities Element recommends the replacement of certain facilities and the construction of new facilities to improve the delivery of public services to the citizens of Live Oak. These are illustrated on Map M-28. These recommendations are based upon the condition and capacity of existing facilities, general planning standards, and the anticipated demand resulting from projected population growth and community goals. The phasing of land acquisition and actual construction of improvements are discussed in the Capital Improvements Element.





MAP M-28 COMMUNITY FACILITIES ELEMENT<sup>1</sup>

-  Active Recreation
-  Mini-park Water Retention Ponds
-  Pedestrian Way

<sup>1</sup>The size of the map permits illustration of open space elements only. See Capital Improvements Element for complete listing of community facilities.

## CONSERVATION ELEMENT

The Conservation Element is an assessment of and plan for the conservation of the community's natural resources. These resources may include rivers, forests, marshes, flood plains, clean air, clean water, and/or other natural assets vital to the maintenance of a safe, aesthetically satisfying quality of environment. The Conservation Element specifically focuses on the protection and utilization of environmentally fragile areas and finite environmental resources, and it therefore is integral to and based upon an assessment of the impact of development proposed in the Comprehensive Plan on the physical environment of Live Oak.

### INTRODUCTION

The City of Live Oak is a rural, largely agricultural community in Suwannee County. It is not proximate to a coastal region, river basin, unique natural forests, or other environmentally sensitive areas. In fact, extensive agricultural usage has modified the physical environment to such an extent that only a very few, small natural areas remain within the present city limits. And, with the exception of these forested areas, much of the natural vegetation has been dramatically altered for either agricultural purposes or urban development. There are no creeks, rivers, or natural drainage basins and corresponding wildlife habitats. Although no wildlife censuses were taken, the absence of diverse plant communities and movement corridors make it unlikely that any unique animal populations exist in, or migrate into or through, the city. It is therefore assumed that the endemic animal community is commonplace and consists mainly of those small mammals, birds, rodents, etc., that can co-exist with human settlements.

In spite of an apparent lack of environmentally unique resources, Live Oak does possess clean air, water, and a historic and rural character which is highly desirable. The Conservation Element is significant to the preservation of these natural assets.

The components of the Conservation Element are Air Quality, Water Quality, Wildlife and Vegetation, Noise, and Urban Design Character.

## AIR QUALITY

Live Oak, like most rural communities, is fortunate to have clean air. This is expected since there are very few (none in the city) major contributors to the deterioration of air quality. In fact, dust or suspended particulates resulting from vehicular traffic on unpaved roads is probably the main air pollution source in the city. No air monitoring stations are in operation within the city; however, it can be expected that with the exception of suspended particulates other pollutants including sulphur dioxide, carbon monoxide, and carbon dioxide are negligible. In all cases it is doubtful whether air quality standards are threatened or ever exceeded.

The impact from development anticipated in the Comprehensive Plan is not expected to greatly alter these air quality conditions. Although industrial uses are proposed and recommended to strengthen and broaden the economic and employment opportunities in Live Oak, the enforcement of air quality standards will insure that ambient air conditions will not be degraded. In fact, the paving of roads will improve current air quality conditions.

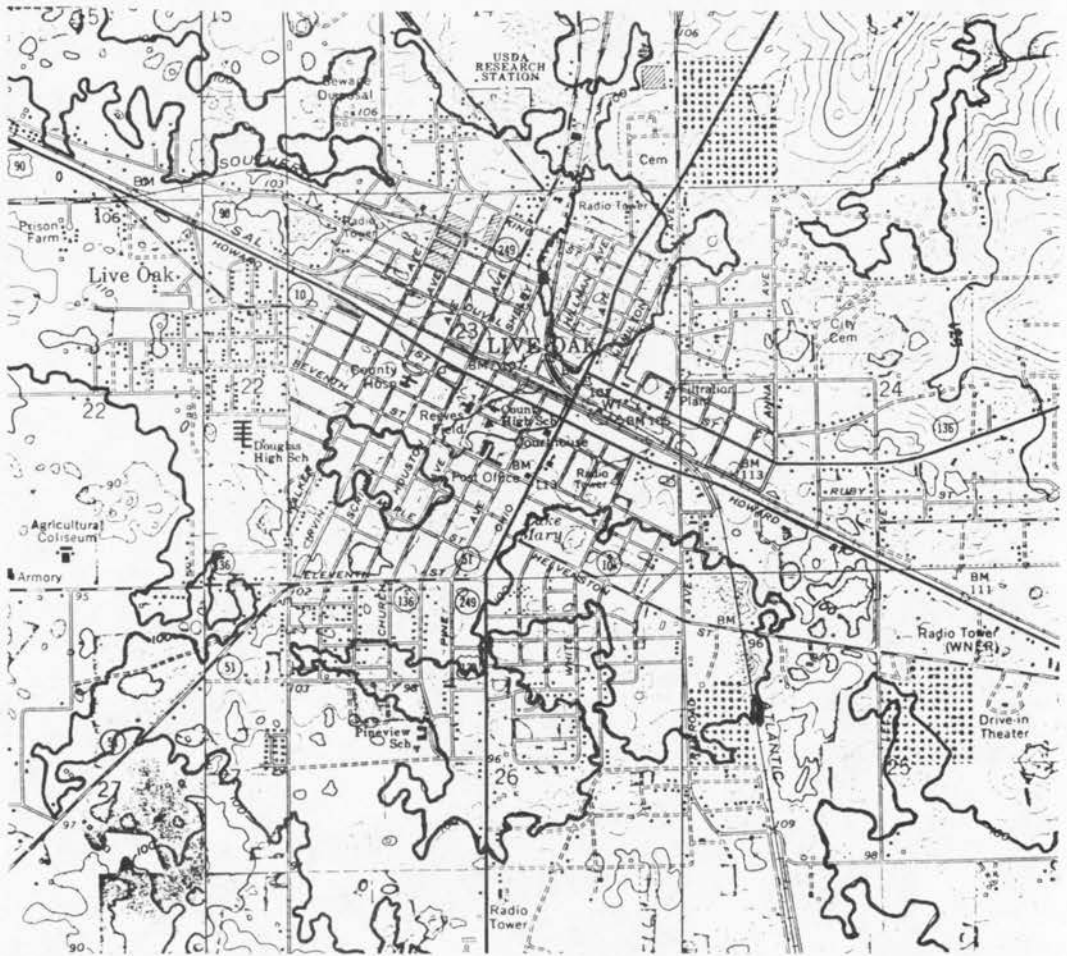
From a nuisance standpoint, there are occasional odors resulting from livestock and agricultural operations. These conditions may be offensive to some of the residents; however this has not been identified as a problem, probably because the location of specific sources is not normally adjacent to residential areas.

The conservation of air quality is a consideration for both health and nuisance reasons. From a health standpoint, the conservation of air quality is concerned with the concentration of various pollutants, the frequency of exposure, and the number of people whose health may be at risk. With reference to nuisance, air quality can be affected by smoke, odors and haze--factors which become a concern according to the number of people affected. As stated earlier, Live Oak is fortunate to have clean air and, in all likelihood, can conserve this asset by reasonable awareness of potential pollution sources and the maintenance and enforcement of proper air quality standards.

## WATER QUALITY

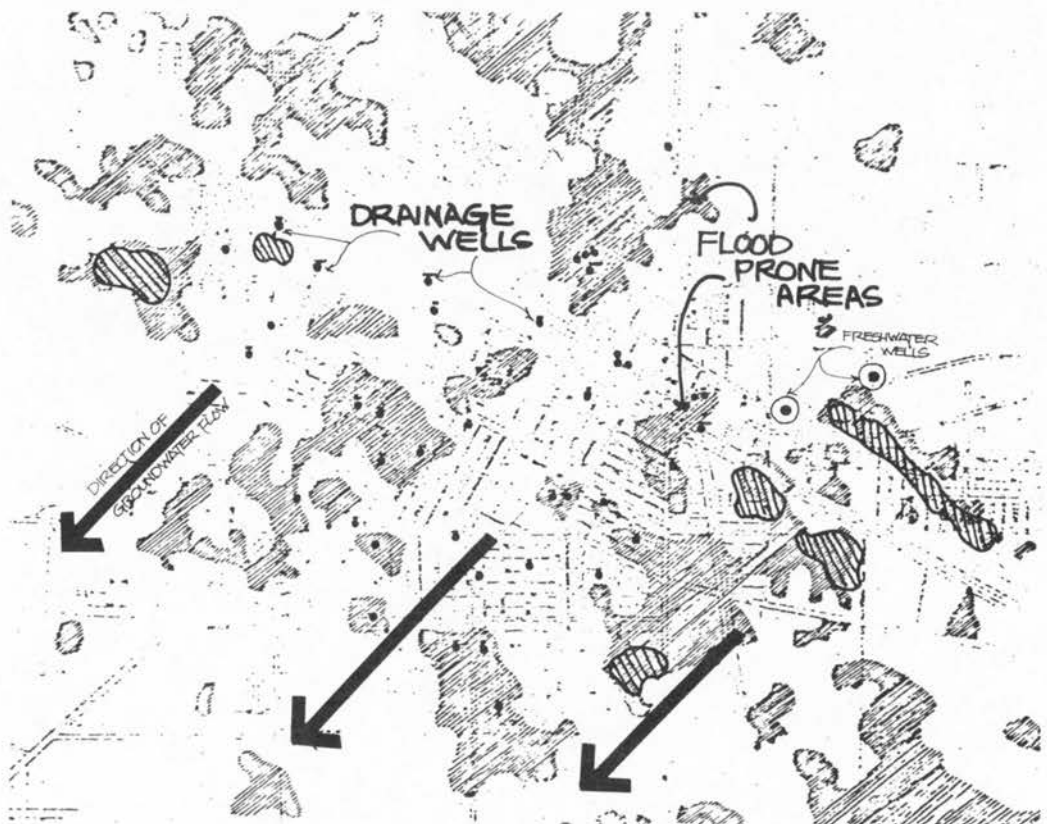
The conservation of water quality is of concern for conditions related to flooding, pollution, and consumption of fresh water. These factors are strongly interrelated in Live Oak due to the use of drainage wells for disposing of stormwater and the resulting co-mingling of surface and ground water. The threat of pollution, withdrawal rates, and ultimate capacity of the fresh water supply are therefore closely interdependent.

Generally, the topography is flat, with no well-defined surface drainage patterns. Land surrounding the city is at a higher elevation, creating a "topographic bowl." These conditions are illustrated on Map M-29 below.



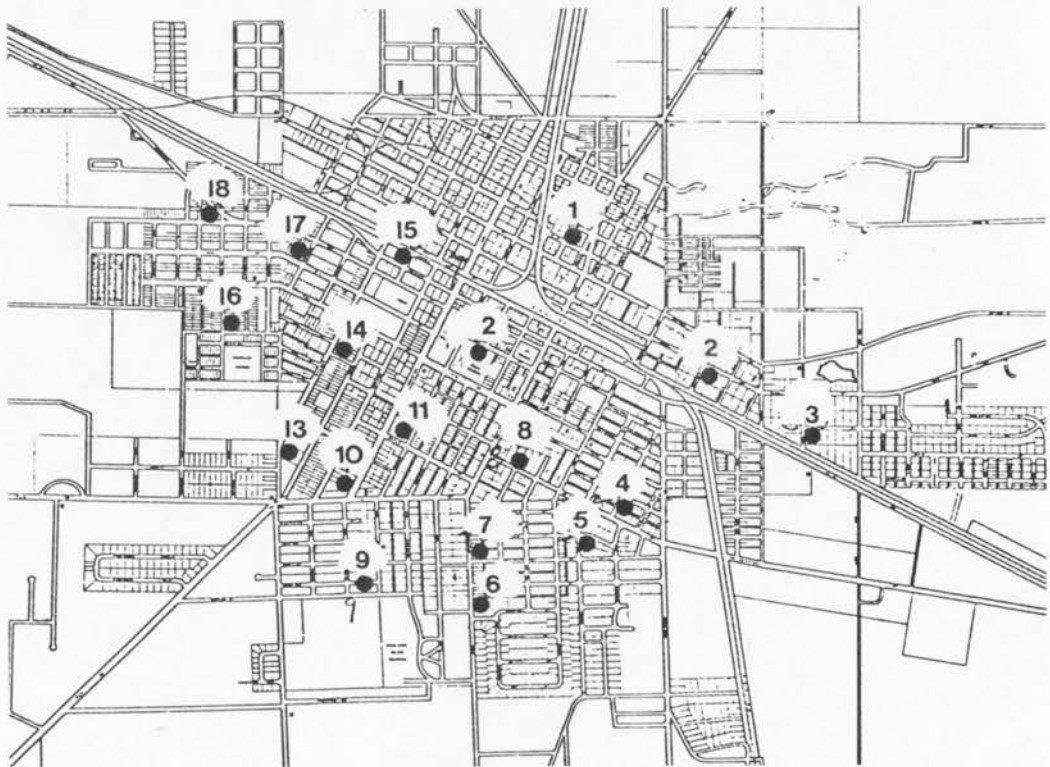
MAP M-29 TOPOGRAPHY

Since disposal of stormwater is through drainage wells, water quality is threatened by the co-mingling of surface runoff with the groundwater supply. Although the quality of groundwater is being degraded (the extent of which is not known), the quality of water that is being withdrawn for the fresh water supply is not currently affected due to the location of drainage wells and supply wells with respect to the direction of groundwater flow. This is illustrated on Map M-30.



MAP M-30 HYDROLOGY

The conservation of clean water may be contingent on the development of an alternative method of stormwater disposal as proposed in the Community Facilities Element and illustrated on Map M-31. Concurrently, a program of testing and monitoring water quality will provide data upon which to base future decisions related thereto.



MAP M-31 WATER RETENTION PONDS - MINI-PARKS

NOTE: Numbers identify proposed water retention ponds as listed on page 102.

## WILDLIFE AND VEGETATION

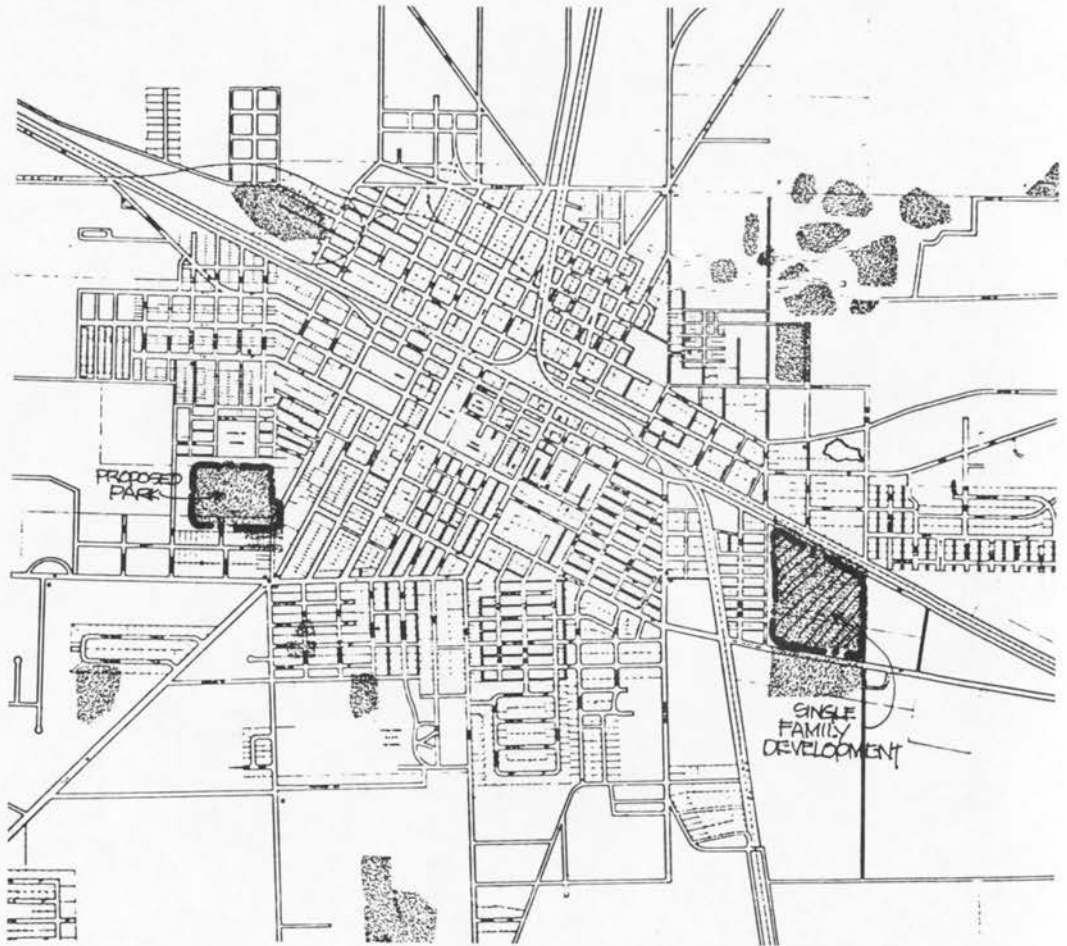
The extent of wildlife population in any given geographic area is dependent on the diversity of plant communities and resulting wildlife habitats. As determined from recent aerial photographs of the City of Live Oak, there is very little natural vegetation remaining within the city. Large forested areas have been converted to agriculture and urban uses, leaving only a few small areas within the city limits that have maintained a semblance of their original natural vegetative character. Some of these areas are prone to flooding, which is probably why they were left in a natural state. Development is slowly encircling and encroaching upon these areas, which are illustrated on Map M-32, and it is assumed that any animal population is therefore negligible.

The size of the remaining forested areas appears to be too small and not sufficiently diverse to provide suitable habitats for any extensive wildlife populations. Although no animal surveys were undertaken, individual citizens questioned did not indicate the presence of any large wildlife within the city limits.

The conservation of any remaining wildlife is dependent on the preservation of those few forested areas within the city limits, and unfortunately it is very unlikely that all of these areas can be preserved. This is evidenced by the fact that one area illustrated on Map M-32 is presently being converted to residential use. One of the forested areas and adjacent land is proposed for an urban park; in addition, a portion of the land should be left in its natural state and protected as an animal sanctuary.

In addition to this recreation area, some of the mini-parks which are proposed to be designed to serve the dual purpose of stormwater retention and open space are wetlands that could support a mini-ecosystem. These passive parks may be suitable habitats for small animals and bird life. Preservation of these areas would tend to increase the wildlife and vegetation value within the city. This system of open spaces is presented on Map M-31.

Map M-32, which follows on the next page, illustrates those forested areas discussed above.



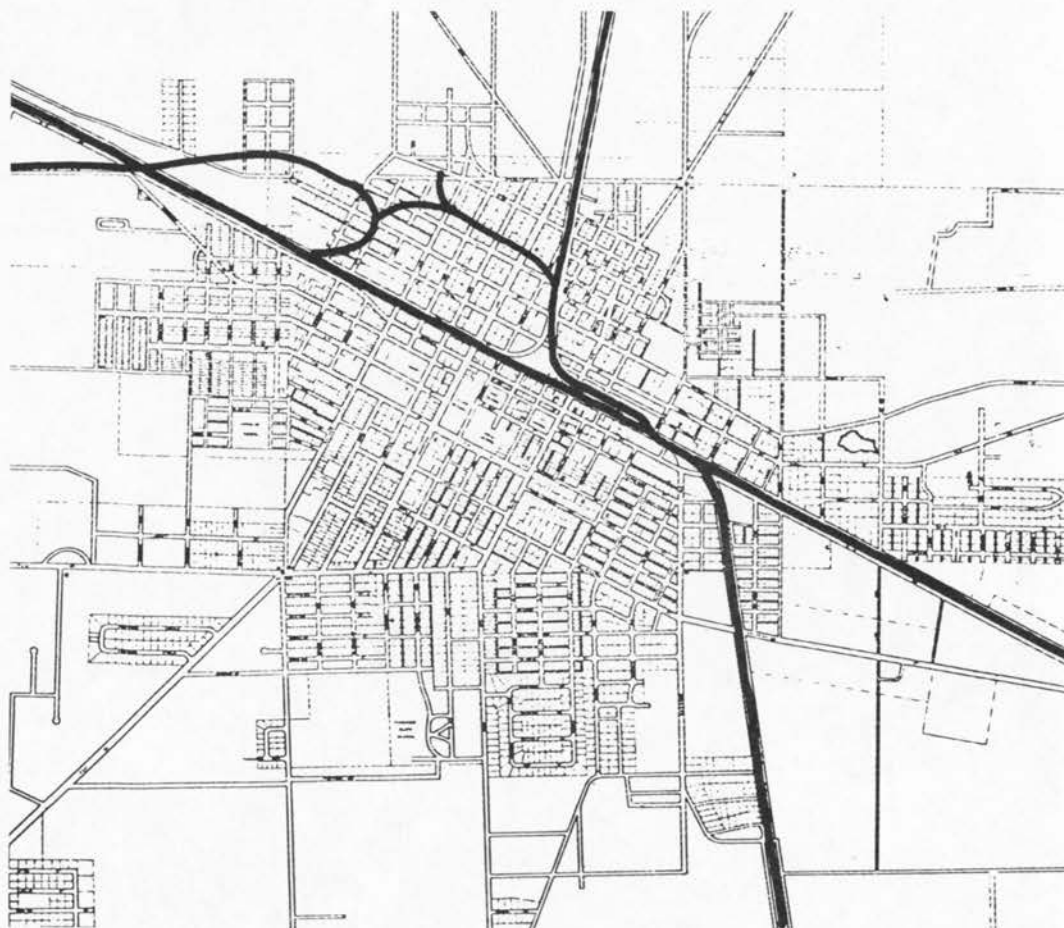
MAP M-32 FORESTED AREAS

## NOISE

The only major source of noise in the City of Live Oak is the Seaboard Coastline Railroad. These tracks bisect the city and are a major determinant in the land development pattern. Additional railroad spurs have been constructed to provide rail access into the



industrial areas. The resulting framework of railroad tracks crisscrosses the city, creating both a barrier to development and a source of noise in many areas of the city, as illustrated on Map M-33 below.



MAP M-33 RAILROADS

The existence of the railroad and resulting negative environmental qualities are accepted as a way of life in the City of Live Oak. Moreover, they have not been determined to be a sufficient nuisance to off-set the obvious economic advantages to the city and are therefore considered as a permanent factor to be accommodated in the future development pattern. Landscape buffers aid control of adjacent land uses and can minimize the noise impact, however this is not always feasible.

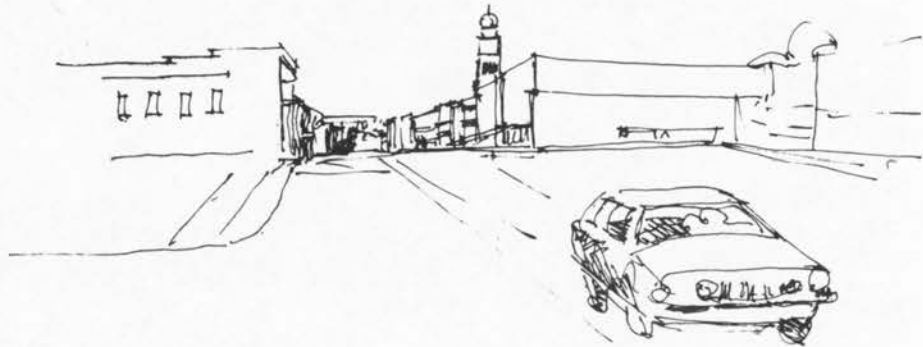
#### URBAN DESIGN CHARACTER

One of the major resources (although not natural) of small communities today is their unique aesthetic character. The rural environment characterized by a simple way of life and community attitude is, to many, a highly desirable contrast to the complexity and pressure of big city urban life.

This rural environment translated into a physical quality can be identified in visual and perceptual terms. It is herein referred to as the urban design quality of the city and represents an important resource of the City of Live Oak. The components of the urban design character are classified in terms of size, scale, paths, landmarks, and historic character.



SIZE - The geographic size of Live Oak is approximately one square mile, and a person can easily travel from city limits to city limits in a short span of time. This permits the traveler to perceive the city as a total form rather than as a series of parts, many times unrelated, as is the case in larger towns and cities. This tends to create a singular coherent image of the town which contributes to ease of image recall and finding one's way. These two qualities--ease of image recall and finding one's way--are primary elements strongly associated with pleasing visual perceptions and aesthetic quality. And, although any one building or group of buildings may be unattractive or deteriorated, the general image is favorable because of the quality and strength of image perception.



SCALE - Similar to size, the scale of Live Oak is small and therefore more human. There are no high-rise structures and very few buildings that are more than one story. The resulting low density of development and corresponding low intensity of activity creates a human scale in the physical environment which is not intimidating or imposing as are many cities. In contrast, the scale of Live Oak as reflected in its downtown and residential areas has a rural character which is friendly, warm, and inviting. The downtown area, therefore, could become very attractive with minimal cosmetic treatment.

Both the size and scale of the urban design character of Live Oak can be protected through careful assessment and enforcement of zoning and the treatment of street landscape.



PATHS - Paths are the channels along which people drive or walk and from which they perceive the design character of the city. The major paths in the City of Live Oak are the highways and arterials which provide ingress and egress through the city. Along these paths one can see evidence of the rural atmosphere due to size, scale, and the agricultural base of the community. As one drives away from the downtown area, the intensity of activity diminishes and the townscape changes into a farmscape. The exception to this sequence of visual events is the shopping area on Pinewood Way. The proposed arterial loop system will tend to preserve this experience by minimizing through traffic.

In addition to the view from the road, the paths in Live Oak tend to assume a more human design quality due to the fact that they are referred to by names identifying the town to which the road leads rather than an artificial number: hence, Branford, Mayo, and Dowling Park Roads rather than S.R. 249, 51, and 136.

LANDMARKS - The major landmarks in the city are the City Hall, County Courthouse, and the grain silo in the downtown area. These structures are dominant elements in the cityscape and provide a constant reminder of the central city and its agricultural character.



HISTORIC CHARACTER - Although a historical abstract of Live Oak was not available, information from the Florida State Gazeteer and the Florida Times-Union indicate that its history is characterized by three factors: the Live Oak tree, the railroads, and agriculture. Proportedly, the city obtained its name from a single, large live oak tree that grew in a small dell surrounded by towering pines. When these pines were timbered the live oak remained, providing shade for the hunter and the plentiful game that abounded in the area. It became known as "the live oak stand." When the railroad was being built from Jacksonville to Pensacola, it passed by this tree; and a camp

was established which became known as "the Live Oak camp" and later the City of Live Oak. This tree has since died but others have grown in its place, and the name remained.



In addition to the live oak and SCL Railroad, the city was settled in an area of rich soil. The fertility of the soil attracted and made profitable farming which still persists today as a dominant factor in the city's economy.

This historic character of Live Oak is reflected in the older residential areas of the city; but it is the name, the role of the railroads, and the importance of agriculture which contribute to the historic character which is significant to the urban design quality of the city.

Conservation of the urban design quality of the City of Live Oak will not necessarily be greatly affected by the proposed development in the Comprehensive Plan. Although growth is projected, the rate and limits of development are such that the rural design quality can be maintained without interfering with development.

## CONCLUSIONS

Clean air and clean water are the primary natural resources to which conservation measures must be applied for the long term safety, benefit, and quality of life of the citizens of Live Oak. Although generally speaking these resources are subject to deterioration as a result of growth, this is not anticipated to occur if constant awareness of and the intent to conserve these qualities are accommodated within the Comprehensive Plan. All decisions related to the physical growth of the city must incorporate an understanding of the impact on the resources, thereby insuring the preservation and maintenance of environmental quality for future generations.

## INTERGOVERNMENTAL COORDINATION ELEMENT

### INTRODUCTION

The Intergovernmental Coordination Element is an identification of governmental and independent agencies and private companies involved in the Comprehensive Planning process and a plan for the coordination of efforts related to the planning of facilities and the delivery of services to the citizens of Live Oak. The Intergovernmental Coordination Element examines the duties of each agency to determine where coordination appears to be mutually beneficial and necessary and recommends policies related to communication and coordination of activities at all levels of government in order to accomplish the following objectives:

1. Identify the governmental agencies, independent authorities, and private companies (including the facilities or services they are responsible for providing) involved in the planning, construction, operation, and maintenance of facilities and services to the citizens of Live Oak.
2. Identify those service areas where more than one agency or authority has responsibility, and coordination of activities therefore would appear to be mutually beneficial.
3. Present principles and guidelines which the local governments can utilize to coordinate planning activities and recommend policies for the coordination of activities between different governmental agencies, independent authorities, and private companies.
4. Describe the potential impact of the Comprehensive Plan on the development of adjacent governmental jurisdictions.



## METHODOLOGY

The methodology utilized to accomplish the stated objectives was twofold. First, a series of informal meetings with various governmental departments, independent agencies, and private companies were held to identify duties and responsibilities. Secondly, a questionnaire was sent to all agencies believed to have some responsibilities in the planning process, requesting their identification of areas appropriate for, or in need of, coordination.

*How determine?*  
A comprehensive list of all agencies involved in planning activities was compiled, and an Intergovernmental Matrix was prepared to identify areas of overlapping or related responsibilities. This Matrix became the basis for recommending policies relating to intergovernmental participation by the City of Live Oak.

## IDENTIFICATION OF AGENCIES AND GOVERNMENTAL ENTITIES INVOLVED IN PROVIDING FACILITIES AND SERVICES IN LIVE OAK

The following agencies, authorities and/or companies are currently involved in the planning of facilities and/or the delivery of urban services that are affected by the Comprehensive Plan. They are classified as local, county, regional, or state as related to their level of responsibility.

### LOCAL AGENCIES

LIVE OAK CITY COUNCIL - The City Council of Live Oak has administrative offices in City Hall, located on Ohio Avenue in Live Oak. The city provides governmental services including police, fire, storm-water drainage, fresh water, sewer, natural gas, solid waste, streets; and it contributes financially to agencies which provide other services for the benefit of Live Oak businesses and residents.

HOUSING AUTHORITY OF LIVE OAK - The Live Oak Housing Authority is an agency of the city and federal government with offices in Live Oak. Its geographic area of jurisdiction is the city of Live Oak, and it has responsibilities for planning, construction, ownership, and leasing of housing facilities.

LIVE OAK LOCAL PLANNING AGENCY - The City of Live Oak designated the City Administrator and Director of Public Works as the Live Oak Local Planning Agency, as per the Local Government Comprehensive Planning Act, Chapter 163, F.S.

#### COUNTY AGENCIES

SUWANNEE COUNTY BOARD OF COUNTY COMMISSIONERS - The Suwannee County Board of County Commissioners has offices located in Live Oak and provides services or contributes financially to agencies for the provision of services which include solid waste disposal, mosquito control, sheriff's department, streets and highways, transit, library, health care, fire protection, senior citizens, and recreation.

*Source of Authority*

SUWANNEE COUNTY DEVELOPMENT AUTHORITY - The Suwannee County Development Authority is an independent authority having jurisdiction in Suwannee County. It has responsibility for the planning, construction, operation, and ownership of facilities related to recreation and industrial development.

SUWANNEE COUNTY HOSPITAL - The Suwannee County Hospital is a county entity providing medical services to all citizens within the county. The hospital is located in Live Oak.

SUWANNEE COUNTY SCHOOL BOARD - The Suwannee County School Board maintains administrative offices in Live Oak and is responsible for providing educational facilities to the citizens of Live Oak. The School Board is involved in the planning, construction, operation, and maintenance of all school facilities and therefore provides an educational, cultural, and recreational service.

LIVE OAK RECREATION DEPARTMENT - The Live Oak Recreation Department is an independent board supported by both the City of Live Oak and Suwannee County. It provides recreational services to citizens of Live Oak by maintaining and operating a recreation program at a single active park located in Live Oak.

## REGIONAL AGENCIES

NORTH CENTRAL FLORIDA REGIONAL PLANNING COUNCIL - The North Central Florida Regional Planning Council is an independent regional planning agency with offices located in Gainesville, Florida. Its planning activities include land use, streets and highways, transit, potable water, stormwater, sewage, solid waste, schools, libraries, police, industrial development, senior citizens, housing, recreation, electric service, natural gas, and A-95 review responsibilities.

*one of the 6.*

SUWANNEE RIVER WATER MANAGEMENT DISTRICT - The Suwannee River Water Management District is a state agency with regional responsibilities. Its offices are located in White Springs; and it has planning, construction, and permitting responsibilities in areas relating to land use, potable water and stormwater, recreation, and the development and management of ground and surface water resources. It is also responsible for the enforcement of regulations related thereto, including well construction permitting, surface water facilities, and water use.

SUWANNEE VALLEY TRANSIT AUTHORITY - The Suwannee Valley Transit Authority is an independent authority providing mass transit service to Columbia, Hamilton, and Suwannee Counties. Its primary responsibilities include the operation of transit facilities and the provision of these services to residents of the affected counties.

SUWANNEE RIVER ECONOMIC COUNCIL, INC. - The Suwannee River Economic Council, Inc., is a private, nonprofit corporation established to implement numerous federal and state programs in a four-county region which includes Live Oak. Some of these programs affect the Comprehensive Plan: including transit, health care, senior citizens, housing, and recreation. This agency is oriented toward implementation and is therefore involved not only in planning but also the construction, operation, and ownership of facilities and implementation of programs related to these facilities.

*3*

SUWANNEE RIVER REGIONAL LIBRARY - The main branch of the Suwannee River Regional Library System, which serves seven counties, is located in Live Oak. Its primary function is to provide library services to the citizens of these counties and is therefore involved in planning, construction, ownership, and operation of such facilities.

## STATE AGENCIES

DIVISION OF STATE PLANNING - The Division of State Planning is a state agency with offices located in Tallahassee. It has planning responsibilities of a regional and statewide nature as related to all aspects of the Comprehensive Planning process.

DEPARTMENT OF COMMUNITY AFFAIRS - The Department of Community Affairs administers the sub-state 701 planning and management program which provides federal funds for assistance to local governments in planning matters. Also, the Department administers state funds provided to local governments for assistance in complying with the Local Government Comprehensive Planning Act. The Department also provides a range of services (at no cost) to municipalities and counties including the Community Service Trust Fund, the Rural Land Acquisition Trust Fund, and technical assistance in municipal charter revision, annexation, flood insurance, grants and aid assistance, housing, personnel systems, collective bargaining, etc.

DEPARTMENT OF TRANSPORTATION - The Department of Transportation is a state agency located in Lake City, Florida. It has responsibility for planning, construction, operation, and maintenance of, permitting and approval of, streets and highways, transit, and stormwater drainage with respect to those roads under its jurisdiction. Live Oak is within D.O.T. District 2, which includes sixteen counties.

SUWANNEE RIVER SOIL CONSERVATION DISTRICT - The Suwannee River Soil and Water Conservation District is staffed by federal employees but designated to a specific local jurisdiction which includes Suwannee County. It is an organization that provides technical assistance on a volunteer basis to private land owners to promote and assist in utilization and conservation of soil and water resources.

## PRIVATE COMPANIES

FLORIDA POWER AND LIGHT - Florida Power and Light is a private company with responsibility for providing electric power to citizens of Live Oak. It maintains an office in Live Oak for billing, collections, and public relations purposes.

NORTH FLORIDA TELEPHONE COMPANY - North Florida Telephone Company is a private company located in Live Oak, with responsibilities for planning, construction, ownership, and operation of telephone service to the citizens of Live Oak.

## IDENTIFICATION OF FACILITIES AND SERVICES

The identification of responsibility for facilities and services affected by the Comprehensive Plan is presented in the Intergovernmental Matrix illustrated below.

Facility/Service	Live Oak City Council	Housing Authority of Live Oak	Local Planning Agency	Suwannee Bd. of County Commissioners	Suwannee Development Authority	Suwannee County Hospital	Suwannee County School Board	Live Oak Recreation Department	N. Central Fla. Reg. Planning Council	Suwannee River Water Mgmt. District	Suwannee Valley Transit Authority	Suwannee River Economic Council, Inc.	Suwannee River Regional Library	Division of State Planning--State of Fla.	Department of Community Affairs	Dept. of Transportation--State of Fla.	Suwannee River Soil Conservation Dist.	Florida Power and Light	North Florida Telephone Company
Land Use																			
Streets/Highways																			
Potable Water																			
Stormwater																			
Sewage																			
Solid Waste																			
Schools																			
Library																			
Health Care																			
Police																			
Fire																			
Industrial Dev.																			
Senior Citizens																			
Housing																			
Recreation																			
Telephone																			
Electric																			
Gas																			
Mosquito Control																			
Transit																			

FIGURE F-11 INTERGOVERNMENTAL MATRIX

The Intergovernmental Matrix indicates that there does appear to be overlapping responsibilities. In fact, with the exception of telephone service, which is the sole responsibility of the North Florida Telephone Company, and to a great extent the provision of electricity,

mosquito control and natural gas which are responsibilities of a single, governmental entity, all other facilities and services have been identified by at least three agencies as areas in which they have some responsibility. Although these agencies may be involved in the delivery of services from a different perspective, their mutual responsibilities, regardless of whether any duplication exists, indicate a desirability for some coordination of activities.

#### PRINCIPLES AND GUIDELINES TO COORDINATE PLANNING ACTIVITIES

Although more than one agency may be involved in the planning of facilities or delivery of services, it is generally not a duplication of resources since each agency is involved at a different governmental level. In addition, some agencies are only involved in planning, while others may have responsibilities in operation and maintenance. For example, state, regional, county, and local entities all have responsibilities for streets and highways; however, each is responsible separately for different types of roads.

The Regional Planning Agency has certain responsibilities for planning activities only, while other departments have construction, operation, and maintenance responsibilities. Nonetheless, since roads interconnect and transportation planning is integral to construction, it is necessary and desirable to coordinate activities. In similar situations related to land use, health care, senior citizens, and recreation, responsibilities may appear to be overlapping in that the citizens of Live Oak are provided services or facilities by different agencies. Yet, while the specific facilities or services may be totally different and entirely separate from one another, they are closely interrelated.

In most cases, channels of communication between governmental agencies already exist. These are usually informal and dependent on personal relationships rather than a structured procedure based on adopted principles and guidelines and corresponding inter-local agreements. However, this type of coordination effort can be inconsistent and less than comprehensive. To overcome these or any potential problems resulting therefrom, the following principles and guidelines are recommended to coordinate activities.

1. Planning and Research - All current planning activities should be identified and classified into specific areas affecting facilities or the delivery of services to local, county, regional, and state agencies. Schedules of planning activities including beginning and completion dates should be clearly identified and

all agencies affected should likewise notify agencies involved in the specific planning activity. Any agency thereby affected in a negative manner or identifying potential conflicts should immediately contact the appropriate planning agency and advise them of the coordination problem.

2. Transfer of Information - Each agency should identify its precise role and responsibilities within the specific service areas and the impact on planning in Live Oak. The type of data collected and analyzed with reference to each agency should be made available to all other agencies and, to the extent that specific information is appropriate, it should be distributed directly to the agencies on a regular basis. At a minimum, all work related to Comprehensive Planning programs should be cross-circulated. Notices of meetings, agendas, and minutes of planning agencies and governing bodies should be forwarded to all affected departments. The process should be initiated in a formal manner by circulating Elements of the Live Oak Comprehensive Plan.

3. Coordination of Policies - Upon notification, each agency that is involved in similar planning activities and delivery of services should agree to coordinate the adoption of policies that might have intergovernmental effects. Policies should be transferred to all appropriate agencies for informational purposes prior to adoption by any governmental agency in order to provide sufficient time to identify conflicts and/or duplications. Procedures for establishing coordination should be identified, and each agency should agree to participate in a form of joint agreement or resolution for this purpose. A particular liaison person should be designated to represent each agency, and this person should be available to coordinate activities of the affected agencies.

4. Technical Data - In addition to coordinating policies that may have intergovernmental effect, there is also a need to establish effective communication between governmental agencies on a technical level. A technical coordination committee composed of technical people representing each agency should be established

to explore the potential of coordinating related planning and development activities. Such technical matters may be involved in the collection and analysis of planning data, operation and maintenance standards, maintenance and operation techniques, and continuing research into operational efficiency and problem solving.

5. Planning and Development Impact - Separate from the governmental decision-making process is the multitude of private development activities in one jurisdiction that can affect other jurisdictions. The impact of these developments can be identified and monitored in order to evaluate the effect it may have on outlying jurisdictions. Live Oak should prepare standards and procedures for evaluating these activities with respect to the type, size or intensity and location of potential development should be identified and transferred to the affected jurisdictions.

#### POTENTIAL IMPACT OF THE COMPREHENSIVE PLAN ON ADJACENT GOVERNMENTAL JURISDICTIONS

The adjacent governmental jurisdiction upon which the Comprehensive Plan for the City of Live Oak may have an impact is Suwannee County. Although other regional and state agencies are involved or affected by planning activities that may be impacted by the Live Oak Comprehensive Plan, the physical impact of the proposed development will be experienced in Suwannee County alone. Coordination of planning activities for other governmental jurisdictions can therefore take place within the framework of the Comprehensive Plan rather than as an assessment of development activity impacted on the land or activities of other governmental agencies.

The impact of the Live Oak Comprehensive Plan on Suwannee County is defined in terms of Land Use, Circulation, and Community Facilities.

LAND USE - Suwannee County does not currently have county-wide comprehensive zoning. The impact resulting from land use activities in Live Oak is therefore intensified due to the lack of an effective land use control mechanism.

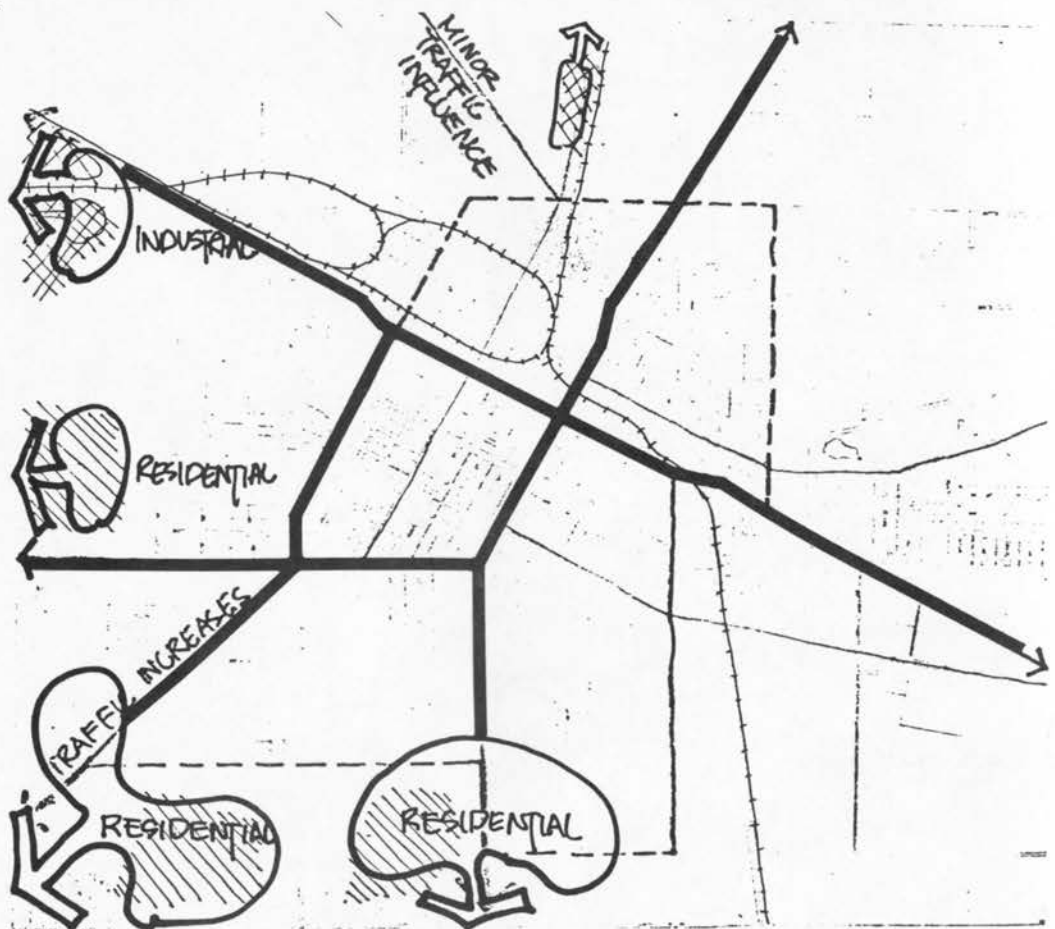
The land use impact resulting from development anticipated in the Live Oak Comprehensive Plan will be minor in terms of commercial activity. The location of the proposed projected commercial uses are well inside the city limits, so that any impact felt will be internal.



Residential activity and pressures for new residential development are already being experienced in Suwannee County adjacent to the city limits of Live Oak. This trend in residential development is anticipated to continue as the City of Live Oak and Suwannee County grow. The greatest impact is most likely to be experienced in the areas proximate to the southern and western city limits and to a lesser extent along the eastern limits.

Areas suitable for industrial activity are identified in the west and northwest sections of the city. This development is adjacent to the city limits' line and it is therefore anticipated that pressures for similar land use will occur on adjoining land in Suwannee County. The availability of rail and highway access will encourage this type of development in the county.

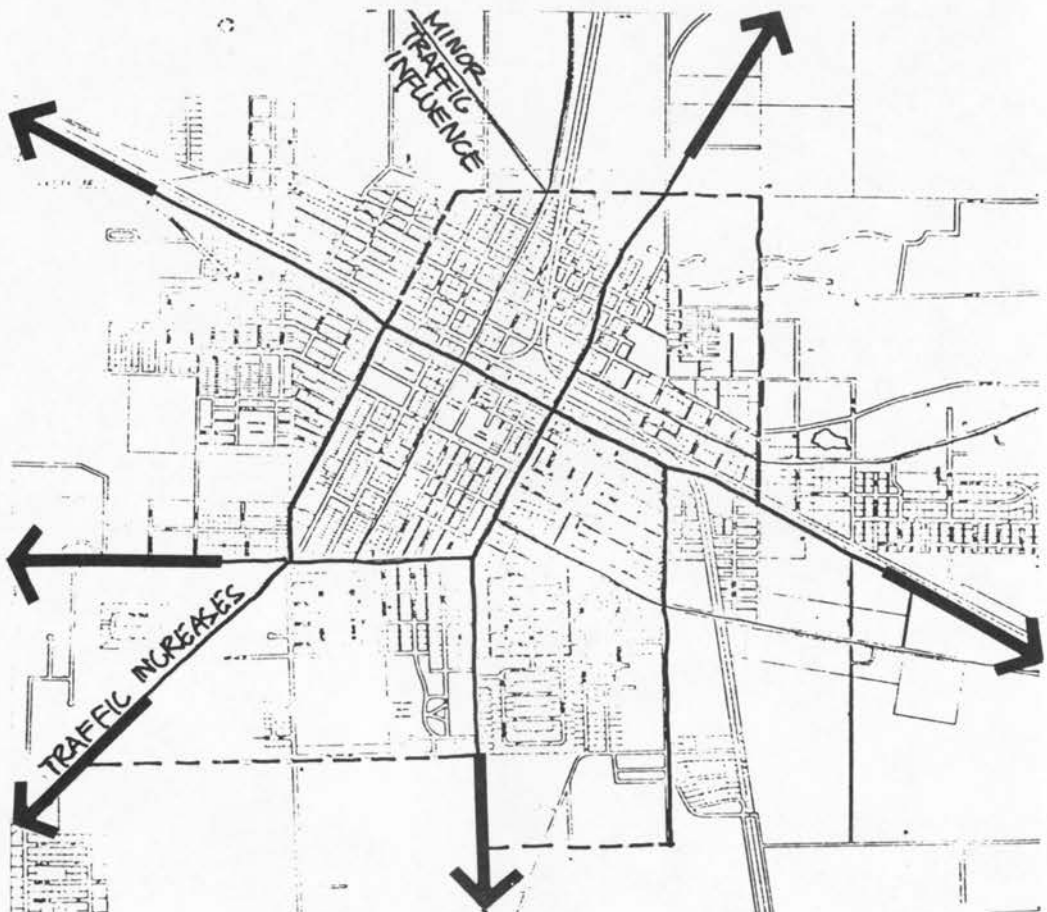
The composite Land Use impact is illustrated on Map M-34 below.



MAP M-34 LAND USE IMPACT

CIRCULATION - The proposed circulation system in the Comprehensive Plan for the City of Live Oak is not anticipated to greatly impact Suwannee County. The primary elements of the plan are the upgrading of certain streets to arterial status, creating an internal arterial loop system. This pattern of streets is proposed to minimize congestion by routing regional and through traffic around the downtown area. This should not have any appreciable effect on the roads in Suwannee County even though the traffic through Live Oak toward Interstate 10 should be improved.

Due to the anticipated development in the southwest sector of the city, it is anticipated that similar growth will occur in that portion of the county. These factors are illustrated on Map M-35 below.



MAP M-35 ANTICIPATED GROWTH

COMMUNITY FACILITIES - The Community Facilities Element of the Comprehensive Plan will have no direct impact on Suwannee County except in the area of recreation. It is assumed that the Live Oak Recreation Board will continue to function as a joint city/county agency and, to the extent that new recreation facilities are developed within the city, the Live Oak Recreation Department would expand its recreation program to include these new facilities. The impact would therefore also be felt in Suwannee County.

Indirectly, the impact resulting from the anticipated development in the City of Live Oak will have some effect on the delivery of services in those areas where cooperation is already existing between the city and county including police/sheriff's department, fire department, solid waste, health care, and transit. The direct quantitative impact on county facilities cannot be determined at this time, however these matters should be monitored and reviewed by a technical coordinating committee.

#### CONCLUSIONS

As Comprehensive Planning becomes increasingly more important as a tool for guiding future growth, and, as additional agencies at the local, county, regional, and state levels become more involved in planning activities, it becomes essential that intergovernmental coordination occur on a formal basis. As resources become more valuable due to their scarcity, all governmental agencies and private companies must cooperate in the planning of facilities and the delivery of services. For these reasons, the adoption of principles and guidelines discussed herein is critical to the implementation of the Live Oak Comprehensive Plan.

## HOUSING ELEMENT

### INTRODUCTION

To many people the primary ingredient of the quality of life is the individual residential unit: its type, cost, condition, and availability.

Whereas the Comprehensive Plan is a general framework to guide all types of development in the community, the Housing Element is a specific analysis of the residential unit and a presentation of need to insure that every citizen, and particularly families of moderate and low income, can live in a safe, decent dwelling in a healthy environment. This involves concern for residential neighborhoods and the individual residential units, both of which are the focus of this Element. First, the Housing Element deals with a subjective evaluation of neighborhoods in Live Oak; and secondly, a more detailed analysis of the housing units is presented.

## METHODOLOGY

The methodologies employed in the preparation of this Element vary with each section. Concerning neighborhoods, the data presented is the result of subjective evaluations based upon field studies undertaken for land use purposes. Methodologies employed in the detailed housing unit analyses are described in each subsection.

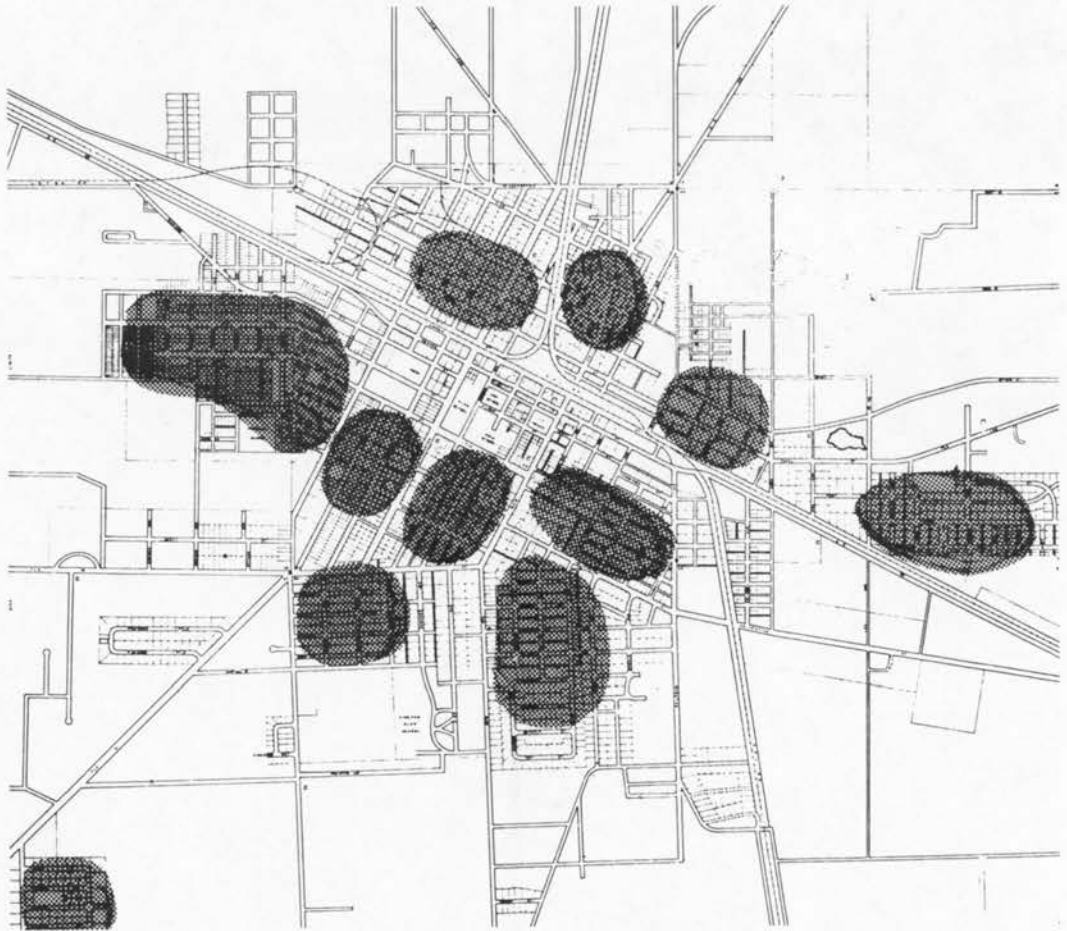
## RESIDENTIAL NEIGHBORHOODS

NEIGHBORHOOD DEFINITION - A neighborhood is defined as a geographic area within which there is a similarity of land uses (residential), type, and scale of activity that creates a homogeneous atmosphere. A neighborhood can be entered into and, to the extent that the edges of the neighborhood are well defined, a person can easily perceive its boundaries. The delineation of a neighborhood is visual, perceptual, and psychological and defines a family's primary living pattern.

In Live Oak, certain neighborhoods are well defined, others are not. Certain neighborhoods are attractive, desirable places to live, others are unsafe and people live there because there is no other choice. Some neighborhoods are stable, others are deteriorating. These and other factors which influence the quality of the neighborhood environment are discussed on the following pages.

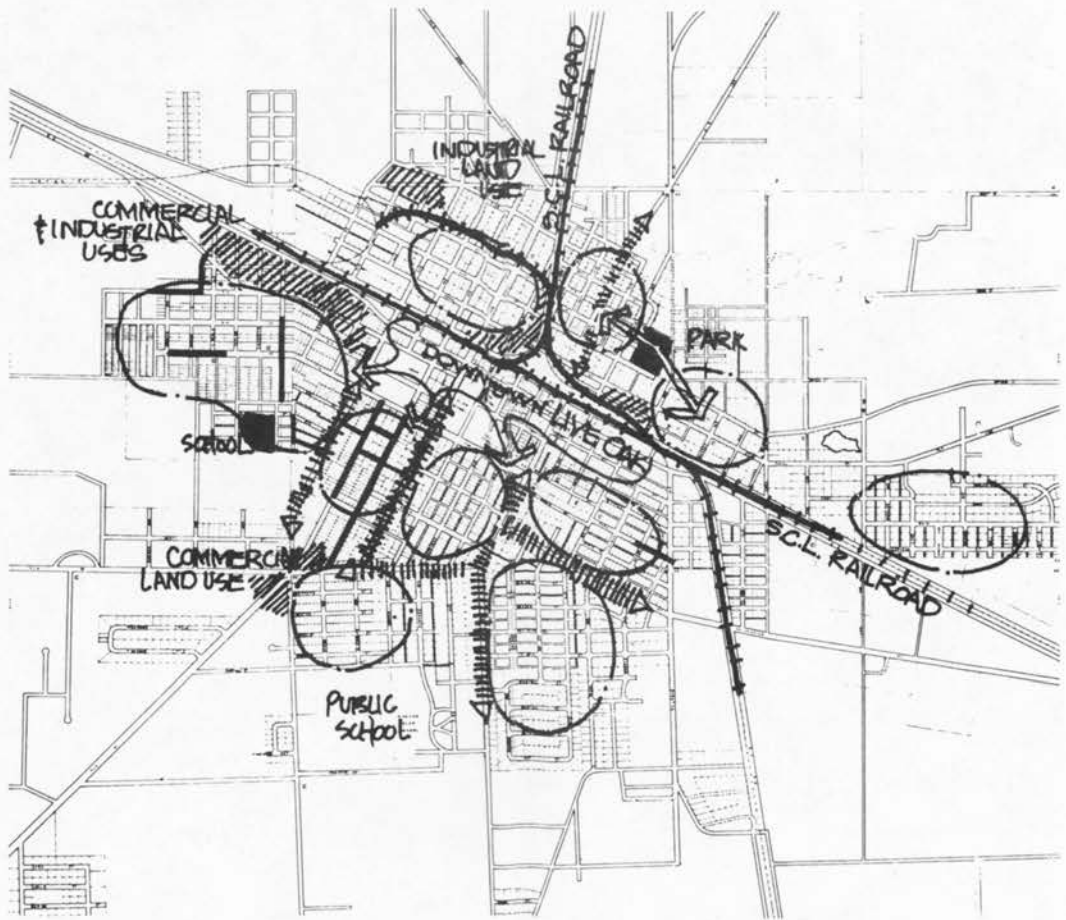
NEIGHBORHOOD DELINEATION - Although a detailed neighborhood analysis was not undertaken and is not a part of the Housing Element, a general delineation of neighborhoods, made on the basis of field work undertaken for Land Use and Structural Condition surveys is illustrated on Map M-36 on the following page.

NEIGHBORHOOD INFLUENCES - Many factors affect or influence the quality of environment in a particular neighborhood. Certain factors such as the existence of parks, schools, paved streets and utilities have a positive influence affecting residential values, neighborhood pride, and stability. Other factors such as heavy traffic, incompatible land uses, deteriorating streets, inadequate utilities, and dilapidated houses have a negative effect and are significant influences contributing to neighborhood degradation. These factors are illustrated on Map M-37.



MAP M-36 GENERALIZED NEIGHBORHOOD DELINEATION

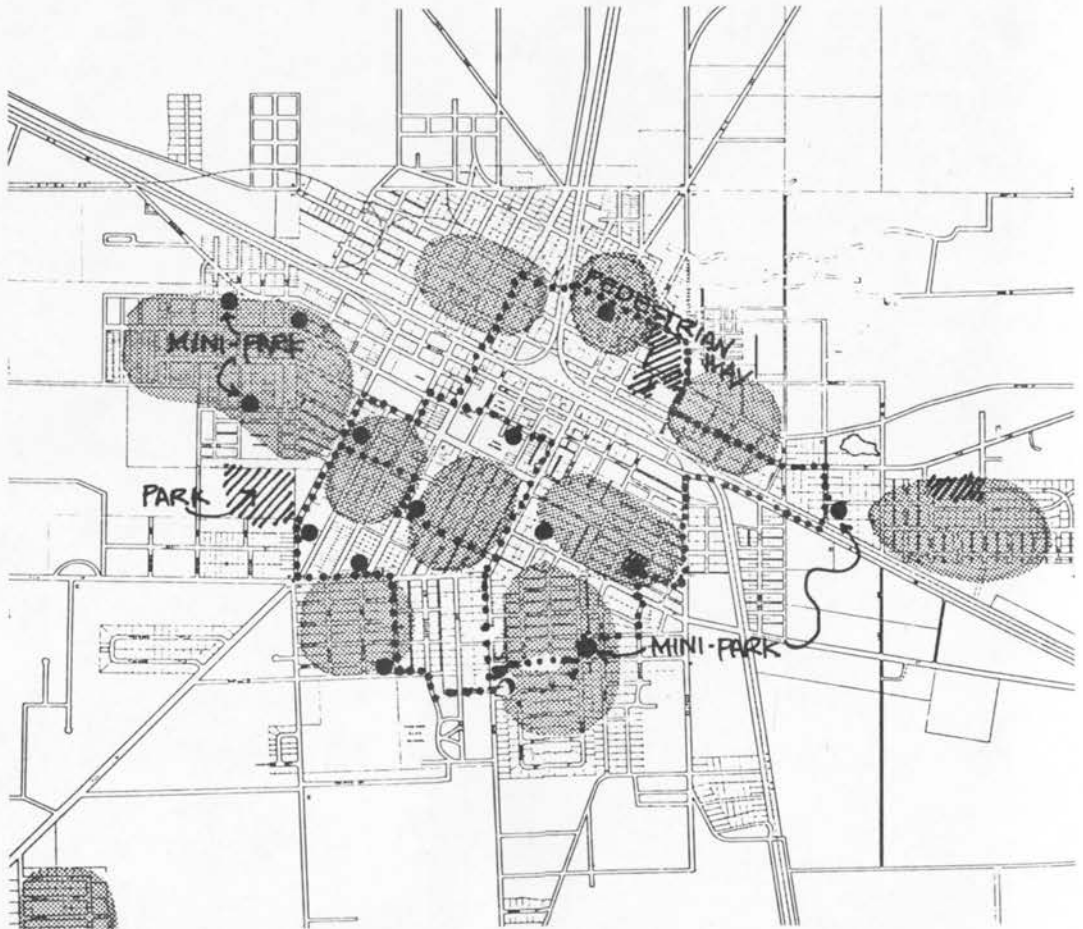
Map M-37, on the following page, illustrates the Neighborhood Influences discussed on the previous page.



MAP M-37 FACTORS AFFECTING NEIGHBORHOOD QUALITY

The city cannot legislate that a person must maintain or improve his private property beyond minimum health and safety standards; however, capital improvements and public policy related to rehabilitation, roads, utilities, parks, etc., can stabilize a neighborhood, instill a sense of pride, and stimulate a self-improvement program.

Incompatible land uses cannot always be removed, but they can be buffered and zoning can be enforced to arrest the spread of and/or phase out non-conforming uses. Traffic can be rerouted around residential areas. Utility systems can be improved, and roads can be paved to provide economic stability. Parks and community facilities can be constructed to enhance neighborhoods and contribute significantly to its desirability as a place to live. These factors are design considerations that have been incorporated into the Land Use, Circulation, and Community Facilities Elements of the Comprehensive Plan. The Recreation and Open Space segments of these Elements, as related specifically to neighborhood stability and improvements, are illustrated on Map M-38 below.



MAP M-38 RECREATION AND OPEN SPACE IN NEIGHBORHOODS



The specific Plan recommendations related to land use, circulation, and public facilities as presented in the Capital Improvement Element will require a commitment of public policy oriented toward neighborhood improvement and stabilization. Equally important to the quality of neighborhoods in a general sense and, more importantly, to any specific family is the individual residential unit. An analysis of these considerations follows.

## RESIDENTIAL UNITS

### INTRODUCTION

From 1970 to July, 1976 approximately 185 new residences were constructed within the city limits. During that same time period, the population grew from 6,830 to 7,304, yielding an increase of 474 persons. Utilizing a factor of 3.12 persons per family (1970 Census), this indicates the formation or in-migration of approximately 152 new families. It would therefore appear that more than adequate new housing is being constructed to meet housing needs. A further examination of the type and cost of housing indicates that this analysis is superficial and not an accurate presentation of housing conditions in Live Oak.

### METHODOLOGY

The Housing Element departs from the general nature of the Land Use, Circulation, and Community Facilities Elements and deals with the specific problems of the housing market. An analysis of this market is undertaken to determine the types and costs of units available, the condition of the present stock of housing, and whether any deficiencies exist. Goals and objectives to overcome deficiencies are then formulated, including programs to accomplish, and means to evaluate, the accomplishment of the stated goals and objectives. More specifically, the Housing Element is divided into four components.

1. Housing Market Analysis
2. Statement of Goals and Objectives
3. Statement of Proposed Programs
4. Statement of Program Evaluation

The Housing Market Analysis investigates housing supply and demand, including an inventory of existing public and private housing. The total number of units is calculated and classified by occupancy, location, and condition. Recent housing trends are examined and an estimate of the current unmet housing needs is made, identifying assisted housing units, unassisted housing units, units for elderly persons, handicapped and large-size households, and specifically those people of displaced households.

Next, an analysis of the housing data explores the relationship of the existing housing inventory to other elements of the community, including public services, employment programs, etc.

Lastly, projections of the housing requirements for five and ten-year periods are made, with the first five years projected annually. Projected housing requirements stratified by housing type and cost are also included.

The second component of the Housing Element is a Statement of Goals and Objectives. The Goals present general statements of purpose related to the overall long-range solutions to housing problems. The Objectives are short-range directions or action programs to accomplish the long-range goals.

The third component is the Statement of Proposed Housing Programs, designed to accomplish the goals and objectives. These programs are based upon existing conditions and attitudes and involve agencies on an area-wide basis.

The fourth component of the Housing Element is the Statement of Program Evaluation, which includes procedures and criteria for evaluating program successes.

## HOUSING MARKET ANALYSIS

Information describing the housing supply and demand was obtained from the 1970 Census of Housing, field studies conducted by The Office of Mark Gluckman in October, 1976, information provided by the Live Oak Housing Authority, and special consultants to the city and the county.

### HOUSING SUPPLY AND DEMAND

TOTAL UNITS - The 1970 Census reported that there were 2,362 total housing units in the City of Live Oak. Information obtained from building permits and new water and sewer connections indicate that an additional 186 dwelling units were constructed within the city from January, 1970 to September, 1976, and permits for 320 mobile homes were issued. This comprises a total housing stock in Live Oak of 2,936.

VACANT/OCCUPIED UNITS - The 1970 Census of Housing indicated that Live Oak had a vacancy rate of 7.6%. Based upon the housing stock in Live Oak in September, 1976 (2,936) and the number of families estimated to be living in the city (7,304 - Bureau of Economic and Business Research), it is estimated that approximately 207 units, or 8% (2,341 families), are vacant.

TYPES OF HOUSING - Of the 2,936 total residential units in the City of Live Oak, it is identified that there are 2,324 single-family, 184 multi-family, and 428 mobile homes. More specifically, the distribution of housing by type in Live Oak is presented in Table T-31, presented below.

TABLE T-31 HOUSING TYPES IN LIVE OAK

	<u>NUMBER OF HOUSING UNITS</u>	<u>PERCENT OF TOTAL HOUSING</u>
Single-Family Dwellings	2,324	80
Multi-Family Dwellings	184	6
Trailers and Mobile Homes	428	14
T O T A L	2,936	100

SOURCE: PUBLIC WORKS DEPARTMENT, LIVE OAK

LOCATION OF HOUSING - For the purpose of stratifying the housing stock in the City of Live Oak by location, it is most meaningful to divide the city into quadrants as illustrated on Map M-37. Quadrant 1 is the northwest sector of the city, bounded by the city limits' lines on the north and west and on the east by the SCL Railroad tracks. Quadrant 2 is the northeast sector of the city, bounded by the city limits' lines on the north and east and on the west by the SCL Railroad tracks. Quadrant 3 is the southeast sector of the city, with the east/south boundary being the city limits and the north being the SCL Railroad tracks and the western boundary being Ohio Avenue. Quadrant 4 is the southwest sector of the city, bounded by the city limits' lines on the west and south, the SCL Railroad tracks on the north, and Ohio Avenue on the east.

The distribution of housing units stratified by location is presented in Table T-32 below.

TABLE T-32 HOUSING UNITS BY LOCATION

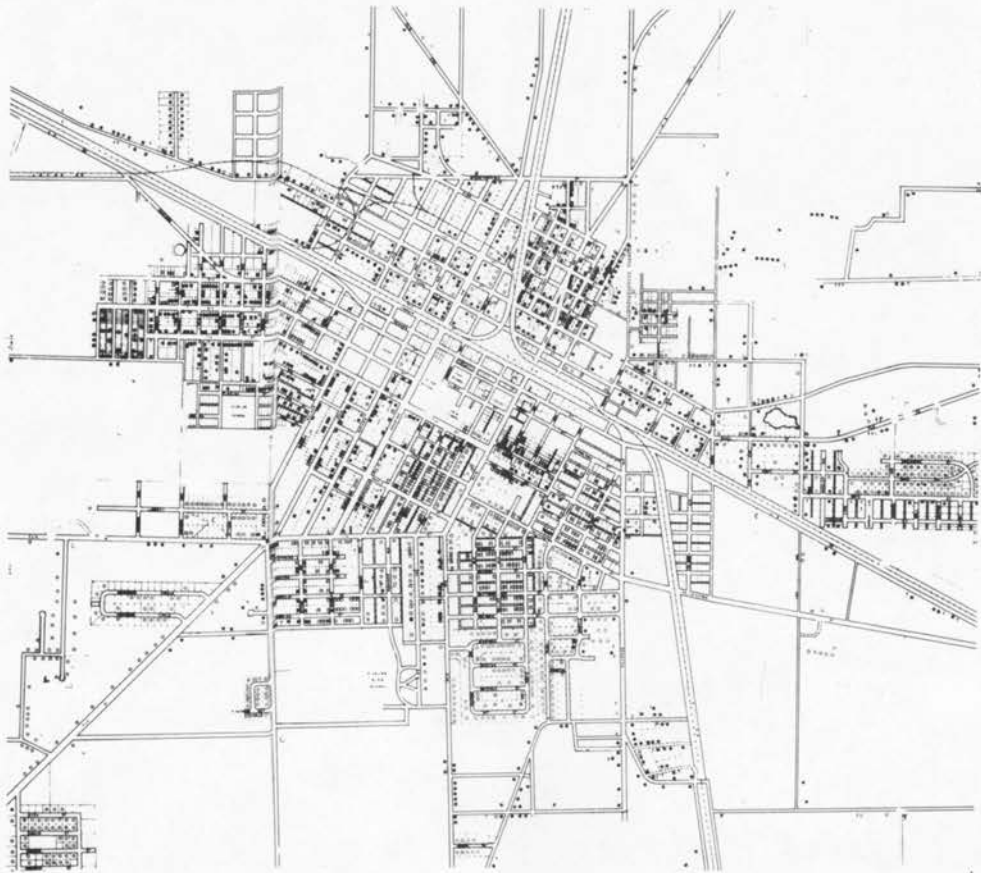
	<u>SINGLE-FAMILY</u>	<u>MULTI-FAMILY</u>	<u>MOBILE HOMES</u>
Quadrant 1	224	51	214
Quadrant 2	454	76	105
Quadrant 3	673	57	72
Quadrant 4	973	--	37
T O T A L	2324	184	428

SOURCE: THE OFFICE OF MARK GLUCKMAN

CONDITION OF HOUSING - The structural conditions of housing units were evaluated on the basis of a windshield survey that categorized the housing according to visual characteristics as standard, deteriorating, or dilapidated, as described below:

- A. Standard Condition - Structure with no or only slight defects which can be repaired by an average homeowner.
- B. Deteriorating Condition - Structures having one or two defects that denote prolonged neglect and cannot generally be repaired by the average homeowner.
- C. Dilapidated Condition - Structures having critical defects that offer a lack of adequate housing and are beyond any attempts at rehabilitation.

Field surveys indicated that approximately 581 structures were in a dilapidated condition, or 23% of the housing stock. Approximately 18% of the housing is in a deteriorating condition, while 59% is considered to be in a standard condition. This data is illustrated on Map M-6 presented below.



MAP M-6 STRUCTURAL CONDITIONS OF RESIDENCES <sup>1</sup>

<sup>1</sup>Map reduction prohibits illustration of Legend. Consult large scale maps for accurate illustration of Structural Conditions.

In addition to the exterior of housing units, another indicator of the condition of housing is the type of facilities inside the unit. Information relating to plumbing facilities and general housing characteristics were obtained from the 1970 Census and presented in Table T-33 below and Table T-34 on the following page.

TABLE T-33 HOUSING CONDITION BY PLUMBING CHARACTERISTICS

<u>PLUMBING FACILITIES</u>	<u>TOTAL</u>	<u>PERCENT OF TOTAL</u>
With all facilities	1815	77
Lacking some or all facilities	547	23
Lacking only hot water	196	8
Lacking other plumbing facilities	351	15
<u>PIPED WATER IN STRUCTURE</u>		
Hot and cold	1868	79
Cold only	334	14
None	160	7
<u>FLUSH TOILET</u>		
For exclusive use of household	2089	88
Also used by another household	6	.3
None	267	11
<u>BATHTUB OR SHOWER</u>		
For exclusive use of household	2031	86
Also used by another household	7	.3
None	324	14
<u>COMPLETE KITCHEN FACILITIES</u>		
For exclusive use of household	2005	85
Also used by another household	1	.04
No complete kitchen facilities	356	15

SOURCE: 1970 CENSUS OF HOUSING

TABLE T-34 HOUSING CHARACTERISTICS FOR LIVE OAK

<u>COMPLETE BATHROOMS</u>	<u>TOTAL</u>	<u>PERCENT OF TOTAL</u>
One	1273	54
One and one-half	157	7
Two or more	363	15
None or used by another household	569	24
<u>SOURCE OF WATER</u>		
Public System or Private Company	2210	94
Individual Well	124	5
Other	28	1
<u>SEWAGE DISPOSAL</u>		
Public Sewer	1309	55
Septic Tank or Cesspool	773	33
Other	280	12

SOURCE: 1970 CENSUS OF HOUSING

In addition to housing age and plumbing characteristics, the number of persons per room is another indication of housing condition. According to 1970 Census figures, the total population in Live Oak's 2182 occupied structures was approximately 6,813, giving each housing unit an average of 3.1 persons.

TABLE T-35 PERSONS PER ROOM - LIVE OAK

	<u>TOTAL</u>	<u>PERCENT</u>	<u>STATE %</u>
1.00 or less (standard)	1,963	90	91
1.01 to 1.5 (substandard)	137	6	6
1.51 or more (intolerable)	82	4	3

SOURCE: 1970 CENSUS OF HOUSING

Of the 2,182 occupied structures, 90 percent were standard regarding persons per room. 6 percent were substandard, and the remaining 4 percent had 1.51 or more persons per room and were judged intolerable.

These figures, of course, are general and based on the overall numbers rather than specific cases. However, in such a general view, Live Oak compares favorably with state percentages of persons per room. As can be seen on Table T-35, Live Oak has only one percent more intolerable units than the state average.

#### HOUSING SUPPLY AND DEMAND - PUBLIC

This portion of the Housing Element deals with the current inventory of public housing units.

TOTAL UNITS - Information provided by the Live Oak Housing Authority indicated that there are presently 104 public housing units. Of these units, 54 are currently owned by the Authority, with the remaining 50 units being leased from Lawson Construction Company.

OCCUPIED UNITS - The occupancy rate of public housing facilities is very high. Currently, of the 104 units available, 103 are occupied.

VACANT UNITS - Presently only one vacancy exists in the public housing units. This unit is vacant due to damage, and the unit is currently under repair.

NUMBER OF UNITS BY TYPE - The distribution of units is as follows: 18 one-bedroom units, 46 two-bedroom units, 30 three-bedroom units, and 10 four-bedroom units. (See Table T-36.) The 54-unit complex owned by the Authority has 8 one-bedroom units, 18 two-bedroom units, 22 three-bedroom units, and 6 four-bedroom units. The remaining 50 units, which the Authority rents, are distributed as follows: 10 one-bedroom units, 38 two-bedroom units, 8 three-bedroom units, and 4 four-bedroom units.

TABLE T-36 PUBLIC HOUSING UNIT BREAKDOWN

<u>NO. OF UNITS</u>	<u>TYPE</u>	<u>PERCENT OF TOTAL UNITS</u>
18	One bedroom	17
46	Two bedroom	44
30	Three bedroom	29
10	Four bedroom	10

SOURCE: LIVE OAK HOUSING AUTHORITY



CONDITION OF PUBLIC HOUSING - All of the public housing now available in Live Oak was judged to be in sound condition during the windshield survey conducted by The Office of Mark Gluckman in 1976. As mentioned earlier, one unit is not currently occupied due to structural defects. This unit is under repair by the Housing Authority. In addition to sound structural condition, all of the units in Live Oak are provided with plumbing facilities, piped water, flush toilets, bathtub or shower, and kitchen facilities.

#### RECENT HOUSING TRENDS

AGE OF HOUSING - According to the 1970 Census, approximately 54 percent of Live Oak's housing was constructed before 1949, while 32 percent of the housing stock was built in 1939 or earlier. This is further illustrated in Table T-37.

TABLE T-37 HOUSING CHARACTERISTICS ACCORDING TO AGE

<u>YEAR STRUCTURE BUILT</u>	<u>NUMBER</u>	<u>PERCENTAGE OF TOTAL</u>
1969 - March, 1970	39	2
1965 - 1968	153	6
1960 - 1964	343	15
1950 - 1959	536	23
1940 - 1949	517	22
1939 or earlier	774	32

SOURCE: 1970 CENSUS OF HOUSING

As listed in the preceding table, only 8 percent of Live Oak's 192 housing units have been constructed between 1965 and March, 1970. From March, 1970 through September, 1976 an additional 186 residential building permits were issued, indicating a new housing stock of 378 houses. Thus, approximately 15% of the houses in Live Oak have been constructed since 1965.

RATE OF NEW RESIDENTIAL CONSTRUCTION - Since 1970, the biggest residential construction year in Live Oak was 1971, when forty-eight residential building permits were issued. The average gain in housing has been approximately 26 houses since 1970, as indicated in Table T-38.

TABLE T-38 NEW RESIDENTIAL CONSTRUCTION IN LIVE OAK 1970 - 1976

<u>YEAR</u>	<u>NUMBER OF BUILDING PERMITS ISSUED</u>
1970	11
1971	48
1972	23
1973	25
1974	34
1975	25
1976	20
Total Permits Jan. 1, 1970 - Sept. 6, 1976	<hr/> 186

SOURCE: DEPARTMENT OF PUBLIC WORKS, LIVE OAK

Conversations with active builders in Live Oak indicated that from September, 1976 to June, 1977 more houses were being built than during any other similar time period. Live Oak is currently experiencing a boom in new single-family construction in the private sector. This trend will most likely continue as long as the economy continues to improve.

COSTS OF CONSTRUCTION - Construction costs in Live Oak have been rising steadily since 1970. No detailed cost information was available, but based on conversations with builders it is estimated that current single-family houses are selling in the \$25,000 - \$30,000 range, or \$20.00 to \$25.00 per square foot excluding land costs.

TYPE OF RESIDENTIAL CONSTRUCTION - New residential units have been of two types: single-family detached houses, and mobile homes. Single-family homes average 1,100 to 1,600 square feet including two to four bedrooms, one to two bathrooms, with carport or garage. There was a definite trend toward mobile homes, as evidenced by the yearly increases from 1970 to 1973 and 1974, as illustrated in Table T-39. The reduction in the number of permits from 1974 may be reversal of this trend.

TABLE T-39 MOBILE HOMES IN LIVE OAK

<u>YEAR</u>	<u>NUMBER</u>
1970	21
1971	63
1972	55
1973	69
1974	59
1975	19
1976	29

SOURCE: PUBLIC WORKS DEPARTMENT, LIVE OAK

OCCUPANCY OF HOUSES - 1970 Census figures indicate that 72 percent of Live Oak's housing is owner-occupied (vacancy taken into consideration). 28 percent of the housing is occupied on a rental basis. Since the dominant residential construction type has been single-family and new, single-family homes are not normally rented, it is assumed that the rate of owner-occupied dwellings has increased. This trend will continue until financial conditions for multi-family dwelling construction improve. Current information from the Building Department concerning new construction and demolition of old structures indicates a current vacancy rate of 8%.

#### UNMET HOUSING NEEDS

The current unmet housing needs are estimated by first examining the annual family income (1970) to determine the number of families in different income brackets, estimating the improvement in family income status for 1970 - 1976 and the income of new families to determine the size of different segments of the housing market by cost of housing based upon 25% - 35% of annual income. Secondly, the value of the current housing stock is estimated, based upon 1970 value data and estimates of new housing construction since that date. Thirdly, comparisons are made between the number of families in each segment of the market and the number of housing units available in each segment to determine numbers of deficient or surplus units. Finally, housing needs by type of housing are estimated, based upon dollar amounts, trends, and consumer preferences.

ESTIMATED ANNUAL FAMILY INCOME - Table T-40 presents Census data on the annual family incomes for 1970 and estimates for 1976. The 1976 estimates are based upon the reported increase in per capita money for Live Oak citizens from \$2,850 in 1969 to \$4,455 in 1974, or an increase of 56.3%. (Source: Updated Census Report--Estimated Per Capita Money Income.) Since the per capita money increased 56.3% from 1969 to 1974, it is assumed that family incomes improved a similar percentage (including inflation and changes due to the economy through 1976). In addition to the upward improvement of family incomes, it is assumed that the new families, 81% of which are the result of in-migration (Bureau of Economic and Business Research, Gainesville, Florida), are distributed in the \$5,000 - \$15,000 income ranges.

TABLE T-40 ANNUAL FAMILY INCOMES

<u>Income</u>	<u>1970</u>	<u>% of Total</u>	<u>1976</u>	<u>% of Total</u>
Less than 1,000	83	4.7	50	2.6
1,000 - 1,999	162	9.2	114	6.0
2,000 - 2,999	164	6.5	81	4.2
3,000 - 3,999	134	7.6	92	4.8
4,000 - 4,999	113	6.4	99	5.2
5,000 - 5,999	131	7.4	110	5.8
6,000 - 6,999	135	7.7	96	5.0
7,000 - 7,999	160	9.0	97	5.1
8,000 - 8,999	99	5.6	106	5.5
9,000 - 9,999	90	5.1	107	5.6
10,000 - 11,999	167	9.5	211	11.0
12,000 - 14,999	135	7.7	226	11.8
15,000 - 24,999	143	8.1	351	18.4
25,000 - 49,999	24	1.4	135	7.0
50,000 or more	20	1.1	37	1.9

ESTIMATE OF AFFORDABLE HOUSING - It is generally accepted that 25% is a reasonable proportion of a household income to be spent on housing. Although households in the lower income brackets tend to spend a greater percentage of their income on housing, for purposes of estimating the affordable unit a 25% factor is utilized for all income brackets. Table T-41 presents the numbers of families in different income brackets and figures for the related affordable housing, based upon a 25% factor.

TABLE T-41 ANNUAL FAMILY INCOME AND AFFORDABLE HOUSING UNITS 1976

<u>INCOME BRACKET</u>	<u>AFFORDABLE RENTAL PAYMENT</u>	<u>AFFORDABLE PURCHASE PRICE</u>	<u># FAMILIES</u>
Less than 5,000	104	10,000	436
5,000 - 9,999	104 - 208	10,000 - 20,000	516
10,000 - 14,999	208 - 313	20,000 - 30,000	437
15,000 - 24,999	N/A*	30,000 - 50,000	351
25,000 - 49,999	N/A*	50,000 - 100,000	135
50,000 and over	N/A*	over 100,000	37

\*Not Applicable

SOURCE: THE OFFICE OF MARK GLUCKMAN

COST OF HOUSING - The 1970 Census indicates that the median value of housing units exclusive of mobile homes is \$7,900 and the median rental cost is \$43.00. Table T-42 and T-43 present the breakdown of housing unit values as reported in the 1970 Census.

TABLE T-42 VALUE OF HOMES

<u>VALUE</u>	<u># SPECIFIED OWNER OCCUPIED</u>	<u># WITH ALL PLUMBING FACILITIES</u>
Less than 5,000	366	191
5,000 - 9,999	448	384
10,000 - 14,999	280	274
15,000 - 19,999	127	119
20,000 - 24,999	56	55
25,000 - 34,999	30	50
35,000 or more	22	--
T O T A L	1,329	1,073

TABLE T-43 COST OF RENTAL UNITS

<u>RENTAL COST</u>	<u># SPECIFIED RENTER OCCUPIED</u>	<u># WITH ALL PLUMBING FACILITIES</u>
Less than \$30	150	---
30 - 39	88	111
40 - 59	165	152
60 - 79	80	78
80 - 99	17	16
100 - 149	16	15
150 or more	---	---
No cash rent	87	41
<b>T O T A L</b>	<b>603</b>	<b>413</b>

In order to more directly determine the breakdown of available housing units in Live Oak, data for the urban portion of Suwannee County was utilized in calculating the percentage of houses in each value range, as presented in Table T-44. These percentages were then applied to the current housing stock in Live Oak to determine available units by value, as illustrated in Table T-45 on the following page.

TABLE T-44 VALUE OF HOUSING UNITS IN SUWANNEE COUNTY

<u>VALUE</u>	<u>NUMBER OF UNITS</u>	<u>RURAL</u>	<u>URBAN<sup>1</sup></u>	<u>% OF TOTAL</u>
Less than 5,000	616	224	392	29.6
5,000 - 9,999	555	182	373	28.1
10,000 - 14,999	415	95	320	24.1
15,000 - 19,999	156	34	122	9.3
20,000 - 24,999	84	26	58	4.5
25,000 - 34,999	39	5	34	2.6
35,000 or more	43	19	24	1.8
<b>T O T A L</b>	<b>1908<sup>2</sup></b>	<b>585</b>	<b>1323</b>	<b>100.0</b>

<sup>1</sup>Calculations of The Office of Mark Gluckman  
<sup>2</sup>Owner occupied only

SOURCE: 1970 CENSUS OF HOUSING

TABLE T-45 VALUE OF HOUSING UNITS IN LIVE OAK<sup>1</sup>

<u>VALUE</u>	<u>1970</u>	<u>1976</u>
Less than 5,000	700	700
5,000 - 9,999	664	664
10,000 - 14,999	569	569
15,000 - 19,999	220	220
20,000 - 24,999	106	190 <sup>2</sup>
25,000 - 34,999	61	145 <sup>2</sup>
35,000 or more	43	51 <sup>2</sup>
T O T A L	2362	2539

<sup>1</sup>Exclusive of mobile homes since 1970

<sup>2</sup>The assumption is made that 90% of new houses (186) in Live Oak from 1970 - 1976 were valued between 20,000 and 35,000 and 10% were over 35,000.

SOURCE: THE OFFICE OF MARK GLUCKMAN

NEED FOR HOUSING - By comparing the number of families in each group to the number of residential units available to each group by income classification as illustrated in Table T-46, it would appear that the greatest need for housing is in the middle and upper-middle income ranges. Whereas this is believed to be partially true, more important is the substandard condition of homes for the moderate and low-income families, which is not identified in Table T-46. Inflation and renter-occupied housing are not accounted for in Table T-46, which presents an unrealistic picture of the Live Oak housing market.

TABLE T-46 COMPARISON OF AVAILABLE HOUSING WITH LIVE OAK MARKET

<u>Rental Cost</u>	<u># Units Available</u>	<u># Families Can Afford</u>
\$149 and under	587	436
\$150 and above	16	1,476 <sup>1</sup>
<u>House Value</u>		
\$10,000 or less	1,364	436
10,000 - 20,000	789	516
20,000 - 35,000	335	527
over 35,000	51	433

<sup>1</sup>Statistical Data Only

## UNMET NEEDS

UNMET HOUSING NEEDS : ASSISTED - In 1970, approximately 27 percent of the families in Live Oak had incomes below the poverty level. As mentioned earlier, the Housing Authority in Live Oak operates 104 units of assisted housing. Currently the Authority has on file applications indicating a need for 55 additional units. These 55 units needed are composed of the following:

- 11 one-bedroom units
- 26 two-bedroom units
- 16 three-bedroom units
- 2 four-bedroom units

It seems to be safe to assume that these needed units only indicate part of the need for new public housing units in Live Oak.

## ANALYSIS OF HOUSING DATA

IMPACT FROM ADJACENT COMMUNITIES - Live Oak is the county seat and population center of Suwannee County. The portion of the county which surrounds the city is primarily rural and absent of any neighboring communities that have a significant effect on the market within the city. To a certain extent there has been a trend for new residential development to take place adjacent to the city but outside its limits and therefore to impact the county. This trend, which relates more to middle and upper-income housing, is expected to continue.

Another trend is characterized by families leaving the southern, more-populated areas of the state, desiring a new, more self-sufficient life style. In these cases, families have purchased small tracts (five to ten acres) of land for farming, purchased a mobile home, and attempt to "live off the land." It is noted that five acres of land is insufficient for a feasible farm operation, so the future impact of this trend is not known, nor is the number of individuals comprising this group. The impact on the housing market in the low-middle and low income segments could be affected if these families attempt to move into the city.

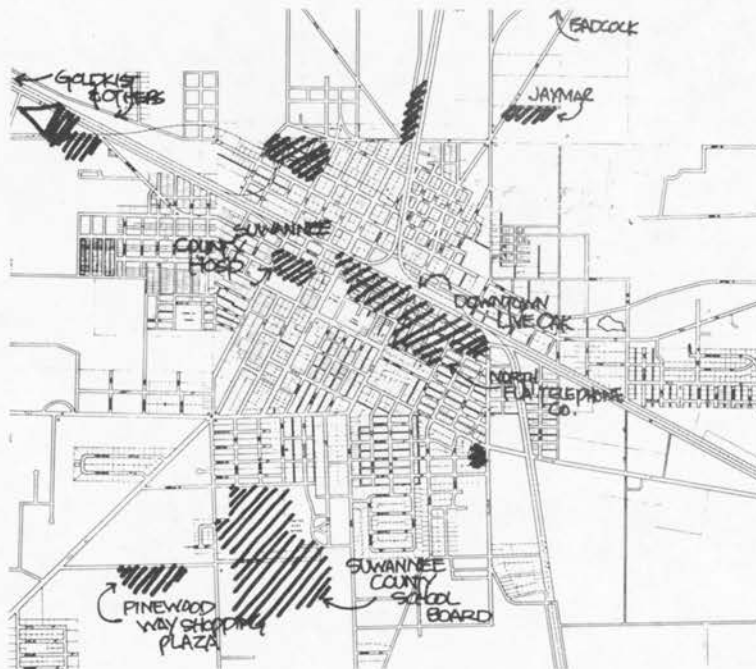


PUBLIC SERVICES AND FACILITIES - A municipal freshwater and wastewater system provides potable water and sewer service to most of the developed portion of the city. Certain older neighborhoods lack distribution and collection facilities; however plans are underway to expand lines into these areas and to upgrade services, as well as to accommodate future growth.

The city is bisected by several state highways which provide excellent regional access from all sections of the city. Paved arterial and collector streets provide access into and from residential areas to the other areas of the city. However, certain neighborhood streets are unpaved and contribute to neighborhood and housing deterioration; these streets and affected neighborhoods are illustrated on Map M-37.

Police, fire, and other community facilities are provided by either the city, county, independent authority, or joint combination of others and are available and accessible to all residential areas. Recreation facilities are limited to school playgrounds and one developed park on Fir Street. This park provides an extensive active recreation program and is widely utilized.

LOCATION OF EMPLOYMENT - Employment locations are scattered throughout the city, Suwannee County, and adjacent counties. Major employers within the city limits are located in the downtown district, school complex, and industrial areas in the northwest and western sectors of the city, as illustrated on Map M-39 below.



MAP M-39 LOCATION OF EMPLOYMENT

LOCAL IMPROVEMENT PROGRAMS - The City of Live Oak is not currently involved in any housing improvement programs. The city does have a Housing Code Enforcement Ordinance, but it is not being implemented at this time. The Housing Authority of the City of Live Oak, created by ordinance in 1951, has been active at times in the construction and leasing of new public housing; however, the Authority is not currently active due to the lack of interest by private contractors in participating in housing programs. The Housing Authority is not active and does not anticipate becoming active in any Code enforcement or specific home improvement programs.

The Housing Division of the Suwannee River Economic Development Council, Inc., is currently administering two housing improvement programs. The Weatherizing Program provides grants up to \$250.00 (for materials; labor is provided by the Suwannee River Economic Development Council, Inc.) for the weatherizing of homes. This includes repair of doors, windows, roofs, etc. The second program is a low-interest loan which can be applied to any repairs. The impact of these programs is dependent on outside governmental funding and is therefore uncertain. Based upon the present appropriations, it is anticipated that approximately 150 homes per year (in a four-county region) will be affected. The specific future impact on Live Oak cannot be isolated from the region due to the selection process of grant recipients.

PROJECTION OF HOUSING REQUIREMENTS - The methodology for projecting future housing requirements is similar to that for estimating current unmet needs. First, based upon population, the number of households (3.0 to 3.12 people per household) is projected on an annual basis for the first five years, then on a five-year projection to 1987. Populations by year are interpolated by equal average annual increments. To these household projections, an annual replacement of 45 dilapidated houses per year and a 7% vacancy factor are added, comprising a total yearly housing need.

TABLE T-47 FUTURE HOUSING REQUIREMENTS

<u>YEAR</u>	<u>POPULATION</u>	<u># FAMILIES</u>	<u>TOTAL</u>	<u># NEEDED</u>
1976	7304	----	2548	---
1977	7335	2350	2515	---
1978	7435	2383	2595	47
1979	7540	2417	2631	36
1980	7650	2452	2669	38
1981	7770	2590	2816	147
1982	7900	2633	2862	46
1987	8400	2800	3221	359

Secondly, since future family incomes are linked to the state, national, and world economies which are highly speculative, no effort is made to project family income. Instead it is assumed that incomes will rise proportionately with inflation and increased housing costs. Therefore, as a guide to future housing needs by type and cost, current trends are utilized.

TABLE T-48 HOUSING TRENDS IN LIVE OAK BY TYPE 1970-1976

<u>TYPE</u>	<u>% OF HOUSING MARKET</u>
Multi-family	6
Mobile Home	14
Single-family	80

TABLE T-49 HOUSING TRENDS IN LIVE OAK BY COST 1970-1976

<u>COST</u>	<u>% OF HOUSING MARKET</u>
Less than 5,000	29.6
5,000 - 9,999	28.1
10,000 - 14,999	42.1
15,000 - 19,999	9.3
20,000 - 24,999	4.5
25,000 - 34,999	2.6
35,000 or more	1.8

To incorporate an amount for inflation, Table T-50 illustrates the Minimum Income Necessary to Afford Adequate Shelter 1975 - 1985, as prepared by the Department of Community Affairs of the State of Florida. This Table, presented on the following page, indicates a yearly factor of approximately 2.5%. Utilizing this factor, Table T-52 presents Future Housing Needs by Cost Based Upon Current Trends.

TABLE T-50 MINIMUM INCOME NECESSARY TO AFFORD ADEQUATE SHELTER 1975-1985

YEAR	MINIMUM INCOME FOR SINGLE-FAMILY DWELLING UNIT		MINIMUM INCOME FOR MOBILE HOME		MINIMUM INCOME FOR RENT	
	25%	35%	25%	35%	25%	35%
1975	11,065	8,852	3,960	3,168	4,920	3,514
1976	11,340	9,072	4,059	3,247	5,168	3,691
1977	11,625	9,300	4,166	3,328	5,426	3,875
1978	11,915	9,532	4,265	3,412	5,698	4,069
1979	12,213	9,770	4,372	3,497	5,981	4,272
1980	12,518	10,014	4,481	3,584	6,283	4,488
1981	12,831	10,264	4,593	3,674	6,595	4,710
1982	12,152	10,521	4,708	3,766	6,925	4,946
1983	13,480	10,784	4,825	3,860	7,272	5,194
1984	13,817	11,054	4,946	3,957	7,637	5,454
1985	14,163	11,330	5,070	4,056	8,016	5,725

SOURCE: DEPARTMENT OF COMMUNITY AFFAIRS, STATE OF FLORIDA

TABLE T-51 MINIMUM COST OF ADEQUATE HOUSING 1975-1985

YEAR	SINGLE-FAMILY DWELLING UNIT	MOBILE HOME	RENT PER MONTH
1975	22,130	7,921	103
1976	22,680	8,119	108
1977	23,250	8,322	113
1978	23,830	8,530	119
1979	24,426	8,744	125
1980	25,036	8,962	131
1981	25,662	9,186	137
1982	26,304	9,416	144
1983	26,961	9,651	152
1984	27,635	9,893	159
1985	28,326	10,140	167

SOURCE: DEPARTMENT OF COMMUNITY AFFAIRS, STATE OF FLORIDA, 1973

TABLE T-52 FUTURE HOUSING NEEDS BY COST

	<u>1977</u>	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>	<u>1987</u>
Less than 5,000	--	--	--	--	--	--	---
5,000 - 9,999	--	30	18	11	10	6	---
10,000 - 14,999	--	10	12	18	56	11	46
15,000 - 19,999	--	2	4	6	31	23	188
20,000 - 24,999	--	--	--	3	18	6	59
25,000 - 34,999	--	--	--	--	12	--	38
35,000 or more	--	5	--	--	10	--	28

SOURCE: THE OFFICE OF MARK GLUCKMAN

TABLE T-53 FUTURE HOUSING NEEDS BY TYPE

	<u>1977</u>	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>	<u>1987</u>
Single-family	--	5	6	6	69	34	231
Multi-family	--	12	24	14	24	9	106
Mobile Homes	--	30	6	18	19	3	12
T O T A L		47	36	38	147	46	359

SOURCE: ESTIMATED BY THE OFFICE OF MARK GLUCKMAN

According to the preceding estimates, from 1975 to 1987 Live Oak will need to add approximately 675 dwelling units, for an average annual increase of 55 to 60 units. Although it is assumed that the preference for owner-occupied single-family dwellings will persist, financial determinants indicate an increase in rental and mobile home usage.

ASSUMPTIONS AND EXPLANATIONS OF FUTURE HOUSING NEEDS - It is recognized that the projections of future housing needs are based upon projections of population, economy, consumer preferences, market trends, land use controls, and numerous other intangible variables each of which may exert a considerable influence on the housing market in Live Oak. To speculate on certain factors is reasonable due to past trends and the unlikelihood of dramatic changes occurring in the near future. When projections are based upon numerous uncertainties, such as Tables T-52 and

T-53, statistically valid processes sometimes reveal strange results. This is especially true when dealing with a small housing market such as Live Oak.

The projections of future housing needs are therefore, although based upon the population and economic data presented in the Plan, modified and interpolated according to sliding percentages of value and housing type, assuming the following:

1. Current housing programs will not be expanded prior to 1978.
2. Any new Federal Housing Program will not impact the city until after 1978.
3. The private sector will continue to build in the medium income range.
4. Mobile homes will continue to provide the main choice of new units for the low and moderate-income families.
5. The less-than-\$10,000 segment of the market will continue to be met with Home Improvement Programs or mobile homes.
6. All housing valued above \$25,000 will be of the single-family type.
7. Housing valued between \$15,000 and \$25,000 will be split between single-family and multi-family.
8. Housing in the \$10,000 to \$14,999 range will be split between single-family, multi-family, and mobile homes.
9. The private sector will continue to play a pre-dominant role in providing new housing.

The combinations of these assumptions were the basis for the Projections of Future Housing Needs presented in Tables T-52 and T-53. The numbers presented should therefore be interpreted as a general guide, subject to considerable variations dependent on the factors and assumptions listed above.

## GOALS AND OBJECTIVES

The statement of goals and objectives is presented to guide the development and implementation of a comprehensive housing program to solve problems related to housing conditions in Live Oak in four general categories: neighborhood stability and improvement; housing availability (type, cost, location, etc.); code enforcement and home improvement programs; city/county joint housing agency. These problems are discussed below.

NEIGHBORHOOD STABILITY AND IMPROVEMENT - The majority of dilapidated housing units exists in several neighborhoods close to the urban core. These neighborhoods were also found to have a negative influence on the surrounding areas. There were definite geographic areas of transition where deteriorating and sound structures occurred on the same street and in close proximity to dilapidated structures. Although a comparative survey was not undertaken, the lack of housing improvement and the extent of dilapidated structures, plus the normal tendency for deterioration rather than improvement to occur, confirm that deterioration is a definite trend.

The stability of neighborhoods is also affected by external factors, such as incompatible land uses and railroad tracks, and internal factors including the lack of utilities, paved roads, community facilities, etc. The component effect of these factors is a deterioration of the quality of the living environment which is difficult to reverse.

HOUSING AVAILABILITY - The most easily identified problems relate to the availability of a decent home at a price that families can afford. Due to the rising cost of housing, low and low-moderate income families are forced to accept less-than-desirable homes or rental units due to lack of choice. To many families in these lower income categories, the only choices are substandard dwellings, assisted rental, or mobile homes. To families with a slightly higher income, mobile homes may be an acceptable choice; but it is one that is accepted rather than chosen. In Live Oak a serious need exists for moderate-income rental units and the upgrading of deteriorating lower-income units.

CODE ENFORCEMENT AND HOME IMPROVEMENT PROGRAM - With the exception of the Weatherizing program and one low-interest loan program for home improvement currently being administered on a four-county basis by the Housing Division of the Suwannee River Economic Development Council, Inc., there are no active Code enforcements or home improvement programs. Neither the City of Live Oak nor Suwannee County is currently pursuing

the solution to these problems. The Housing Authority for the City of Live Oak is active only in the operation, maintenance and leasing of the presently extant assisted housing units. The expansion of assisted housing units is dependent upon the private sector's interest in available programs, which has not been significant. The Housing Authority is not involved in Code enforcement or home improvement programs.

CITY/COUNTY JOINT HOUSING AGENCY - Due to the fact that Live Oak is the county seat and major population center of Suwannee County, it is difficult to isolate the housing need by governmental jurisdictions. Socio-economic forces cross governmental boundaries indiscriminately, and a joint city/county effort is required to render coordinated solutions. A joint city/county effort would also maximize utilization of resources.

#### HOUSING GOALS

In order to overcome the problems identified above and to provide a guide to the continued improvement of housing conditions in Live Oak, general goals are presented below. These are statements of policy and are not to be interpreted as specific projects or directives. These are contained in the Housing Program.

GENERAL HOUSING GOALS - The General Land Use Goal related to housing states that it is the policy and intent of the city to insure that every citizen has maximum residential choice and the opportunity to live in a decent home in a pleasant living environment. More specifically, the following housing goals are identified:

1. To upgrade and improve the existing housing stock in order to render all dwellings safe and acceptable according to present living standards.
2. To encourage the construction of new dwellings of all types in all price ranges in order to provide maximum residential choice for residents of Live Oak.
3. Expand the duties and responsibilities of the existing Housing Authority or create a new agency with the added responsibility to monitor, solicit, coordinate, and construct housing in the city and county. Furthermore, this agency should seek to promote the wise expenditure of capital improvements in deteriorating neighborhoods to create stability and stimulate self-improvement programs.



## HOUSING OBJECTIVES

To accomplish the housing goals stated on the preceding page, specific housing objectives have been formulated. These objectives can be translated into specific housing programs for immediate implementation.

1. Initiate an annual program of replacement of all dilapidated structures to be completed by 1990.
2. Initiate a program of home improvement in order to upgrade all deteriorating structures to standard condition.
3. Provide incentives in the form of rezonings, street paving, and other capital improvements that would encourage the construction of sufficient new homes each year in order to create maximum residential choice.
4. Expand the duties and responsibilities of the existing Housing Authority or create a new city/county housing agency with powers to implement housing objectives.
5. Create a Citizens' Advisory Board to the Housing Agency to provide feedback and public information efforts related to current programs and neighborhood involvement.
6. The city and county should jointly fund the position of an Executive Director of the Housing Agency and formally enter into an agreement to coordinate and jointly solve housing problems.
7. New public housing programs should be initiated and encouraged by the Housing Agency.
8. The Housing Agency should assist the private sector wherever possible to encourage the construction of new residential units in all price ranges.
9. The City Administrator should act as the liaison officer between the city and the Housing Agency.
10. The Capital Improvements Program for the city should reflect a high priority for new and improved facilities in blighted neighborhoods to provide stability and stimulate self-improvement programs.

11. Enforce the present city Minimum Housing Code in conjunction with a program of new construction.
12. Monitor housing activities on a yearly basis to assess changing conditions with respect to new construction and home improvements.
13. Make yearly reports to the City Council assessing housing conditions and implementation of programs.

#### HOUSING PROGRAM

Due to the fact that the Housing Authority of the City of Live Oak is not directly active in all facets of the housing market and the Suwannee River Economic Development Council, Inc., is involved in regional home improvement programs having only a limited impact on housing conditions in the city, it is recommended that a joint city/county agency be created to implement programs that will accomplish the housing objectives. To guide the development of an active, responsive program the following categorical programs are recommended.

- A. Home Improvement
- B. Home Replacement
- C. New Home Construction
- D. Neighborhood Stability and Improvement
- E. Public Information
- F. Program Evaluation, Monitoring

HOME IMPROVEMENT - Under the sponsorship of a Housing Agency and the Suwannee River Economic Development Council, Inc., current home improvement programs could be expanded. New programs should be investigated and, to the extent that they are found to be applicable to Live Oak and Suwannee County, they should be implemented. First priority should be given to older structures in deteriorating neighborhoods.

HOME REPLACEMENT SECTOR - Five hundred and eighty-one (581) structures were found to be in a dilapidated condition. These homes cannot simply be demolished without creating extreme hardship on the tenants. A program of home replacement should be initiated to replace those specific homes which are unsafe with new dwellings. This effort should

be a joint public/private effort with incentives and encouragement from state and federal agencies.

NEW HOME CONSTRUCTION - In addition to the new homes constructed to replace dilapidated structures, new house construction in all price ranges must occur to meet the demand of future population growth. This program should be undertaken primarily by the private sectors with encouragement and stimulation by the pri-public sector (zoning, utilities, capital improvements, etc.).

NEIGHBORHOOD STABILITY AND IMPROVEMENT - This sector of the program should be sponsored by the Housing Agency but implemented primarily through public expenditures and incentives and private neighborhood self-improvement programs.

PROGRAM EVALUATION AND MONITORING - The Housing Agency should develop a specific program of evaluation and monitoring of the entire housing program. Specific yearly targets in each area of the program should be adopted and reviewed annually as a specified part of each housing program, and annual reports should be made to the City Council and County Commission.

PUBLIC INFORMATION - In order to incorporate a citizen's point of view and create public awareness of housing conditions and programs, an information dissemination effort must be made. A coordinated public information program should be created to inform potential applicants, builders, civic leaders, governmental officials, and private citizens of programs and accomplishments. The program should be targeted to specific groups and serve as a continuing resource for program implementation.

#### PROGRAM EVALUATION

The purpose of an evaluation program is to determine the success or failure of a specific effort. Normally, quantifiable goals or targets are set and if the targets are met the program is deemed successful. If the targets are not met, the program may still be successful, but the goals may have been set at an unrealistic level. In addition, an evaluation program can provide a continuous flow of data which will be useful to the public and private sectors in other matters relating to housing for grant programs, public information, and efficient use of resources.

It is recommended that the Live Oak evaluation program incorporate each categorical housing program. These targets should be established in quantifiable terms as identified in the Housing Analysis.

In addition to specific housing, a public information program, including seminars, newsletters, and referral system should be adopted as a means of evaluating the neighborhood improvement efforts. It is further recommended that yearly reports be made to the city and county, reporting on the successes and failures of the programs. The report should be based upon discussions relating to accomplishments or lack thereof of yearly targets, including reasons for and to support the performance. Finally, the report should include recommendations concerning the targets for the succeeding years and their relationship to five-year goals.

## CAPITAL IMPROVEMENT ELEMENT

### INTRODUCTION

The Capital Improvement Program is a list of new public facilities and a corresponding priority schedule for their construction. The Capital Improvement Program is necessary in order to assure that dollars are spent wisely and efficiently and according to logical, well-coordinated actions. Its relationship to the Comprehensive Plan is significant due to the direct impact of these major capital expenditures on the future growth of a community.

The Capital Improvement Program and corresponding annual budget are integral to, but not normally a part of, the Comprehensive Plan due to the difference in detail, purpose, time-frame, and general intent of the two documents. The Capital Improvement Program is a detailed list of technical information extending for a five-year period but budgeted on an annual basis. The Comprehensive Plan is a general policy statement or guideline document projecting long-term (20 years or longer) needs. In addition to this, many of the capital improvements necessary are presently the responsibility of others, including private companies, county, regional or state agencies, and are therefore out of the jurisdiction of the Live Oak City Council.

To overcome these inconsistencies and provide a meaningful guide to Capital Improvement programming, the Capital Improvement Element interprets the Comprehensive Plan in terms of Capital Improvements and recommends priorities based upon Goals and Objectives of the Plan and municipal financial feasibility. It is different from the Capital Improvement Program because it is not a detailed list and cost estimate of proposed improvements, however the Capital Improvement Element synthesizes the Plan and principal budget constraints and presents a general guide to budget programs. Furthermore, the Capital Improvements Program is a series of specific actions which should be the result of departmental interactions and extensions of current programs and in many cases is more logically an operational rather than a planning decision.

The Capital Improvement Element is the first step toward the preparation of a Capital Improvement Program and Budget. It is a summation of the Plan recommendations by priority rating based upon planning requirements and city goals as established by officials and citizens of Live Oak.

The purpose of the Capital Improvement Element is six-fold as listed below.

- A. Coordination of intergovernmental planning efforts as related to anticipated needs of Live Oak.
- B. Policy guide for the city in the preparation of a detailed schedule of capital improvements for each department.
- C. Provides a list and map of needed capital improvements for reference in the Plan that require coordination for Federal and State Grant purposes.
- D. Demonstrates to the general citizen that proposed capital improvements are the result of a logical process based upon a plan.
- E. Serves as a coordination tool so that construction in one area can be logically phased between different agencies.
- F. Demonstrates that local government is effectively serving many levels of government and vice versa due to the coordination of joint jurisdictional services and facilities.

All of these purposes are integral to the actual budgetary process of the city, county, regional and state agencies, and as such the Capital Improvement Element previews and guides the Capital Programming and Budgeting process.

## METHODOLOGY

The methodology utilized to prepare the Capital Improvement Element is an extension of the Comprehensive Planning process and is comprised of four components described below.

1. Inventory Plan Recommendations - The specific elements of the Comprehensive Plan are inventoried according to proposed capital improvements such as roads, utilities, public buildings, parks, etc. General policy recommendations are translated into improvement projects.
2. Analyze Capital Improvement Recommendations - Examine improvements recommended in the plan and assign priorities on the basis of need and importance to plan implementation as recommended by citizens and city departments.
3. Review City Financing - Examine previous years' financial statements and budget to determine income and expenditures with respect to local funding for capital improvements. Identify revenue sources, expenditure liabilities, and possible financing sources.
4. Prepare Capital Improvement Schedule - Modify priority ratings of proposed capital improvements according to appropriate sources and expenditures and prepare priority schedule of improvements.

## INVENTORY OF PLAN RECOMMENDATIONS

It is important to note that the Inventory of Plan Recommendations includes a major citizen and departmental input as a result of the planning process. To that extent, inherent in the Inventory of Plan Recommendations is a composite of citizens' reactions, departmental input, and guidance from the Department of Public Works and the City Administrator. The Plan recommendations are therefore a synthesis of many ideas and preferences related to the future growth of the city.

The following descriptive list of Capital Improvements is a mixture of policy and projects. As stated in previous sections, the Comprehensive Plan is a general policy statement rather than a technical document of future needs. References and descriptions below, therefore, are policy interpretations based upon plan concepts and are subject to specific departmental implementation decisions.

DOWNTOWN DEVELOPMENT - The revitalization of the downtown area is a long-term commitment by the city to encourage the financial and aesthetic enhancement of the central business district. The Plan identifies the downtown area as the focal point and economic heart of the city; however, a special study and preparation of a Downtown Revitalization Plan are needed to identify specific projects and courses of action. General projects are herein identified as follows:

1. Parking
2. Demolition of dilapidated and unsafe structures
3. Aesthetic improvement of existing structures
4. Street furniture, signage, and landscaping
5. Adaptive and/or new multi-use of vacant school property
6. Drainage retention basin in conjunction with aesthetic improvement
7. Park and recreation facilities in conjunction with multi-use projects
8. Preparation of Downtown Revitalization Plan

PUBLIC BUILDINGS - Certain public buildings have been identified as needing expansion, replacement, relocation, or improvement to more adequately fulfill their intended public function. These are listed below.

9. City Hall
10. Fire Station Number Two
11. School Buildings (see section below)

EDUCATION - Public education in Suwannee County is the responsibility of the Suwannee County School Board which is outside the jurisdiction of Live Oak; therefore no school facilities are listed herein.

HOUSING - The construction of housing is a joint public/private effort between local, county, regional and state agencies. Specific housing types and numbers of units have been identified in the Housing Element of the Comprehensive Plan.

12. Public-assisted new housing
13. Public-assisted home improvement



14. Public-assisted/private sector new housing
15. Public-encouraged/privately constructed new housing

URBAN DESIGN AND CITY BEAUTIFICATION - Pride in the city is dependent upon socio-economic satisfaction and aesthetic values, both of which are significant factors in improving and maintaining a high quality of environment. Public participation in terms of individual contribution to neighborhood self-improvement can only be successful if encouraged by public support in beautification efforts as identified below:

16. Historic preservation
17. Entrances to the city
18. Landscaping around public buildings
19. Mine-pit reclamation

CIRCULATION - Circulation improvements consist of facilities for vehicular and pedestrian traffic which require coordination between county and state agencies. Those street improvements comprising the internal loop are identified by name, other improvements or facilities are identified by category only.

20. Street improvements and/or new construction
  - a. Walker Avenue
  - b. Winderweedle Street
  - c. Pinewood Way
  - d. Miller Street
  - e. Railroad Avenue
  - f. Eva Street
  - g. Duval Street
  - h. Lee Avenue
21. Improve unpaved neighborhood streets
22. Construct sidewalks and pedestrian walkways

POTABLE WATER SYSTEM - The existing municipal water treatment plant has sufficient capacity to meet current and future demand if it is repaired and upgraded to meet operational standards. These and other improvements to the system which are also needed are listed below.

23. Treatment Plant
24. Enlarge, replace, and construct new distribution lines

25. Replace and construct new fire hydrants in specified areas

SEWER SYSTEM - The capacity of the existing municipal treatment plant is insufficient to meet future demands. It must be expanded in capacity and upgraded to a higher level of treatment. Other improvements to the system will be required as identified below.

26. Treatment Plant
27. Disposal Pond
28. Collection lines and pumping stations

STORMWATER DISPOSAL - It is uncertain at this time whether additional drainage wells will be permitted as an acceptable means of stormwater disposal. The Plan elaborates an alternative disposal system comprising surface water retention ponds. Certain sites would become lakes, others would retain water only for short periods of time and would serve a dual purpose as mini-parks.

29. Fir and Brown Streets
30. Mussey and SCL Railroad
31. Ruby and Eva
32. Nabor and Santa Fe
33. Meadow and Myrtle
34. Marymac and Darrow
35. Meadow and Ohio
36. Weller and Lake Mary
37. Hawkins and Church
38. Houston and Eleventh Street
39. Church and John
40. Suwannee and Wilbur
41. Irvin and Liberty
42. Irvin and Eighth
43. Irvin and Fourth
44. Lafayette and Eighth
45. Ammons and Fifth
46. Fifth and Taylor

OPEN SPACE AND RECREATION - In addition to the water retention ponds, which may also serve a recreational purpose, specific open space and recreational facilities are recommended as listed below.

47. Expansion of facilities at the city park on Fir Street
48. Acquisition of a new park site on Walker Street and construction of active and passive recreation facilities
49. Creation of an open space network composed of pedestrian areas with connecting mini-parks

SOLID WASTE - Continue joint function with county at landfill site and improve and replace collection equipment as required.

50. Equipment and Personnel

POLICE - Replace equipment and/or provide new equipment as population increases and demand warrants.

51. Equipment and Personnel

FIRE - Expand facilities to meet demands of future population.

52. Equipment and Personnel
53. Relocate and expand Fire Station Number Two (when future growth demands)

HOSPITAL - Although medical services are provided by the Suwannee County Hospital, additional doctors have to be attracted to Live Oak. Zoning studies and encouragement of new medical offices in the area adjacent to the existing hospital campus are needed.

#### CAPITAL IMPROVEMENT PRIORITIES

Certain Capital Improvements recommended in the Plan are already in progress, others may be needed on an immediate or emergency basis, and still others are highly desirable to improve environmental quality but can be postponed without unduly affecting the lives of individuals. The need for other improvements may be contingent upon population growth and financial feasibility. Priorities are therefore

established on the basis of these factors and importance to overall Plan implementation. A four-priority rating schedule is applied to the list of improvements as defined below. A fifth priority is given to those improvements which require coordination with other governmental agencies.

Priority I - Projects which are already in progress or those for which an immediate need exists and should therefore not be delayed.

Priority II - Projects which are necessary to the health, safety, and welfare of the citizens and should be completed within the next few years. These projects have been rated important to citizens, and efforts should be made to secure funding.

Priority III - Those projects which are desirable either as a result of community preference or departmental desires, but can be undertaken when funds are available.

Priority IV - Projects which are recommended for long-range improvement of the quality of life and are therefore desirable, but action can be postponed without affecting the quality of present levels of service.

Priority IA, IIA, IIIA, IVA - Those facilities requiring coordination from other governmental agencies and/or private companies but have priority according to Live Oak's needs.

<u>CAPITAL IMPROVEMENT</u>	<u>PRIORITY RATING</u>
Downtown Development	
1. Parking	1. III
2. Demolition of dilapidated and unsafe structures	2. III
3. Aesthetic improvement of existing structures	3. III
4. Street furniture, signage, and landscaping	4. IV
5. Adaptive and/or new multi-use of vacant school property	5. IVA
6. Drainage retention basin	6. IV
7. Park and recreation facilities	7. IV
8. Downtown Revitalization Plan	8. IVA

CAPITAL IMPROVEMENT

PRIORITY RATING

Public Buildings	
9. City Hall	9. I
10. Fire Station Number Two	10. IV
11. School Buildings	11. IVA
Education	
11. School Buildings	11. IVA
Housing	
12. Public-assisted new housing	12. IVA
13. Public-assisted home improvement	13. IVA
14. Public-assisted/private sector new housing	14. IVA
15. Public-encouraged/privately constructed new housing	15. I
Urban Design and City Beautification	
16. Historic Preservation	16. III
17. Entrances to the city	17. III
18. Landscaping around public buildings	18. III
19. Mine-pit reclamation	19. IVA
Circulation	
20. Street improvements and/or construction	20. I
a. Walker Avenue	a. I
b. Winderweedle Street	b. I
c. Pinewood Way	c. I
d. Miller Street	d. I
e. Railroad Avenue	e. I
f. Eva Street	f. I
g. Duval Street	g. I
h. Lee Avenue	h. I
21. Improve unpaved neighborhood streets	21. I
22. Construct Sidewalks and Walkways	22. II
Potable Water System	
23. Treatment Plant	23. I
24. Enlarge, replace, and construct new distribution lines	24. II
25. Replace and construct new fire hydrants	25. II
Sewer System	
26. Treatment Pond	26. I
27. Disposal Pond	27. I
28. Collection lines and pumping station	28. II

CAPITAL IMPROVEMENTSPRIORITY RATING

## Stormwater Disposal

29. Fir and Brown Streets	29. II
30. Mussey and SCL Railroad	30. II
31. Ruby and Eva	31. II
32. Nabor and Santa Fe	32. II
33. Meadow and Myrtle	33. II
34. Marymac and Darrow	34. II
35. Meadow and Ohio	35. II
36. Weller and Lake Mary	36. II
37. Hawkins and Church	37. II
38. Houston and Eleventh Street	38. II
39. Church and John	39. II
40. Suwannee and Wilbur	40. II
41. Irvin and Liberty	41. II
42. Irvin and Eighth	42. II
43. Irvin and Fourth	43. II
44. Lafayette and Eighth	44. II
45. Ammons and Fifth	45. II
46. Fifth and Taylor	46. II

## Open Space and Recreation

47. Expansion of park on Fir Street	47. IVA
48. Acquisition of new park site on Walker Street	48. IVA
49. Creation of open space network	49. IVA

## Solid Waste

50. Equipment and Personnel	50. II
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## Police

51. Equipment and Personnel	51. II
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## Fire

52. Equipment and Personnel	52. II
53. Relocation of Fire Station Number Two	53. IV

## Hospital

54. Doctors' offices	54. IVA
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## Cultural

## REVIEW OF CITY REVENUES AND EXPENDITURES

Statements of Appropriations and Expenditures for the fiscal years ending September 30, 1973 through September 30, 1976 present information describing the general financial condition of the city. Revenues and Expenditures of the General Fund, Utility Fund, and Gas Utility Fund were examined to gain an understanding of the city's past experience in financing capital improvements as a basis for incorporating present fiscal condition into the schedule of Plan recommendations. This effort should not be construed as a financial analysis of the budgetary process nor as an intent to identify specific sources of capital financing. This section synthesizes ongoing governmental operations with the priorities of the Comprehensive Plan to provide a framework for future financial decisions related to capital improvements.

REVENUES - Exclusive of the Utility Funds for the Municipal Water and Waste Water Systems and Natural Gas, the major sources of income to the city are Property and Cigarette Taxes. Property Taxes yielded an increase from \$134,788.86 in 1973 to \$147,421 in 1976, for a net gain of \$12,632 or 9.4%. Cigarette Taxes yielded an increase from \$212,780 in 1973 to \$340,648 in 1976, for a net gain of \$127,868 or 60%. Total Revenues, including transfers from Federal Revenue Sharing, increased from \$671,242.56 in 1973 to \$953,854 in 1976, for a net gain of \$282,612 or 42%. The complete statement of revenues is presented on Table T-54 on the following page.

A significant portion of the revenues in 1974 (42.5%), 1975 (20.3%), and in 1976 (11.9%) came from Federal Revenue Sharing. It is not known at this time whether this source of revenue will continue. Trends would indicate that it will not; however, other sources of revenues may be created in its place. Other local and state sources of revenues should continue to increase at a rate which is consistent with economic growth and stability. It is interesting to note that while general revenues increased 42%, population increased only 10.5% from 1973 - 1976.

Special utility funds have been established for Water, Wastewater, and Natural Gas Services provided by the city. Statements of Revenues and Expenditures for the Fiscal Years ending September 30, 1973 through September 30, 1976 are presented in Tables T-55 and T-56.

TABLE T-54 LIVE OAK STATEMENT OF REVENUES  
SEPTEMBER, 1973 - 1976

	<u>1973</u>	<u>1974</u>	<u>1975</u>	<u>1976</u>
<u>TAXES</u>				
General Property Taxes	134,788.86	142,472.43	144,621	147,421
Housing Authority - In Lieu of Taxes	1,466.45	1,487.51	1,756	1,852
Interest and Penalties	487.82	453.09	969	969
<u>GARBAGE SERVICE</u>	55,686.50	55,975.00	60,828	63,551
<u>LICENSES AND PERMITS</u>				
Occupational Licenses	28,954.25	34,269.74	28,214	33,305
Parking Violations	196.00	15.00	122	---
Power & Light Franchise Tax	32,082.43	44,357.40	59,970	78,020
Cable TV Franchise	5,007.09	4,832.50	5,334	5,393
Building Permits	1,938.95	2,725.75	3,801	3,139
Mobile Home Licenses	2,611.83	3,665.81	4,135	4,819
<u>FINES, FORFEITURES, AND COURT COSTS</u>				
	26,161.00	14,257.00	13,299	18,730
<u>CHARGES FOR CURRENT SERVICES</u>				
Pound Fees	239.75	183.50	188	176
Cemetery Lots	4,475.00	2,288.15	5,745	7,185
<u>OTHER REVENUES</u>				
Road and Bridge Fund	23,000.00	23,000.00	23,000	33,096
Cigarette Tax	212,780.51	30,315.82	244,686	340,648
Eight-cent State Fuel Tax	70,929.03	85,224.43	84,894	-----
Interest on Time Certificates	6,789.72	5,922.99	15,927	23,082
Suwannee County Fire Service	10,000.00	10,000.00	10,000	10,000
Miscellaneous Income	963.62	1,383.81	15,812	10,462
Police Academy Fees	186.00	-----	-----	-----
County Jail Facilities	297.50	-----	-----	-----
Sale of Fixed Assets	2,220.25	-----	-----	-----
Transferred from Utility Fund	50,000.00	-----	20,000	42,000
<u>FIVE-CENT FUEL TAX</u>	-----	1,650.59	-----	-----
<u>REFUND OF EXPENDITURES</u>	-----	1,475.09	-----	-----
<u>TRANSFER FROM FEDERAL REVENUE SHARING</u>				
	-----	345,968.90	189,666	113,707
<u>TOTAL REVENUES</u>	671,242.56	813,864.51	934,181	953,854

SOURCE: THE CITY OF LIVE OAK



TABLE T-55 LIVE OAK UTILITY FUND  
SEPTEMBER 30, 1973 - 1976

	<u>1973</u>	<u>1974</u>	<u>1975</u>	<u>1976</u>
<u>OPERATING REVENUES</u>				
Water	168,135.27	171,282.45	183,576	201,234
Sewer	72,895.61	81,598.73	83,195	96,096
<u>OPERATING EXPENSES</u>				
Water	100,394.70	124,482.10	143,334	176,270
Sewer	62,977.26	56,120.58	66,100	105,964
<u>OPERATING INCOME</u>				
Water	67,740.57	46,800.35	40,242	24,964
Sewer	9,918.35	25,478.15	17,095	(9,868)
<u>OTHER INCOME</u>				
Water	118,565.57	256,457.16	167,977	214,523
Sewer	-----	121,750.00	-----	-----
<u>TOTAL INCOME</u>				
Water	186,306.14	303,257.51	192,424	239,487
Sewer	9,918.35	147,228.15	-----	(9,868)
<u>OTHER DEDUCTIONS</u>				
Water	50,000.00	N/A	N/A	59,239
Sewer	23,688.75	22,586.26	N/A	N/A
<u>NET INCOME (OR LOSS)</u>				
Water	136,306.14	303,257.51	103,252	180,248
Sewer	(13,770.40)	12,641.89	(24,678)	(9,868)

SOURCE: THE CITY OF LIVE OAK

TABLE T-56 GAS UTILITY FUND  
SEPTEMBER 30, 1973 - 1976

	<u>1973</u>	<u>1974</u>	<u>1975</u>	<u>1976</u>
<u>GAS SERVICE REVENUES</u>	146,899.19	122,656.48	162,911	195,228
<u>GAS PURCHASED</u>	68,432.91	65,597.43	71,991	88,554
<u>GROSS PROFIT</u>	78,466.28	57,059.05	N/A	N/A
<u>OPERATING EXPENSES</u>	46,121.25	55,958.61	N/A	N/A
<u>OPERATING INCOME</u>	32,345.03	1,100.44	N/A	N/A
<u>OTHER INCOME</u>	5,965.13	8,301.79	N/A	N/A
<u>OTHER REDUCTIONS</u>	15,489.86	20,464.58	N/A	N/A
<u>INCOME (LOSS)</u>	22,820.30	(11,062.35)	6,171	48,322

SOURCE: THE CITY OF LIVE OAK

Net income or losses derived from providing these services do not follow a pattern. Water Service has consistently shown a positive cash flow, while Sewer Service has not. Natural Gas Service experienced a positive income for three of the four years examined.

Since these services are currently provided by special utility funds and therefore are supported separately from general revenue sources, it is anticipated that this will continue to be a reasonable approach in meeting current and future demands.

EXPENDITURES - Separate from the utility funds, expenditures for the city are divided into six categories: General Government or Administrative, Police Department, Fire Department, Streets and Parks, and Sanitation. Expenditures by departments for the fiscal years ending September 30, 1973 through September 30, 1976 are presented on Table T-57. The largest departmental expenditures are for Streets and Parks, which increased from \$195,902.99 in 1973 to \$253,379 in 1976, for an increase of \$57,476 or 29.3%. Total expenditures, including debt service, refunding of bonds, etc., increased from \$732,654.98 in 1973 to \$860,314 in 1976, for an increase of \$127,659 or 17.4%.

Information describing expenditures for capital outlays is also presented on Table T-57; however, other capital improvements are a part of different budgetary items so it is not possible to make specific identifications. The city has been appropriating funds for capital improvements from general revenue sources, specifically with reference to streets. Expenditures for parks and recreation, which are included under General Administration rather than Streets and Parks, increased from \$11,000.04 in 1973 to \$62,005 in 1976. Of this \$62,005, \$39,505 was appropriated for swimming pool improvements, with the balance of \$22,500 expended toward the general recreation program. The actual increase in funds spent on recreation from 1973 to 1976 was \$51,000 or 460%.

TABLE T-57 LIVE OAK GENERAL FUND EXPENDITURES  
SEPTEMBER 30, 1973 - 1976

	<u>1973</u>	<u>1974</u>	<u>1975</u>	<u>1976</u>
<u>TOTAL EXPENDITURES BY DEPARTMENT</u>				
Administrative	94,099.42	109,587.36	160,422	217,949
Recreation	11,000.04	15,000.00	32,430	62,005
Police Department	110,041.08	103,432.15	111,779	138,027
Fire Department	90,877.28	91,883.72	98,339	111,355
Streets	195,902.99	253,006.11	342,917	253,379
Sanitation	97,774.12	102,919.10	124,626	135,055
<u>TOTAL EXPENDITURES INCLUDING DEBT SERVICE &amp; REFUNDING BONDS</u>				
	732,654.98	673,315.82	838,083	860,314
<u>EXPENDITURES FOR CAPITAL OUTLAY</u>				
Administrative	10,786.02	10,049.50	4,564	1,757
Police	7,609.10	-----	2,500	18,967
Fire	7,317.80	4,664.54	1,680	1,926
Streets	96,644.83	113,656.31	182,741	31,777
Sanitation	1,951.50	3,930.11	11,088	13,578

SOURCE: THE CITY OF LIVE OAK

TABLE T-58 CHANGES IN UNAPPROPRIATED SURPLUS AND RESERVE  
June 30, 1973 - 1976

	<u>1973</u>	<u>1974</u>	<u>1975</u>	<u>1976</u>
<u>TOTAL REVENUES</u>	671,242.56	813,864.51	934,181	953,854
<u>TOTAL EXPENDITURES</u>	732,654.98	673,315.82	838,083	860,314
<u>EXCESS OF REVENUES OVER EXPENDITURES</u>	-----	140,548.69	96,098	93,540
<u>INTRA FUND</u>	87,639.33	(27,335.00)	-----	-----
<u>BALANCE PREVIOUS YEAR</u>	81,536.38	107,763.29	-----	-----
<u>BALANCE CURRENT YEAR</u>	107,763.29	220,976.98	294,200	388,299
<u>RESERVE</u>	24,483.00	51,818.00	-----	-----
<u>T O T A L</u>	132,246.29	272,794.98	294,200	388,299

SOURCE: THE CITY OF LIVE OAK

## CONCLUSIONS

Table T-58 presents a comparison of the balance of unappropriated surplus and reserve from the General Fund for the fiscal years ending September 30, 1973 through September 30, 1976. Accounting procedures were modified in the fiscal years ending 1975 and 1976, so it is difficult to make direct comparisons for all items. There were also discretionary actions taken with reference to funds being transferred from and into reserve accounts. It is therefore not reasonable to assume that a specific balance at the end of any one fiscal year could be directly appropriated for additional capital improvements. It does indicate, however, that the city is in a financially sound condition and that certain capital outlays are currently being expended from operating revenues -- which should continue -- and that as long as revenues continue to increase at a faster rate than expenditures, that additional money can be appropriated for capital outlay projects. More specifically, on the basis of current fiscal experience, the Plan recommendations identified could be accommodated as indicated below.

DOWNTOWN DEVELOPMENT - Major funding for improvements to the downtown area must come from private sources and/or affected businesses. The city should assume a leadership role in preparing a plan for revitalization and be prepared to sponsor specified public projects to stabilize and provide incentive to the private businesses. The city should appropriate funds for a one-year study to explore the feasibility of parking, recreation, beautification projects and the adoption of a new, multi-purpose usage of the vacant school property. The merchants should match a city contribution on a pro rata basis in order to jointly sponsor the study which would identify a specific program of improvements.

PUBLIC BUILDINGS - A federal grant for money to construct a new City Hall is currently pending. Funds for architectural fees have already been spent. Further appropriations should be delayed until the outcome of the grant is known. Expansion and/or relocation of Fire Station Number Two is not a high-priority item, being dependent on future growth and demand.

EDUCATION - Responsibility for public education is outside the jurisdiction of the City of Live Oak and funding is contingent on School Board and State involvement. Discussions with the School Board concerning joint use of facilities and adaptive use of vacant buildings and trade of vacant property should be initiated.

HOUSING - The city is currently active in the housing sector in a limited manner through the Live Oak Housing Authority. The function of the agency should be expanded or transferred to a joint city/county/regional agency with separate funding sources. The city should make its proportionate contribution based upon an equitable participation formula.

URBAN DESIGN AND CITY BEAUTIFICATION - Urban Design and City Beautification projects are appropriate budgetary items to include with street improvements and public buildings. Appropriations for specific streets should include landscaping and aesthetic treatments according to the open space plan. Specific projects related to aesthetic enhancement of the gateways to the city, including the mine-pits north of town, should be adopted on a yearly basis with appropriations from the General Fund, according to a percentage formula based upon recreational usage.

CIRCULATION - The paving of streets and sidewalks is currently a major budgetary item and is therefore likely to continue. The upgrading of arterial roads will require county/state and/or federal government involvement. The projects are normally funded from Gasoline Tax and/or special road funds.

WATER AND SEWER SERVICE - Improvement of and expansion of facilities related to the municipal water and wastewater systems are funded from a separate Utility Fund. Revenues are received from operational income, Federal Grants, and Revenue Bonds. It is recommended that this process be expanded to meet future demand.

STORMWATER DISPOSAL - Possibly the largest single new expenditure for capital improvements will be related to stormwater disposal. The magnitude of the improvements needed are dependent on State and Regional water management policy, which has not yet been established, and the rate of new growth in the city. Plans should be formulated to respond to this need when the Suwannee River Water Management District submits its Water Management Plan this year. The Stormwater Drainage Study completed in 1967 should be reexamined for its relevance. If surface water retention ponds are required, Federal Grants should be requested. In addition, current ordinances should be examined and expanded if necessary to assure that future private development does not aggravate the situation.

OPEN SPACE AND RECREATION - Current appropriations from the General Fund are providing limited recreational facilities. This program should be expanded and matched by county contributions to expand the present facilities and to acquire additional land to meet current and future needs. State and Federal Grants should be requested where applicable to develop a new park on Walker Avenue and to contribute to recreation potential resulting from stormwater retention sites.

SOLID WASTE, POLICE, FIRE - Financing of equipment and personnel to provide these services is currently appropriated from the General Fund. As demand warrants, these funds can be increased to meet future demands. However, major expenditures of a one-time nature can be treated as a separate project to be financed by special grant or funding source.

## CITIZEN PARTICIPATION ELEMENT

### INTRODUCTION

Citizens' participation in the Live Oak planning process was comprised of formal and informal activities. Formal activities included designated meetings with the Local Planning Agency and Citizens' Advisory Committee, according to the specified work program, and two public forums which were sponsored by the Local Planning Agency and Citizens' Advisory Committee in conjunction with the Live Oak City Council. Informal citizen participation activities included the numerous interviews, meetings, and presentations before various groups representing organizations and all segments of the citizenry of Live Oak. These activities are summarized in the following section.

## FORMAL CITIZENS' PARTICIPATION ACTIVITIES

LOCAL PLANNING AGENCY AND CITIZENS' ADVISORY MEETINGS - The Live Oak City Council designated the City Administrator and the Department of Public Works as the Local Planning Agency. Six lay citizens were appointed to an Advisory Committee, with the Chairman serving also as the Chairman of the existing Zoning Commission. Regular monthly meetings were held, as illustrated on the Comprehensive Work Schedule presented below in Figure F-1. At these meetings, draft elements were reviewed, discussed, and reactions received. Each meeting included a specified agenda relating to Plan Elements, revisions, and associated matters.

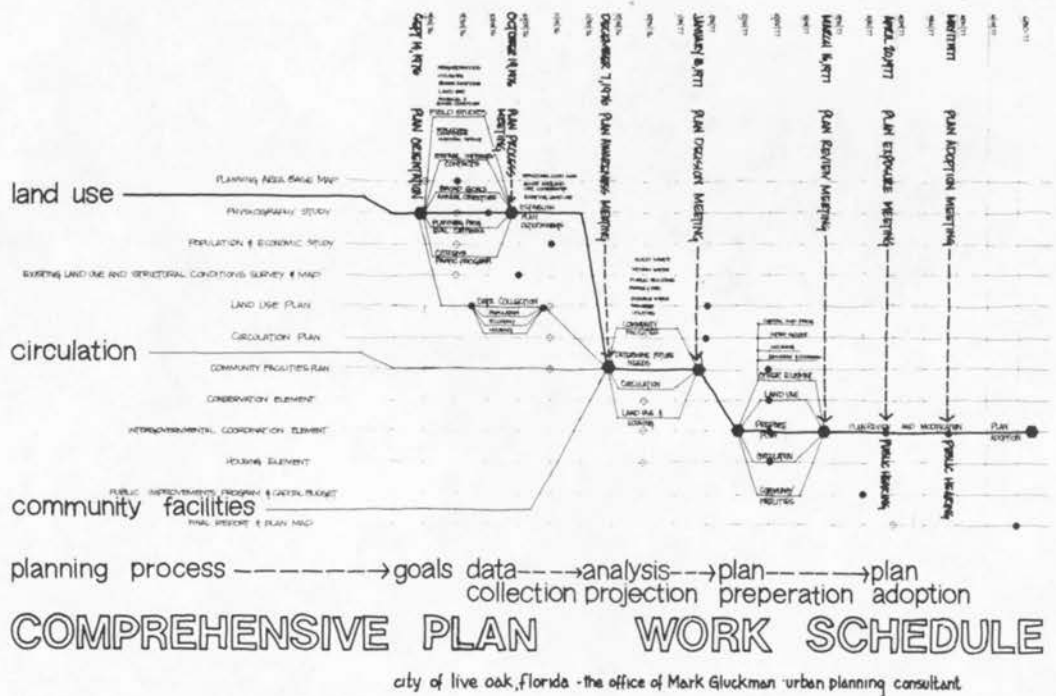


FIGURE F-1 COMPREHENSIVE WORK SCHEDULE



Figure F-1 illustrates the relationship and primary purpose of each of the Citizens' Advisory Committee meetings. Due to the fact that the planning program did not begin until September, only seven monthly meetings were held prior to the final public forum held May 17, 1977. Meeting dates varied slightly from the schedule as follows:

September 14 - Plan Orientation Meeting

October 19 - Plan Process Meeting

December 7, 1976 - Plan Awareness Meeting

January 11, 1977 - Public Forum and Presentation of Goals

March 16, 1977 - Plan Exposure and Review Meeting

April 20, 1977 - Plan Refinement Meeting

May 17, 1977 - Public Forum and Plan Presentation to the City Council

#### INFORMAL CITIZENS' PARTICIPATION ACTIVITIES

Immediately following the Plan Orientation Meeting of the Citizens' Advisory Committee and the Local Planning Agency, interviews were set with directors, chairmen, or presidents of local agencies and boards responsible for the provision of services and facilities affected by and included in the Comprehensive Plan. Individuals contacted were extremely helpful in serving as sources of information and citizens' feedback. These interviews also broadened the base of citizen participation by alerting the consultant to other individuals, agencies, and organizations that should also be contacted as part of the planning process. Meetings were held with the County Clerk and members of the North Central Florida Planning Commission to accomplish a similar purpose with county and region. Informal meetings were also held with the members of the Suwannee County Chamber of Commerce and the Live Oak business community.

In addition to the intended purpose of those interviews and meetings, several significant but peripheral issues were explored, including mine reclamation, regional housing and recreation programs, and neighborhood improvement. These issues served to further expand the base of citizen participation in the planning process. Specific attention

is called to the presentation at the Suwannee River Economic Council, Inc., inter-agency meeting of November 22, 1976. This meeting was extremely helpful in establishing an initial base of citizen priorities as related to physical, cultural, educational, and economic problems and community goals.

Special mention is also made of the Local Government Planning Seminar held March 21, 1977 in Live Oak. This seminar was sponsored jointly by the Suwannee County Board of County Commissioners and the Chamber of Commerce and was helpful in establishing a county and regional framework within which the local planning process could function.

#### ASSESSMENT OF CITIZENS' PARTICIPATION IN THE PLANNING PROGRAM

Due to the varied nature of the formal and informal activities to stimulate and obtain citizens' participation in the planning process, the program was deemed to be successful. Although it was not possible within the confines of the specified Plan Preparation Work Schedule to review all Plan Elements with all citizens that participated in the process, it can be stated that a maximum level of awareness of the program was obtained. This should prove to be extremely beneficial during the formal hearings related to the adoption of the Plan.

In all instances, genuine interest was expressed and participation received by all groups contacted. The press was cooperative in reporting on the Public Forums, but efforts to receive broader continuing coverage of the planning program and/or special articles relating to Plan Elements were not successful.

By synthesizing input from citizens obtained in formal and informal activities and public presentations, consensus points of view concerning citizens' priorities were obtained and became an integral part of the Plan preparation process.

#### FUTURE CITIZENS' PARTICIPATION

To improve and continue the process of citizens' participation in the planning process, it is recommended that the Local Planning Agency, the Citizens' Advisory Committee, and the Planning and Zoning Commission be combined into a single board of lay citizens. This board should be expanded to include a minimum of nine members, with liaison persons designated as ex officio members due to their responsibility for services and facilities to citizens of Live Oak, including housing, recreation, medical services, cultural affairs, education, and the like.

Special effort should be expended to disseminate the completed Plan document into the community in an effort to insure awareness and stimulate interest and participation in the public hearing process prior to formal adoption of the Plan and as a springboard to an ongoing process of citizens' participation.

## ENVIRONMENTAL ASSESSMENT

An examination of the impact of the Comprehensive Plan on environmental factors is presented in conjunction with the Conservation Element. The Environmental Assessment specifically explores the impact of the Plan policies in relation to the following:

1. A summary or abstract of the proposed Plan.
2. The beneficial and/or adverse environmental impact of the proposed Plan if carried out.
3. Any adverse environmental effects which cannot be avoided should the proposed Plan be implemented.
4. Alternatives to the proposed Plan.
5. The relationship between the short-term uses of man's environment and the maintenance and enhancement of long-term productivity.
6. Any irreversible and irretrievable commitments of resources which would be involved if the proposed Plan were implemented.
7. A statement setting forth applicable Federal, State, and Local environmental controls.

## INTRODUCTION

The City of Live Oak is a rural, largely agricultural community in Suwannee County. It is not proximate to a coastal region, river basin, unique natural forests, or other environmentally sensitive areas. In fact, extensive agricultural usage has modified the physical environment to such an extent that only a very few, small natural areas remain within the present city limits. And, with the exception of these forested areas, much of the natural vegetation has been dramatically altered for either agricultural purposes or urban development. There are no creeks, rivers, or natural drainage basins and corresponding wildlife habitats. Although no wildlife censuses were taken, the

absence of diverse plant communities and movement corridors make it unlikely that any unique animal populations exist or migrate into or through the city. It is, therefore, assumed that the endemic animal community is commonplace and consists mainly of those small mammals, birds, rodents, etc., that can co-exist with human settlements.

In spite of an apparent lack of environmentally unique resources, Live Oak does possess clean air, water, and a historic and rural character which is highly desirable.

## SUMMARY OF THE COMPREHENSIVE PLAN

The Comprehensive Plan envisions a compact, centralized form of development. An internal loop circulation system is proposed which expands upon and upgrades certain existing facilities in order to create a more efficient circulation pattern that insures convenient and safe traffic flow around the downtown area. Commercial development is concentrated in the central business district and along the arterial loop system.

Residential neighborhoods are identified as the primary planning unit, with major capital improvements oriented toward stabilizing and improving residential environments. Policies related to community facilities support new residential, commercial, and industrial development, according to a logical and efficient land use pattern.

To summarize the policies contained in the Plan, a list of recommended capital improvements is presented below.

### CAPITAL IMPROVEMENT PLAN RECOMMENDATIONS

#### Downtown Development

1. Parking
2. Demolition of dilapidated and unsafe structures
3. Aesthetic improvement of existing structures
4. Street furniture, signage, and landscaping
5. Adaptive and/or new multi-use of vacant school property
6. Drainage retention basin
7. Park and recreation facilities
8. Downtown Revitalization Plan

#### Public Buildings

9. City Hall
10. Fire Station Number Two
11. School Buildings

#### Education

11. School Buildings

#### Housing

12. Public-assisted new housing

13. Public-assisted home improvement
14. Public-assisted/private sector new housing
15. Public-encouraged/privately constructed new housing

#### Urban Design and City Beautification

16. Historic Preservation
17. Entrances to the city
18. Landscaping around public buildings
19. Mine-pit reclamation

#### Circulation

20. Street improvements and/or construction
  - a. Walker Avenue
  - b. Winderweedle Street
  - c. Pinewood Way
  - d. Miller Street
  - e. Railroad Avenue
  - f. Eva Street
  - g. Duval Street
  - h. Lee Avenue
21. Improve (pave) neighborhood streets
22. Construct neighborhood sidewalks and pedestrian paths

#### Potable Water System

23. Treatment Plant
24. Enlarge, replace, and construct new distribution lines
25. Replace and construct new fire hydrants

#### Sewer System

26. Treatment Pond
27. Disposal Pond
28. Collection lines and pumping station

#### Stormwater Disposal

29. Fir and Brown Streets
30. Mussey and SCL Railroad
31. Ruby and Eva
32. Nabor and Santa Fe
33. Meadow and Myrtle
34. Marymac and Darrow

35. Meadow and Ohio
36. Weller and Lake Mary
37. Hawkins and Church
38. Houston and 11th Street
39. Church and John
40. Suwannee and Wilbur
41. Irvin and Liberty
42. Irvin and Eighth
43. Irvin and Fourth
44. Lafayette and Eighth
45. Ammons and Fifth
46. Fifth and Taylor

#### Open Space and Recreation

47. Expansion of park on Fir Street
48. Acquisition of new park site on Walker Street
49. Creation of open space network

#### Solid Waste

50. Equipment and Personnel

#### Police

51. Equipment and Personnel

#### Fire

52. Equipment and Personnel
53. Relocation of Fire Station Number Two

#### Hospital

54. Doctors' offices

#### Cultural

### ENVIRONMENTAL IMPACT OF THE COMPREHENSIVE PLAN

Due to present physiographic conditions in Live Oak as discussed in the introduction, no major adverse impact on the environment is anticipated to result from the development proposed in the Plan. Concerning specific environmental factors, the following statements are abstracted from the Conservation Element.



AIR QUALITY - The main source of air pollution is anticipated to be the automobile. Assuming that emission standards are enforced on new automobiles and the city continues to pave and improve dirt and limestone roads, an improvement to the ambient air quality of Live Oak should result. New industry will also be required to meet standards, thereby minimizing any potential deterioration of air quality. (For additional information see page 117 of the Conservation Element.)

WATER QUALITY - Current stormwater drainage practices create a potential source of groundwater pollution. The Comprehensive Plan proposes an alternative system of surface water retention ponds which would greatly minimize this threat to the quality of groundwater. No new major construction projects that might affect surface runoff erosion are anticipated in the Plan. (For additional information see pages 117-120 of the Conservation Element.)

WILDLIFE AND VEGETATION - Very few large natural areas remain inside the city limits. The existing plant communities are not diverse and sufficiently extensive to support a varied wildlife population. The Plan will therefore have little affect--adverse or beneficial--on wildlife populations. The proposed Parks and Open Space System will enhance environmental qualities, but it is doubtful whether it will contribute to expanding the diversity of the wildlife population.

NOISE - The major source of noise in Live Oak is the Seaboard Coastline Railroad and the automobile. The impact from these factors is expected to increase commensurate with projected population and economic growth.

#### ADVERSE ENVIRONMENTAL EFFECTS WHICH CANNOT BE AVOIDED

The only adverse environmental effects which cannot be avoided should the proposed Plan be implemented are those which might result from normal growth conditions. Vacant land will be converted to urban and suburban uses which will result in the loss of certain natural environments. Increased usage of vehicles will tend to degrade present clean air; however, emission control standards (if enforced) should offset any projected pollution increases from new vehicular traffic.

Withdrawals from groundwater sources and continued drainage of surface water into subsurface systems will have some adverse impact, the extent of which is not known at this time.

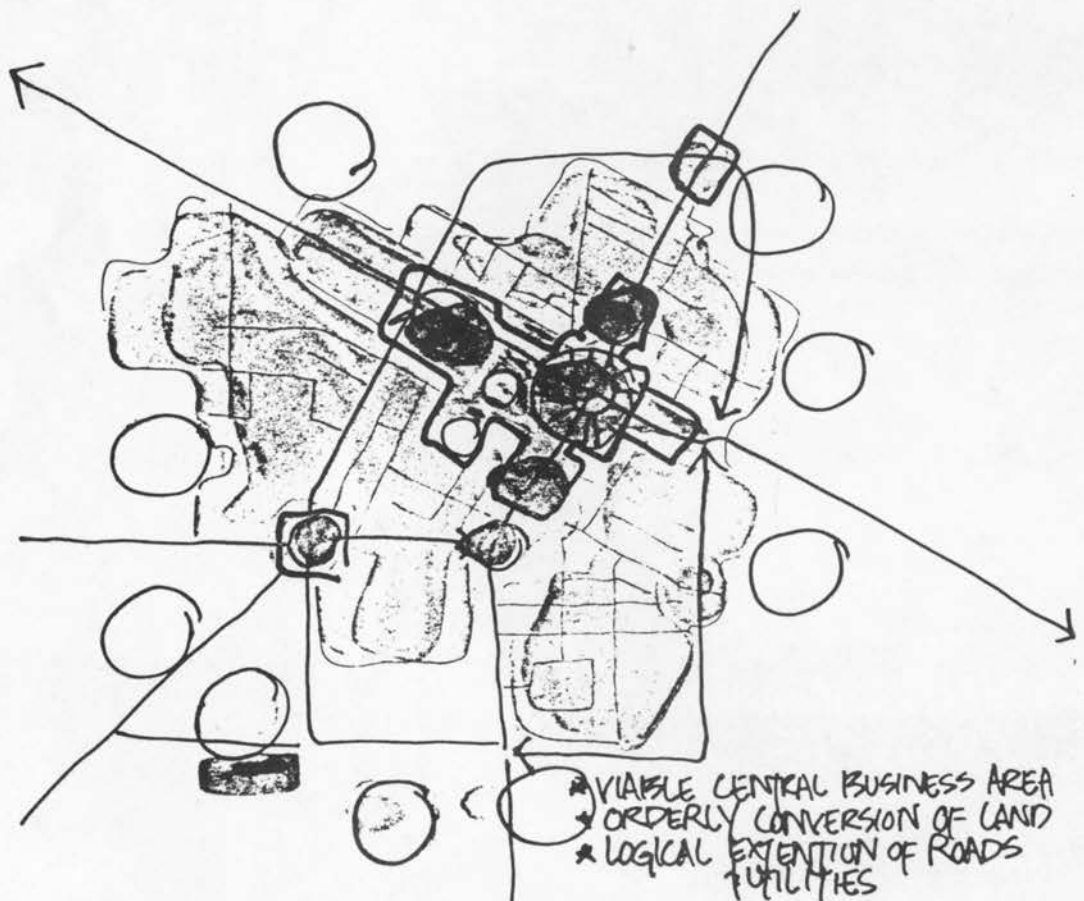
New residential, commercial, and industrial development will increase surface runoff and negatively affect areas of natural vegetation;

however, as already specified, agricultural and urban development have already all but eliminated this resource within the city. Logical planning and an attention to landscape preservation and enhancement could improve this condition.

#### ALTERNATIVES TO THE PROPOSED PLAN

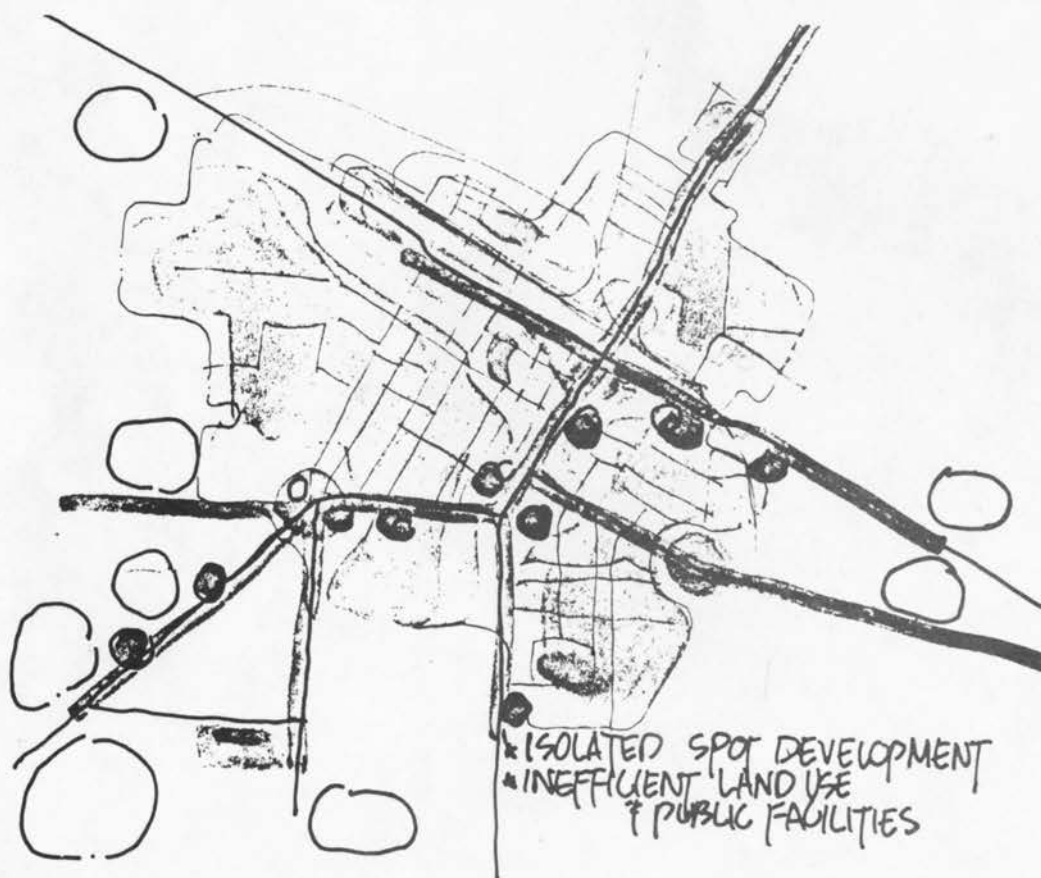
Three alternative urban patterns were investigated in the design stage of Plan preparation: Centroid/Concentration, Centroid/Scatteration, and Centroid/Southwest. These are discussed below.

CENTROID/CONCENTRATION - Centroid/Concentration as described earlier is illustrated on Map M-40 below.



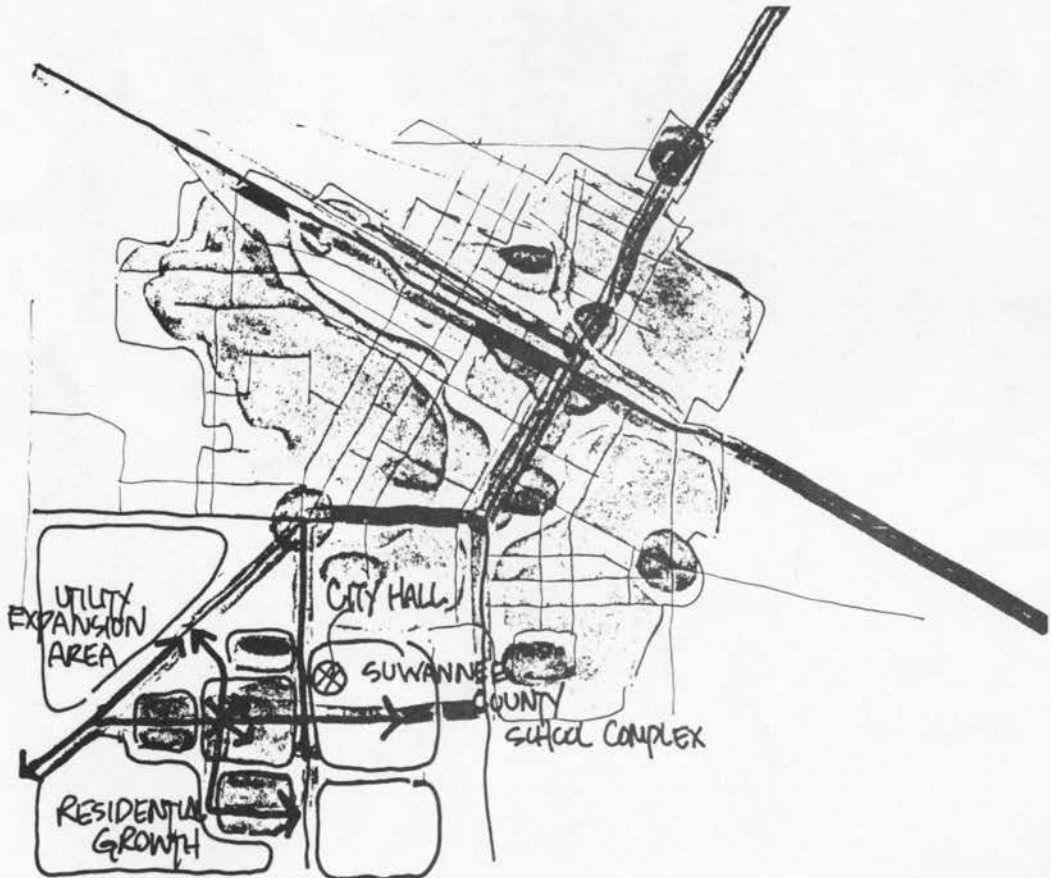
MAP M-40 CENTROID/CONCENTRATION

CENTROID/SCATTERATION - Centroid/Scatteration envisions a continuation of present development trends with little or no governmental intervention or control. Residential development is scattered and haphazard, with little relationship to public service. Neighborhoods are threatened, capital improvements would be extended unnecessarily, and facilities could not be constructed to meet development needs. This concept is illustrated below on Map M-41.



MAP M-41 CENTROID/SCATTERATION

CENTROID/SOUTHWEST - Centroid/Southwest envisions major encouragement of capital expenditure in the southwest sector to correspond to present development trends. The new City Hall and recreation area would be located in this sector and become the focal point of the city, to the detriment of the central core. Although this concept was deemed to be the easiest to implement, the negative impact on the downtown area and overall urban form would have been extremely detrimental to the long-range growth of the city. This concept is illustrated below on Map M-42.



MAP M-42 CENTROID/SOUTHWEST

## RELATIONSHIP BETWEEN LOCAL SHORT-TERM USES OF MAN'S ENVIRONMENT AND THE MAINTENANCE AND ENHANCEMENT OF LONG-TERM PRODUCTIVITY

Live Oak is heavily dependent upon agricultural activities and has several industries which are completely dependent upon agricultural commodities produced in the county. At the same time, there has been a definite trend to reduce the number but increase the size of farms in Suwannee County. Agricultural land within the city has almost disappeared. This trend, coupled with the increase in urban land assessment, has rendered most land more valuable for urban purposes. The remaining parcels used for agricultural purposes are too small to have a major productive value, and in all likelihood will be converted to urban and suburban uses in the near future. The long-term productivity of these farms is questionable due to economy of scale as related to farm operations and marketing.

The Land Use Plan recommends a concentrated form of development which will tend to reduce the pressure on land in the surrounding county, thereby assisting long-term productivity of these lands.

Long-term protection and enhancement of the groundwater system is integral to the proposed Comprehensive Plan and future growth of the city.

## IRREVERSIBLE AND IRRETRIEVABLE COMMITMENTS OF RESOURCES WHICH WOULD BE INVOLVED IF THE COMPREHENSIVE PLAN WERE IMPLEMENTED

The loss of certain agricultural lands would be the only anticipated irreversible and irretrievable commitment of resources which would be involved if the Comprehensive Plan were implemented. As stated in previous discussions, the scale of these activities is negligible when compared to the specified needs of urban development for the economic, social, and physical well-being and enjoyment of the citizens of Live Oak.

## FEDERAL, STATE, AND LOCAL ENVIRONMENTAL CONTROLS

The process of environmental control relates to four separate but integrated areas of regulation: Planning, Standard Setting, Permitting, and Enforcement. Planning is necessary for long-term management of resources. Standard Setting is that portion of the regulatory process in which the goals and problems identified in the planning phase are

addressed by the adoption of general minimum criteria and standards by rules in accordance with specified laws. Permitting has the purpose of implementation of planning by the application of standards to specific activities. Enforcement involves the monitoring of activities to determine compliance with standards and permit conditions and the initiation of corrective measures where violations are determined.\*

FEDERAL - A complete statement of Federal Environmental Control regulations would be too extensive and voluminous for this report, nor is it significant in many cases since State Regulations exist which are based (in general) thereon. For purposes of this report, it is stated that Federal Regulations relating to clean air and water as administered by the Federal Environmental Protection Agency will have a major impact on future development in Live Oak. For a complete reference to the individual regulations, the reader is referred to Code of Federal Regulations, 40, Protection of Environment, Parts 100 to 1500, published by the Office of the Federal Records Service, General Services Administration, U.S. Government Printing Office, Washington, D.C., 1976.

STATE - In 1975 the State of Florida began an entire reorganization of agencies and departments involved in environmental affairs and created a single Department of Environmental Regulation. This department has further prepared recommendations to the State involving additional reorganization of the permitting system. All of these factors will affect future development in Live Oak. The most applicable regulations are contained in Chapter 401 - Environmental Control, Chapter 380 - Relating to Development of Regional Impacts, and Chapter 381 - Relating to the State Board of Health. Also applicable are the Rules of the Department of Environmental Regulation, Rules of Administrative Procedures as listed below:

- Chapter 17-2 Air Pollution
- Chapter 17-3 Pollution of Waters
- Chapter 17-3 Permits
- Chapter 17-6 Sewage Works
- Chapter 17-16 Water and Domestic Wastewater Plants, Operator Certification
- Chapter 17-19 Domestic Wastewater Treatment Plant Monitoring
- Chapter 17-21 Rules and Regulations Governing Water Wells
- Chapter 17-22 Water Supplies

\*Abstracted from Report of the State of Florida, Department of Environmental Regulations in Response to H.B. 4251 (1976), March 1, 1977.

The Suwannee River Water Management District is in the process of establishing rules and procedures relating to surface and ground-water quantity and quality. These rules will have a major impact on future development in the city.

LOCAL - The most applicable local regulations relating to environmental controls are the Zoning Ordinance, Housing Code, and Subdivision Regulation of the City of Live Oak. These will have primary impact on implementing Comprehensive Plan recommendations.

## HISTORIC PRESERVATION ELEMENT

Live Oak was incorporated on the 24th day of April, 1878. The town became a railroad center, being situated exactly on the half-way ground between Jacksonville and Tallahassee. It took its name from a solitary Live Oak tree that grew in a dell surrounded by tall, majestic pines that were timbered in the early days of the settlement. This tree is said to have provided shade for both the hunter and game that abounded in the county at that time. It also became a shady rest spot for railroad workers. Due to the rich, fertile soils, the city developed strong agricultural roots which persist today as the primary economic base of the community.\* This history of Live Oak is reflected in its early structures, some of which are still standing today.

\* This historical survey is abstracted from a Florida Times-Union article, January, 1890.



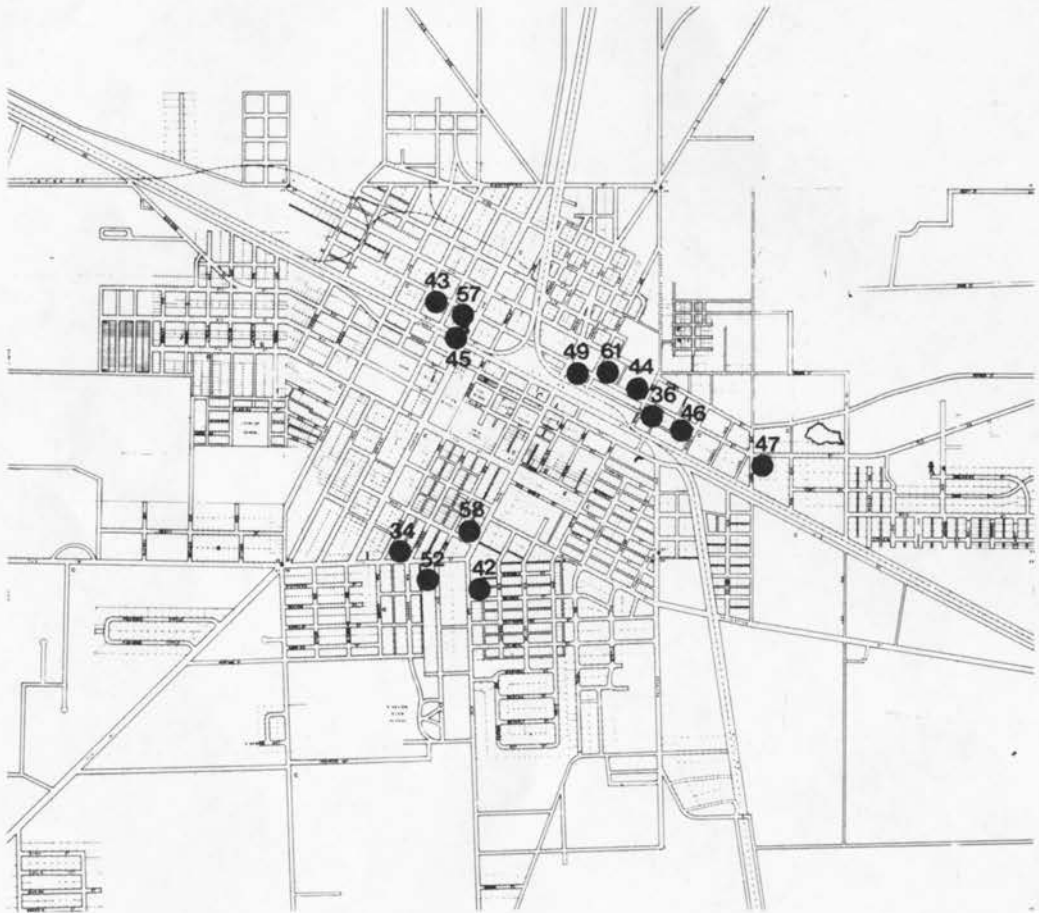
The Historic Preservation Element takes note of this history as embodied in a historic quality of the city as it presently exists. Since it was outside the scope of the Comprehensive Plan to undertake an inventory of historic structures and places, contact was made with the Division of Archives, History, and Records Management to determine whether there are any structures in the city which have been placed on the National Register. Table T-59 lists the structures in the city which are included in the Florida Master Site File; however, none of the buildings have been placed on the National Register.

TABLE T-59 SITES LISTED IN THE FLORIDA MASTER SITE FILE

<u>Site #</u>	<u>Site Name</u>	<u>Address/Location</u>	<u>Type</u>
34	Rogers House	corner of Suwannee Ave & Hwy. 51	building
42	Airth House	817 Ohio	building
43	Alison House	418 W. Duval St.	building
44	Beady Apartments	303 E. Duval St.	building
45	Broome House	105 N. Houston	building
46	B. W. Deese House	608 E. Duval St.	building
36	Dowling House	406 E. Duval St.	building
49	Live Oak City Hall	Ohio Street	building
52	McDowell House	802 Pine St.	building
57	Aubrey Steigle House	310 W. Duval St.	building
58	Sullivan Real Estate	626 S. Ohio	building
61	202 E. Duval St.	202 E. Duval St.	building
47	B. W. Deese House	814 E. Duval St.	building

SOURCE: Division of Archives, History and Records Management

All sites were inspected and, with the exception of 303 E. Duval Street, are preserved and appear to be in reasonable condition. The locations of these buildings are illustrated on Map M-43 presented below.



MAP M-43 LOCATION OF HISTORIC BUILDINGS

The Comprehensive Plan does not have any direct impact on the preservation of these structures. Unfortunately, with the exception of the Live Oak City Hall, all of the buildings are privately owned and are therefore subject to the decisions of individuals outside the direct control of city government. No major arterials, community facilities, or projected development will directly impact these structures. It is hoped that the strong orientation toward the downtown area and residential neighborhoods will tend to stabilize older areas, thereby influencing the use and preservation of these residential structures. It is recommended that an inventory of historic structures be undertaken as a part of the planning programs for downtown development and neighborhood improvement.

