1964

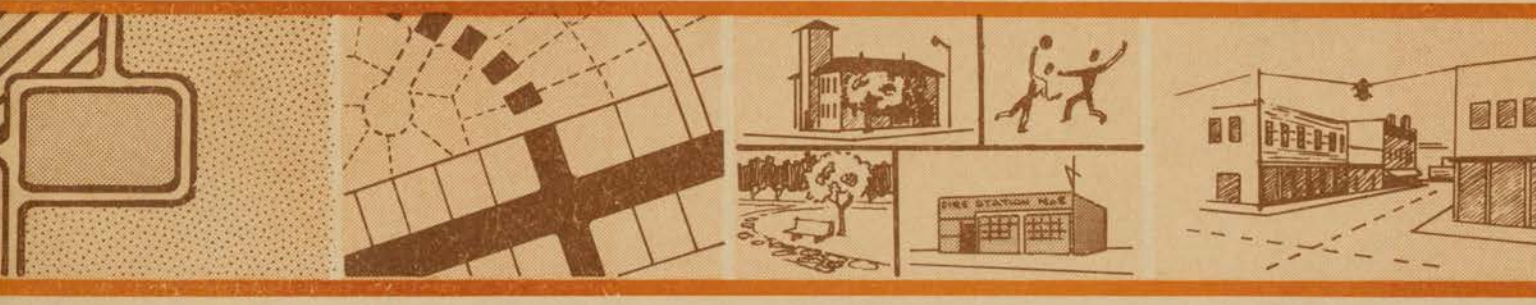
Comprehensive City Plan for Live Oak Florida. Vol. 2

Planning and Improvement Division Florida Development Commission

City of Live Oak

COMPREHENSIVE CITY PLAN

volume two



THE LAND USE PLAN
THE STREET PLAN
COMMUNITY FACILITIES
THE BUSINESS DISTRICT

CITY OF LIVE OAK FLORIDA

Florida
Development
Commission

FARRIS BRYANT
Governor
State of Florida

COMPREHENSIVE PLAN FOR LIVE OAK

Florida

Prepared Cooperatively
by the

PLANNING AND IMPROVEMENT DIVISION
FLORIDA DEVELOPMENT COMMISSION
and the
CITY OF LIVE OAK

Wendell Jarrard,
Chairman-Director

January 1964

Published By
THE FLORIDA DEVELOPMENT COMMISSION
Tallahassee, Florida

The preparation of this plan was financially aided through a Federal Grant from the Urban Renewal Administration of the Housing and Home Finance Agency, under the urban planning assistance program authorized by section 701 of the Housing Act of 1954, as amended.

COMPREHENSIVE PLAN
FOR
LIVE OAK, FLORIDA

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THE CITY OF LIVE OAK, FLORIDA

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FOREWORD

Volume I relates the research and analysis phase of the planning process, which is a background study to project future population and economic growth and land development trends.

Volume II defines the development plans of the City, which are based upon the growth potential as projected in Volume I. The Comprehensive Development Plan of Live Oak includes a General Land Use Plan, a Plan for Streets, a Community Facilities Plan, and plans for the Central Business District. All of these plans are designed for the physical development of the City. Long-range goals are defined, but short-range objectives are identified as part of a project-by-project improvement process.

Volume III, which follows, is concerned with the various means of implementing the City's planning objectives through a continuing process of administration, enforcement, and development.

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LAND USE ANALYSIS
HOUSING ANALYSIS
CONCLUSIONS, RECOMMENDATIONS

VOLUME III

Contains The
PROCEDURES FOR IMPLEMENTATION

PLANNING PROCEDURES
THE ADVISORY PLANNING BOARD ORDINANCE
THE ZONING ANALYSIS WITH PROPOSED REVISIONS
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PLANNING LAND USE

Planning the future land use of Live Oak requires a determination of the amount and proper distribution for the major categories of land by uses. Although the Land Use Plan is generalized, it must be based upon reasonable expectations of space requirements for the total of 9,300 persons projected for planning purposes to live in Live Oak.

Proposals of the Land Use Plan are based on all previous research and analysis of population, economy, existing land use, housing, and the neighborhood analysis. Furthermore, the General Land Use Plan was prepared in conjunction with plans for major streets and community facilities.

OBJECTIVES

Live Oak's overall planning for community development should be furthered in every way possible by the Land Use Plan. Live Oak's goal for development may change from time to time, and for this reason the Plan may need periodic revision. Therefore, the Plan must be considered flexible and subject to frequent review by Live Oak's planning officials to insure that local needs and objectives are kept in the forefront.

Through land use planning, policies should be defined for:

- Future improvement of major thoroughfares.
- Street paving programs for maximum service to the community at least cost, considering initial costs and costs of maintenance.

- Distribution of new residential development for the most orderly growth of the community, taking into consideration the availability or planned provision of street, sewer, water, school, and other community facilities.

- Extension of water mains and sewers where development is to be encouraged at higher densities.

- Alternative requirements to be applied to areas not to be encouraged for immediate development, i.e., lot sizes for areas to be provided with individual sewerage and water facilities, paving standards, zoning to be applied to low-density areas, and the level of public facilities and services to be provided.

- The location and type of industrial areas desired in order to provide a stable economic base.

- The location of public use areas according to the function to be served:

    - Public buildings of an administrative and cultural nature to be located within the Central Business District.

    - Utility buildings or service facilities to be located in industrial areas, where feasible and otherwise serving efficiently the purpose intended.

    - Parks to be located in any area of the City where they might serve a recreational, aesthetic, or "buffer" function.

    - Recreation areas to be located, according to type, in the Central Area for all age groups and in all residential areas for the young age groups.

- Schools, to be centrally located for the most convenient service to the residential areas.

SPACE REQUIREMENTS

As discussed in the Population, Economic, and Housing Analysis, there is an extremely limited range of growth opportunity available for the physical planning of the corporate area of Live Oak.

Moderate to small changes in the space requirements and development pattern will likely occur, however, over the next two or three decades. Space requirements for the various land uses will be estimated for the 9,300 population projected for planning purposes.

LAND CONSUMPTION RATIOS

Based upon the land use survey of 1962, the following land consumption ratios apply; these ratios describe the areas of each major category of land use required by each 100 persons in the population:

Table 1
LIVE OAK 1962 LAND CONSUMPTION RATIOS*
(Acres per 100 Persons)

	Acres
Residential Land	5.16
Commercial Land	.67
Industrial and Warehousing Land	.90
Public and Semipublic Land	1.62
(Open Space Land)	(1.01)

* 1962 population of Live Oak - 6,900 persons.

One method of estimating future land needs is to multiply the projected population by the above ratios. The results should, however, be modified in accordance with other considerations, i.e., changing space needs for a particular use, changes in the economic base, existing deficits of space for a particular category of land use. The value of land consumption ratios is to provide general guides, and their usefulness varies with the category of land use, as will be discussed:

RESIDENTIAL LAND REQUIREMENTS

Based upon the 9,300 population projected, approximately 143 acres of additional residential land will be needed.

Additional areas needed = residential land consumption ratio times the projected population less the existing residential land.

= 5.16 acres per 100 persons times 9,300 population less 356 acres.

= 124 acres

The above estimate requires adjustment for larger lot sizes preferred today (and expected to be the future preference). If a 75 foot lot (containing about 9,000 square feet)* is assumed to be the average size lot for future development, an increase by 19 acres is indicated for a total of 143 acres.

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* Compared with an average of 7,800 square feet in 1962 for all past development.

This is considered to be a reliable estimate of future residential land requirements, assuming no significant change in the existing preference for single-family housing.

The above estimates are in terms of net acres, which do not include streets. To the extent that future residential requirements will be met in the many areas already subdivided and provided with streets, the net acreage figure will apply. Any excess to be located in new subdivisions must be expanded one-third to provide for streets in arriving at the gross acreage needed. These allocations will be discussed on page 15 in more detail, according to requirements recommended for each type of area.

COMMERCIAL LAND REQUIREMENTS

Space requirements for future commercial growth can be estimated according to the ratio of .67 acres per 100 persons. This ratio is in line with that of some other Florida cities of similar and much larger size. Accordingly, about 16 additional acres of commercial land will be required. Adjustments according to changing needs for more spacious commercial land (primarily for parking) suggest an increase in the above figure by 25 per cent. Accordingly, there is an apparent need for some 20 acres* of additional commercial land for future population growth.

Based upon the economic analysis pertaining to trade, the foregoing is considered to be a liberal estimate of space needs. The range in estimate is from 15 to 20 acres over the next twenty years, which represents little growth.

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* Exclusive of abutting streets.

INDUSTRIAL LAND REQUIREMENTS

Industrial space requirements cannot be projected on a ratio basis, as the amount of land varies less by number of the population than by economic characteristics.

The economic analysis suggests some changes of employment in manufacturing, transportation, communications, and utilities requiring industrial type land. Based upon the projection of a small increase in employment and the prospects of adding to the City's basic industry, a liberal estimate of future needs suggests 20 to 30 acres additional industrial type land. However, the City and County are striving to improve the area's economy by attracting new industry, particularly manufacturing activity. Should these efforts bear fruit, industrial space requirements might double. Some modern industries desire very large sites, although only a small portion is usually utilized, and the acquisition of a plant of this type could increase space requirements by several times the above projections.

Because of the uncertainties connected with the preceding projection, the Land Use Plan will designate very liberal amounts of land according to suitability and compatibility for industrial development.

PUBLIC AND SEMIPUBLIC LAND REQUIREMENTS

There is a wide variation in ratios of public and semi-public land to the population, and the ratio for Live Oak, 1.62 acres per 100 persons, is considered to be low. According to higher standards found in other communities of comparable size,* Live Oak should plan for a higher ratio in the future. A ratio of 2.00 acres per 100 persons is proposed, based upon the observation that most public buildings are located on small, inadequate sites; the Live Oak High School Center, including recreation

areas, is very restricted in size, and the City has few developed parks and recreation areas.

For the 1980 population, based upon this ratio, there will be an apparent need for 186 acres of public and semipublic land, an increase of 74 acres. Based upon detailed planning of community facility needs, utilizing other standards for each particular use proposed in the Land Use Plan, the range in estimate indicates a need of 68 to 74 acres of additional land for this category of use.**

LAND SUITABILITY

The suitability of land for a particular use is determined by a combination of factors. Characteristics making it unsuitable for one use may not disqualify it for another use. Also land might be suited for the same use although at varying degrees of intensity (for example, single family versus high-density, multi-family use). Factors entering into a determination of suitability are: topography, other physical characteristics, such as vegetative cover, transportation facilities, availability of utilities and community facilities, and compatibility of existing uses in the area or in adjacent areas.

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* Many small Florida cities use 2.00 to 2.50 acres per 100 persons for all types of public and semipublic institutional and open space uses.

**The City and County already own some 50 acres of undeveloped land reserved for parks, school sites, and other purposes.

TOPOGRAPHY

No large area of Live Oak will be restricted in its development by unfavorable topography. The high elevation and relatively low slope combine to offer good building sites in all sections of the City in over 95 per cent of the total land area. Drainage problems are very local in nature, where a few minor topographic depressions occur.

TRANSPORTATION FACILITIES

All areas of Live Oak are currently served well by major thoroughfares, most of which are highways that are part of the state primary and secondary system. Other right-of-ways exist for extending a thoroughfare system, and in a few cases some need exists for adding a few connecting links, as discussed in the section on the Major Street Plan.

Live Oak is a small community, and all parts of the corporate area are within five minutes of the center of town via hard surfaced roads. However, in the future as development of some areas intensifies and traffic increases in accordance with national trends for vehicle ownership and miles driven, some areas will be poorly served without new thoroughfare improvements.

The major consideration to be given streets in the land use planning of Live Oak involves improvement of the minor, more numerous access streets. Many miles of streets have been platted and partially developed, but streets with adequate, standard paving are limited. Paving all of Live Oak's unimproved streets would create an excessive financial burden because of the low density and poor development potential of many areas of the City. The problem of street paving suggests the need for more intensive development of areas already subdivided. Most platted areas that are undeveloped should be replatted with fewer streets at such time as a need arises for the development of the area.

ACCESSIBILITY OF UTILITIES

Only a small portion of the corporate area is accessible to sewers and served adequately by the public water system. Low density of development of large areas of the City prevents economical extension of utilities. Many areas are served by pipes of inadequate size, particularly if any new development should take place in these areas. Land use planning should carefully consider the adequacy of existing utilities, and, where possible, prevent uneconomical extensions into areas of poor development potential.

COMPATABILITY OF USES

Major consideration should be given the compatibility of land uses in formulating the General Land Use Plan. The previous Land Use Analysis has identified major problems resulting in the past from mixing of land uses. A guide is needed for the orderly grouping of land uses with careful placement of non-residential uses in relation to residential areas.

Much emphasis must be placed on the preservation of the City's areas of good residential potential to avoid future blight worse than the problems already prevalent in almost all areas of the City. The Land Use Plan will delineate areas that are suitable for residential development, where future growth might be indicated and the Area Treatment Plan will suggest policies for improving existing residential areas already blighted. In preparing the proposed Land Use Plan, the existence of severe blight was considered. In some cases existing blight was considered too far advanced to make additional development feasible or advisable under present conditions, and these areas are labeled potential redevelopment areas.

THE LAND USE PLAN CONCEPT

For long-range guidance a general sketch plan based upon land suitability is presented in figure 1. This sketch plan considers the best urban use of land proposed for the entire corporate area <u>if in the future growth (even beyond the 1980 planning projections) a need arises for all of the City's undeveloped land</u>. This is an ultimate development scheme in very generalized form, and it provides a broad concept useful in the delineation of the more detailed General Land Use Plan proposed for the period of projected growth.

LAND USE PLAN CONCEPT
(BASED ON SUITABILITY)

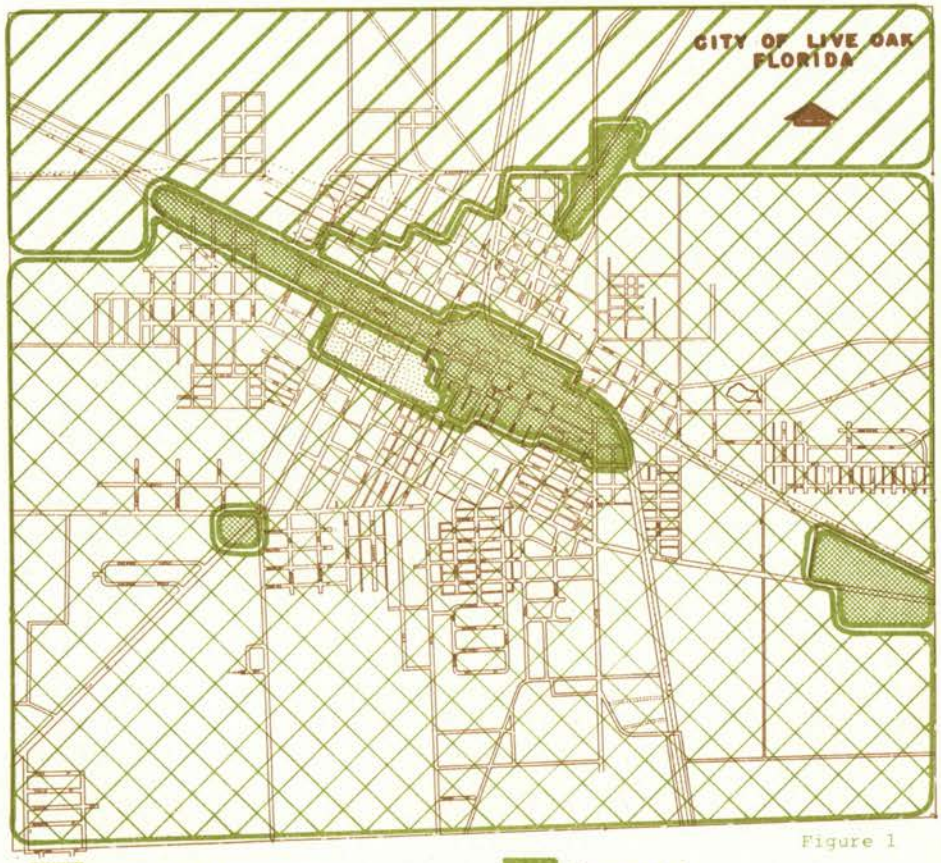


Figure 1

THE GENERAL LAND USE PLAN

The General Land Use Plan (proposed), figure 2, is a long-range view of the City's development potential some twenty years in the future. It was prepared after consideration of all the basic research discussed in the previous sections of this report, the analysis and projection of future trends and requirements of population, the economy, housing, and land use.

The Land Use Plan is a composite of the space allocations, which will be described in the following pages, by the following major use categories:

- MEDIUM-DENSITY RESIDENTIAL, which is an urban standard of residential settlement defined for Live Oak conditions of from 2 to 5 dwelling unit per gross acre.

- LOW-DENSITY RESIDENTIAL, which is a semirural standard of residential settlement defined for Live Oak of less than 2 dwelling units per gross acre.

- COMMERCIAL, which covers all types of retail businesses, trade services, and general commercial uses.

- INDUSTRIAL, which includes all lands intended for processing, warehousing, manufacturing, and storage facilities.

- PUBLIC, OPEN SPACE, which includes areas for all major open space uses such as parks, playgrounds, cemeteries, and forest preserves or greenbelts.

- PUBLIC, INSTITUTIONAL, which includes areas for all major public buildings, such as administrative centers, the medical center, schools, and the colosseum.

- EXTENSIVE AREAS, primarily undeveloped land or farmland left in a rural state of use.

- MAJOR THOROUGHFARES, which serve as the framework for developing the various component areas of the City.

The urban growth projected for planning purposes will not provide an opportunity for the entire corporate area to be developed. Even by 1980 some 69 per cent of the total corporate area's land is expected to be vacant or in nonurban use, compared with 75 per cent in 1962. However, the Land Use Plan, as proposed, will extend over a major portion of the City's corporate area, because much vacant land will be surrounded by a pattern of urban development.

LIVE OAK'S GENERAL LAND USE PLAN

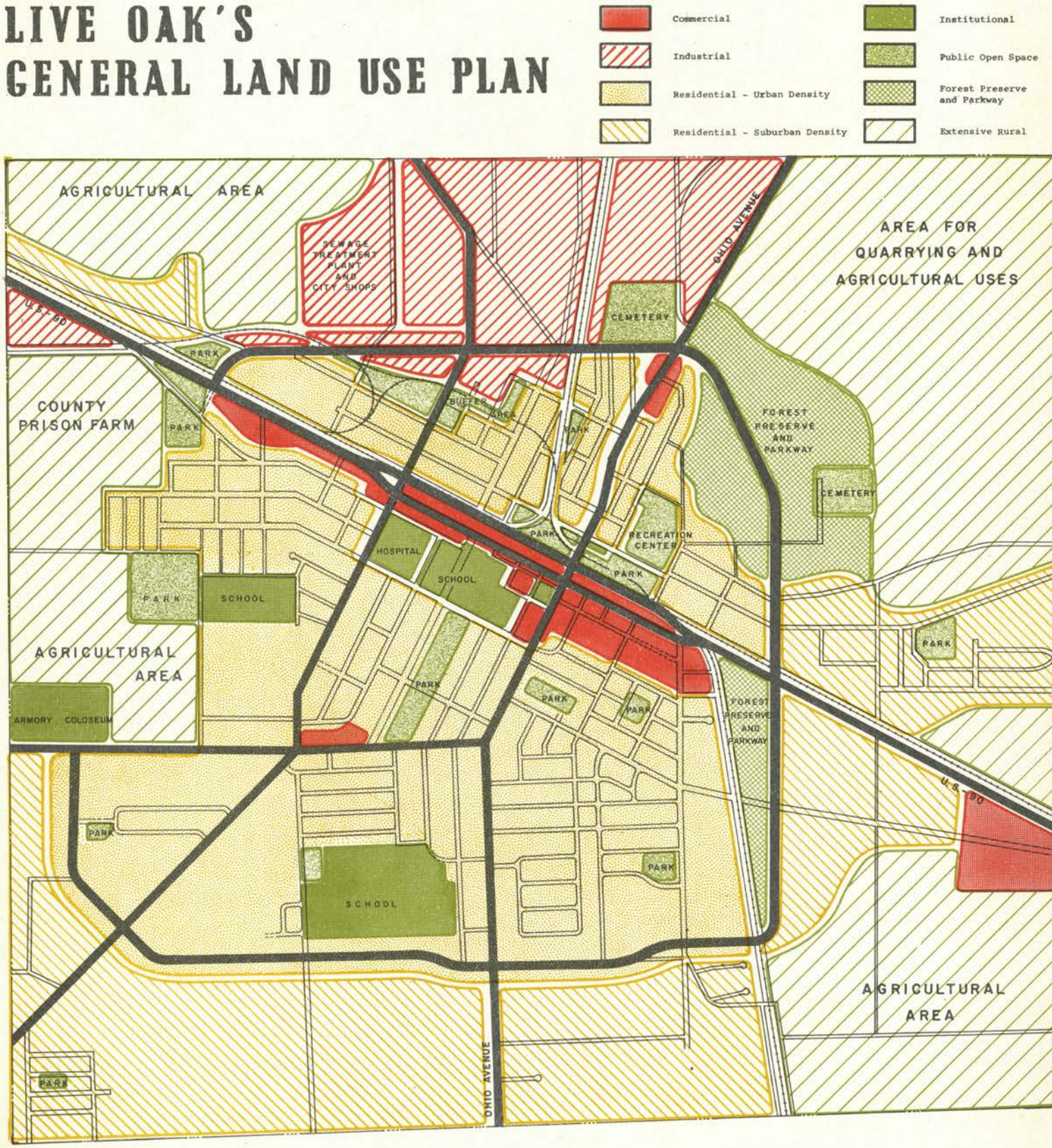
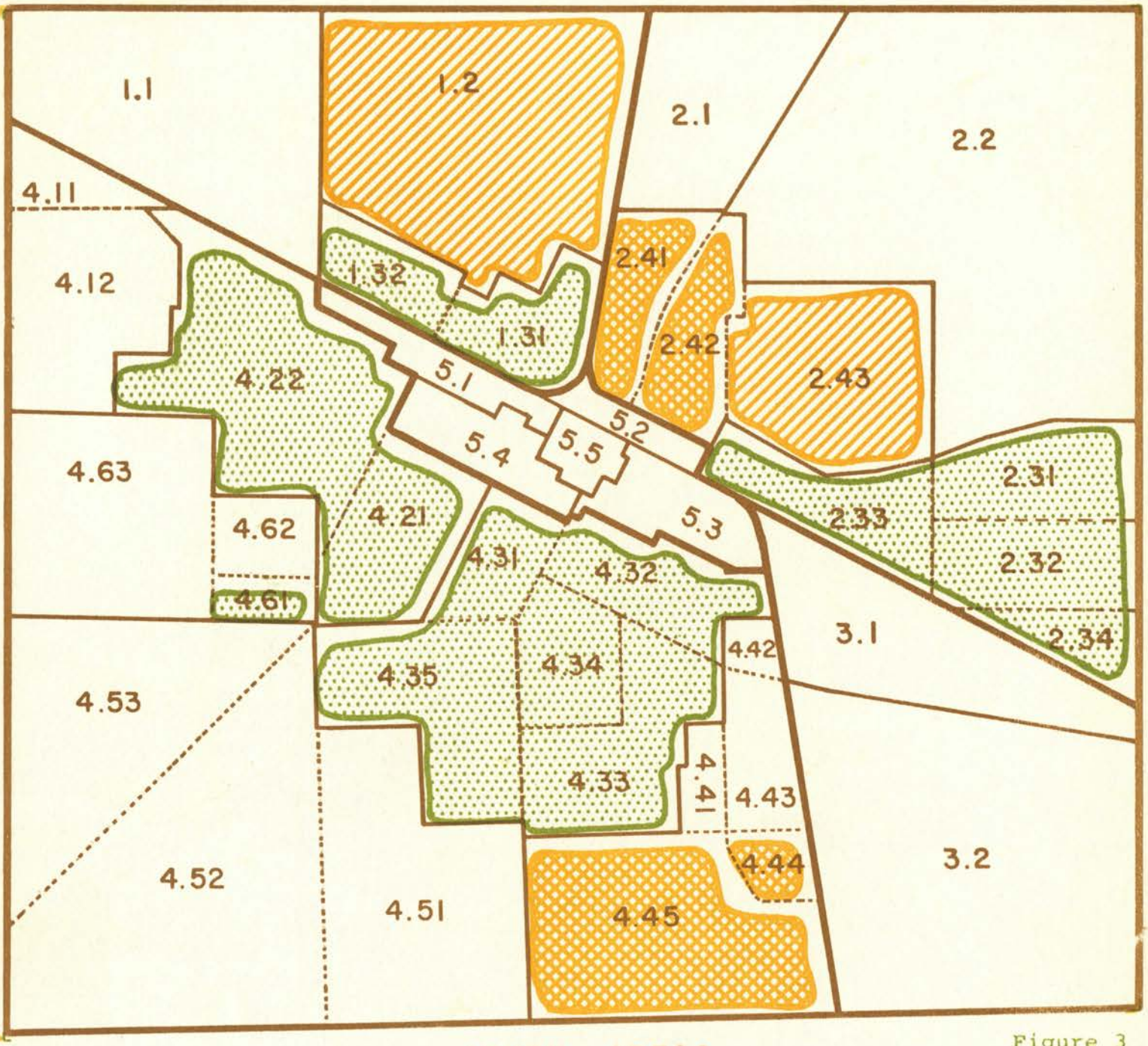


Figure 2

GROWTH POTENTIAL OF EXISTING RESIDENTIAL AREAS



STUDY AREAS

Figure 3

Fair to good areas for growth

Low growth potential without extensive redevelopment and rehabilitation measures

Areas to be redeveloped into nonresidential uses

RESIDENTIAL DEVELOPMENT

The first step in delineating future areas of high potential for residential development requires a determination of recent growth trends and availability of vacant residential lots that are accessible to public improvements. Figure 3 identifies the several residential districts that will be discussed in the following analysis.

Existing Areas of High Growth Potential

In areas of the City that are subdivided, partially developed, and judged to have fair to good growth potential, there are a total of 765 vacant, buildable sites for houses, distributed by districts as identified in figure 3:

Districts	4.3	4.61	1.3	2.3	4.2
Vacant Lots	302	20	60	137	246

Only 314 of these, however, have frontage on a paved street, distributed as follows by district:

	152	8	38	63	53

and a total of 373 sites are accessible to sewers:

	215	12	9	66	71

By assuming that no large area of the City will likely exceed 90 per cent of its development potential, allocations of future growth are made by study districts. The following estimates take into consideration past growth trends, level of public facilities, and the extent or absence of blighting influences. There are a total of 530 vacant, buildable house sites available and

desirable for future growth in areas already subdivided and judged desirable for growth:

4.3	4.61	1.3	2.3	4.2
222	16	40	70	182

These are the districts where future growth should be encouraged to take place first, before new acreage is subdivided and obligated for additional street, sewer, water, and gas improvements and other public services and facilities. These areas should be improved with all the public facilities and utilities that are required to stimulate earliest possible development. In addition to public improvements, a concerted effort should be undertaken to completely eliminate or minimize as rapidly as possible all blighting influences, either incompatable land uses or substandard housing, that hinder new development in these areas.

In the growth districts identified above there are an estimated 317 substandard housing units that are in need of replacement over the next twenty years:

Districts	4.3	4.61	1.3	2.3	4.2
Substandard Units	21	0	20	20	256

Areas of Low Growth Potential

Several residential areas that are already subdivided and partially developed are judged to have very low growth potential. These areas, identified in figure 3, are judged to have a low growth potential because of the prevalence of blight and the lack of public improvements.

Areas 1.2 and 2.43 should be eliminated as residential areas as soon as possible and be redeveloped for non-

residential use. There are 158 housing units existing in the two districts:

District 1.2	District 2.43
62	96

of these, 108 units are substandard and should be eliminated:

35	73

These areas are predominantly nonwhite by occupancy, and over a period of years an estimated 101 fewer housing units will be required for the nonwhite population. Therefore, the elimination of these housing areas would result in a net loss of about 57 units to be provided in other areas of the City.

Areas 2.41, 2.42, 4.44, and 4.45 are recommended for retention as residential areas but substantial redevelopment and rehabilitation measures will be required if they are to be made into desirable housing areas. There are a total of 208 housing units, distributed as follows:

Districts	2.41	2.42	4.44	4.45
Housing Units	106	102	22	42

Of these, 64 units are substandard and will require replacement over the next twenty years:

47	17	8	27

Area 4.45 should be practically eliminated and its 42 units located in one modern subdivision in the same general area but contiguous to existing development.

Area 5, the central area of Live Oak, eventually should eliminate the 77 existing housing units, as the residential properties are redeveloped for business and institutional type uses.

Areas for Future Housing Development

From the preceding discussion it is possible to determine how many acres of new residential land must be subdivided to provide for the new houses which will not be accommodated in existing areas.

There will be a future requirement for an estimated 626 units to accommodate the population growth.* To that should be added 277 units recommended for demolition and relocation from three redevelopment housing areas.** The total of 903 units needed should be distributed approximately as follows:

In areas already subdivided - 427 units
In new areas to be subdivided - 476 units

It will be assumed for general planning purposes that each housing unit will require one lot. Following is an estimate of additional lot development recommended and projected in the future within each of the desirable growth districts:

Districts	Total	4.3	4.61	1.3	2.3	4.2
Number of Units	427	222	16	30	60	99

The 476 units projected for new areas will require approximately 136 acres to be subdivided, assuming 3½ single family units per gross acre (including streets). Based upon recent growth trends, topographic characteristics, level of community facilities available to the area, the 136 acres are recommended for development almost entirely in the southern half of the City west of the A.C.L. Railroad tracks.

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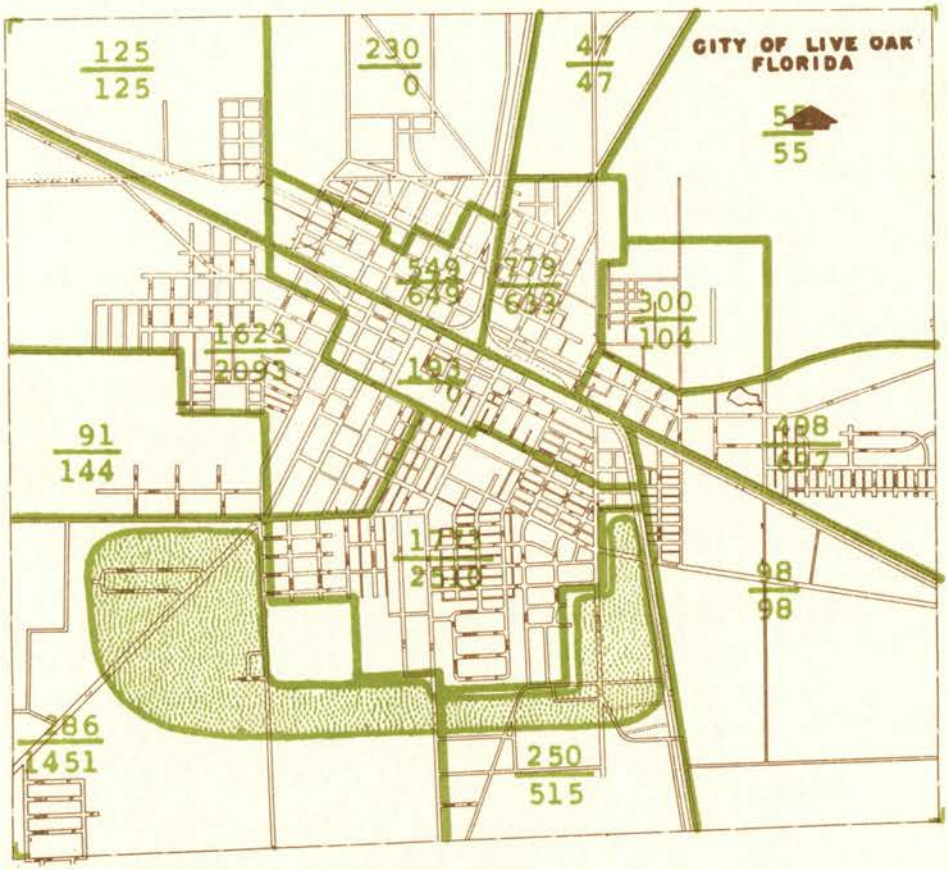
* 727 units for the white population gain, less 101 units for the nonwhite population loss, yields 626 units total.

** 42 units from areas 4.45; 62 units from area 1.2; 96 units from area 2.43; and 77 units from area 5.

VACANT LANDS RECOMMENDED FOR SUBDIVISION
OR RESUBDIVISION



6897 (1963 Population Estimate)
9121 (1980 Population Projection)
Major Growth Area

Fig. 4

Figure 4 identifies the new areas recommended for intensive urbanized residential development. The area delineated would provide about 800 lots, if totally developed. This area would provide 168 per cent of the space needs by 1980 for new land, which provides a wide margin for vacancies and partial development. Future projections of population by areas of the City are also shown in accordance with the Land Use Plan objectives.

The areas delineated for intensive urbanized residential development are recommended for a high level of community facilities. Sewers, water, and gas mains should be extended into these areas when applications are received for substantial development. Extensions of utilities into these areas would present few problems if existing mains were adequate, and in many cases they are not. Therefore, a major improvement program is indicated in the years ahead of the sewer and water system, and this subject will be discussed in more detail in a later section.

There are other areas identified in figure 2 that will be suitable for residential development at such time as a larger housing market develops. No foreseeable need is indicated for intensive development; therefore, the areas are delineated with a recommendation for extensive, rural density development without the provision of public sewers and water in most cases. However, water can be extended very often where sewers cannot. Large lots, not less than one-half acre, should be required to permit installation of septic tanks and to keep development at a very low density. Implementation of this recommendation will be proposed through a zoning amendment defining an estate district.

COMMERCIAL DEVELOPMENT

Allocations for commercial area are identified for 5 principal locations. These areas are selected on the basis of the following considerations:

A nucleus of commercial development already exists. The area is properly located to serve a commercial function, each of which might experience part of the future commercial expansion.

The Central Business District, and its extension of strip commercial development along Route 90, is the most important commercial area of the City. The limited commercial growth should be directed to this district insofar as practical in order to encourage the most concentration of retail business and trade service establishments as possible. Live Oak will continue in the future to be too small to fragment its commercial functions into several small decentralized shopping districts. The detailed planning and analysis of this Central Area will be the subject of another section of this report.

The commercial district delineated on Route 90 at the eastern limits of the City is an existing commercial district consisting of uses requiring an extensive use of land, such as the drive-in theatre and radio station. Other similar uses, such as commercial entertainment and recreation facilities, probably will arise in the future and could be satisfactorily located in this area.

The area located on North Ohio near Winderweedle has businesses oriented mainly to drive-in trade. In the future, as this street becomes an access route to the Interstate Highway, some increase in such business uses might take place, possibly some motel development.

The area located on U. S. 90 west of Woods Street and along Madison Street is an existing commercial district only partially developed. It serves a limited area with neighborhood type, convenience facilities plus some general commercial uses not requiring a central location in the City. The area is not expected to grow much, if any, except possibly as a location for agri-business uses requiring larger sites on a good highway.

The area located at 11th Street near Walker Avenue will provide neighborhood type businesses. Several are already located in the area, and some growth is expected.

The future commercial growth is projected to require some 20 acres of additional land. To this should be added some 5 acres recommended for relocation from residential areas where they are now improperly located as nonconforming uses. The 5 areas delineated for future commercial use will provide ample area to meet the 1980 space requirements.

INDUSTRIAL DEVELOPMENT

Industrial growth is not expected to require much additional land, perhaps 20 to 30 acres. However, if the City will apply effective planning controls to eliminate existing nonconforming industrial uses from all nonindustrial areas, as is proposed in the General Land Use Plan, some 10 acres of industrial land would be required for relocation. Not all nonconforming uses need be removed immediately, but over the long run many of them might be relocated as old buildings or sites become inadequate.

There is an abundance of land available to accommodate all of the projected industrial space needs. The main objective in Live Oak's Land Use Plan should be to reserve one area of the City for industrial purposes and curb the tendency to place scattered industrial uses in any area of the City. The area proposed for industrial use is located in the Northwest quadrant of the City. The area is accessible to U. S. 129 and several county roads, in addition to having an abundance of rail frontage. One area is proposed for light industrial use, but the major portion need not be restricted.

Additional lands might be developed outside the City for modern industrial uses requiring extraordinarily large sites. The industrial park - a community of industries - is a relatively new approach to industrial site development in a planned project providing for major site and facility needs. Figure 5 is a general sketch plan prepared for preliminary planning of a Suwannee County airport-industrial park.

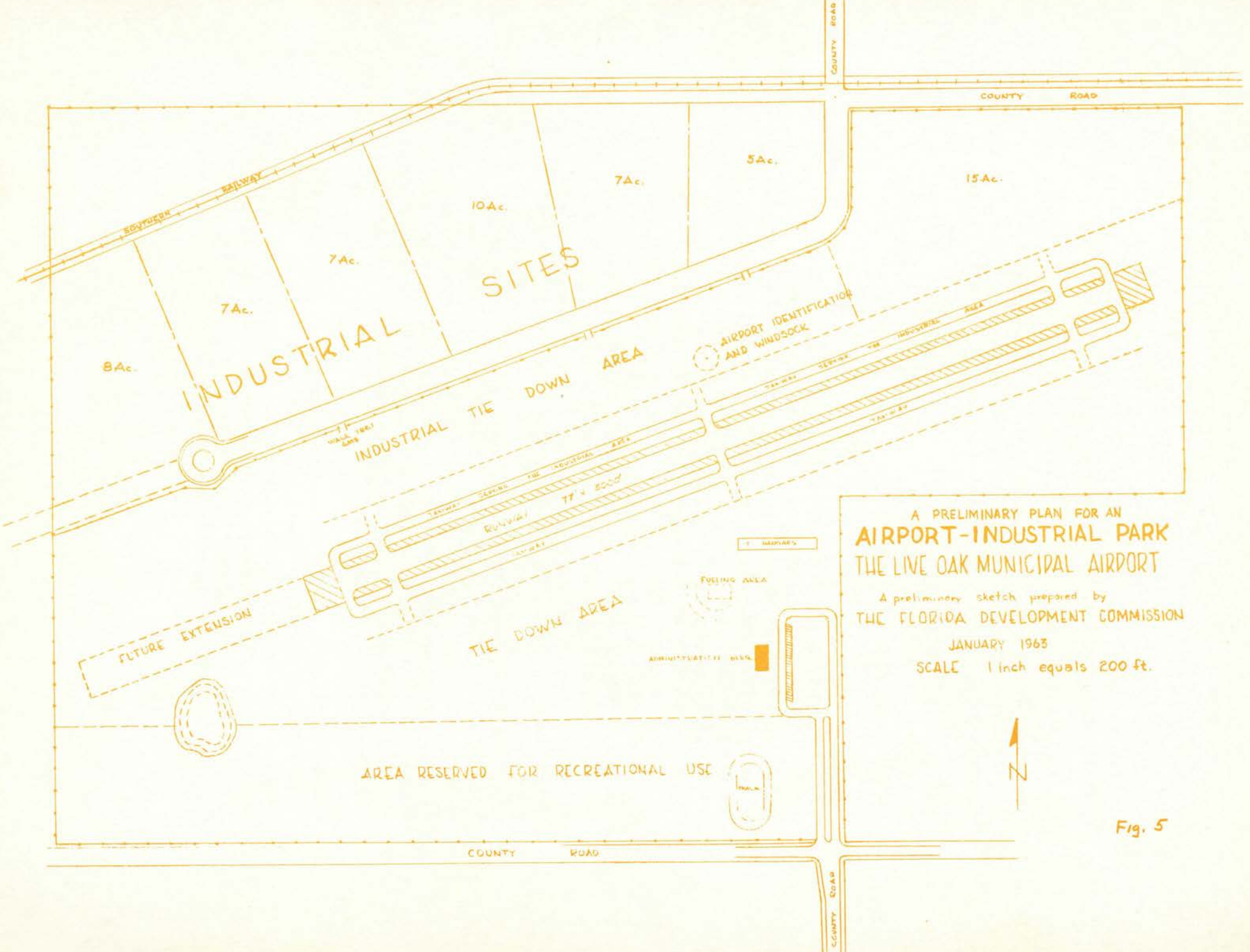

COUNTY ROAD
COUNTY ROAD
SOUTHERN RAILWAY
5Ac.
7Ac.
15Ac.
10Ac.
7Ac.
7Ac.
8Ac.
INDUSTRIAL SITES
INDUSTRIAL TIE DOWN AREA
AIRPORT IDENTIFICATION AND WINDSOCK
RUNWAY 17' x 5000'
FUTURE EXTENSION
TIE DOWN AREA
FUELING AREA
AREA RESERVED FOR RECREATIONAL USE
COUNTY ROAD
COUNTY ROAD
A PRELIMINARY PLAN FOR AN
AIRPORT-INDUSTRIAL PARK
THE LIVE OAK MUNICIPAL AIRPORT
A preliminary sketch prepared by
THE FLORIDA DEVELOPMENT COMMISSION
JANUARY 1963
SCALE 1 inch equals 200 ft.
N

Fig. 5

PUBLIC AND SEMIPUBLIC DEVELOPMENT

The General Land Use Plan will designate existing and future areas for the major public uses and will not attempt to provide for every minor public and semipublic use.

Areas for public administration buildings are shown as extensions of existing areas according to reasonable expectation of long-range needs.

Areas for utility buildings, services, and maintenance facilities are proposed for location at existing sites and in some cases at new sites located in the industrial district. For example, the County barn is poorly located in the long-range view of a orderly pattern of urban development, and it should be relocated eventually in the northwest industrial district.

School sites that exist are considered adequate for future locations, although the central high school site might be expanded to include one or two additional acres. The two other school locations have large sites reserved for future expansion. Although only part of these sites will be needed for school use, they should be reserved for school, park, and recreational use.

Land around the Live Oak Hospital is proposed for expansion into a medical district, including doctors offices and clinics, rest homes, sanitariums, pharmacies, and other related uses.

Recreational areas are in short supply at the present time, and it would be beneficial for the City to undertake to acquire and develop additional recreation and park areas. The Live Oak Recreation Center is adequate for most needs at this time, but several small neighborhood parks and playgrounds should be acquired while vacant

land is yet available. Live Oak needs to develop some attractive parks for beautification purposes; however, limited recreation facilities might also be located in the parks. Several sites are proposed for acquisition, although partial use of parks could be effectively made of several existing public areas. Several parks should be acquired and developed as buffer strips protecting residential areas from nonresidential uses. Not all park areas need be developed as conventional parks with many facilities. Those intended to serve as greenbelts or buffer strips could be planted as forest preserves.

The foregoing public uses and facilities will be discussed in more detail in the Community Facilities Plan.

PLANNING STREETS

The street system of Live Oak is designed to provide for through movement of traffic to and from the City as well as circulatory movement within it. Long-range plans should be developed to guide all major street improvements needed now or in the future. A plan for major streets would serve as a framework within which all minor streets could be developed in an efficient and orderly manner.

The determination of the major streets is based upon the General Land Use Plan. The analysis of existing traffic conditions identifies current problems and when coordinated with the growth characteristics of the General Land Use Plan, a projection of future traffic volume aids in the identification of future traffic needs and street improvements.

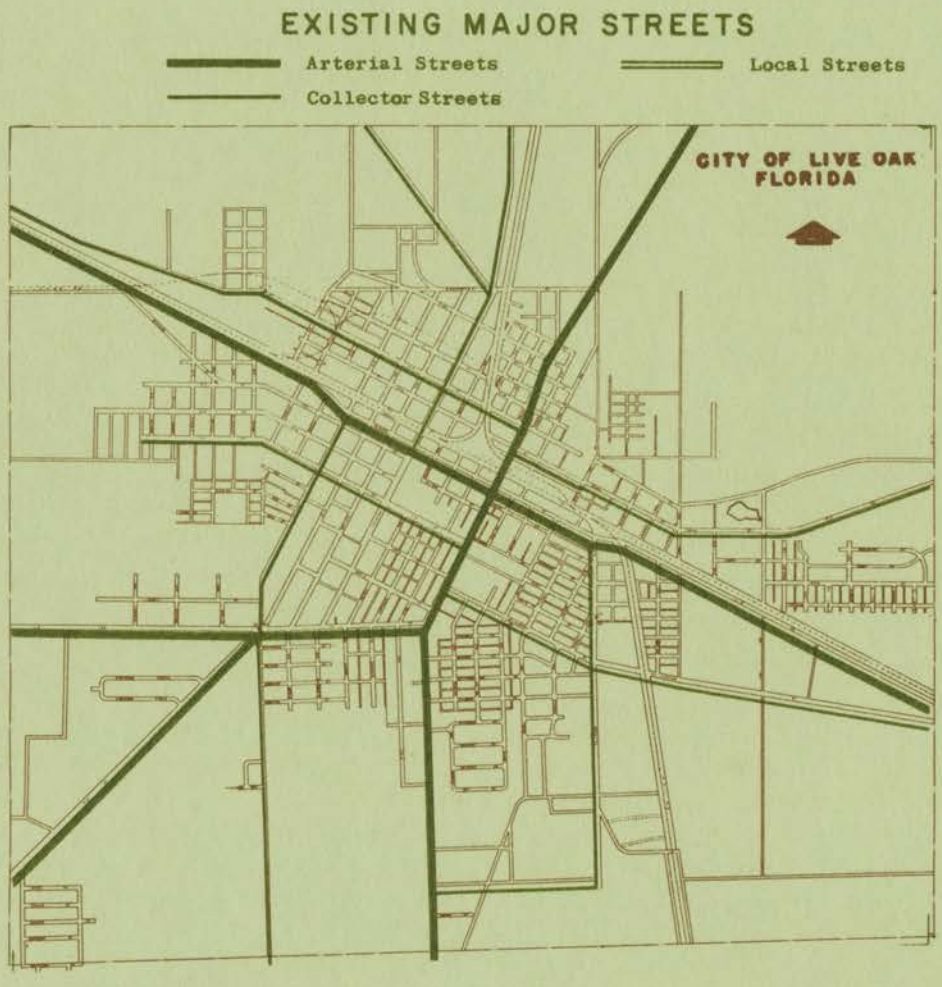
CLASSIFICATION OF STREETS

Streets serve several functions: access to property, through movement of traffic, and storage of vehicles. In addition, they provide some secondary benefits, such as light and air to abutting property. The majority of streets serve primarily to provide access to property, but a few, about one-third of the total in Live Oak, are important in addition for moving large volumes of traffic over longer distances. Most of Live Oak's streets are used also to store vehicles, i.e., on-street parking.

In the smaller cities, where traffic is usually small, there have been few problems connecting with a street serving all three functions. However, as traffic volumes increase, it will become increasingly difficult for a street to efficiently move large volumes

of through traffic if, at the same time, it must store parked vehicles and provide unlimited access to abutting property. Live Oak's street system is already experiencing difficulties as a result of the conflict in functions.

Figure 6 classifies the existing street system according to the major type of street, classified as follows:



ARTERIAL STREETS

Arterial streets are the major thoroughfares intended to carry "cross-town" traffic, made up largely of through, long-distance trips. In Live Oak, the arterial streets at this time are state roads which handle considerable "external" traffic passing through the City as well as local "internal" traffic. On these streets, parking and access to property should be subordinate to the need to move traffic. According to specific needs and circumstances, parking and even access to property might be eliminated altogether.

The primary arteries are U. S. 90 (Howard Street) and U. S. 129 (Ohio Avenue), which converge on and cross each other in the central business district. As a result of heavier, through traffic and the improved relatively wide roadways, these streets have been stripped with business development, particularly in the case of Howard Street.

Several other state roads provide secondary arterial routes leading into the City, although traffic volume on these roads is less.

Interstate 10 will provide a by-pass 1.7 miles north of the City, and it will influence the future traffic pattern of Live Oak. Ohio Avenue will provide an important connecting route with Interstate 10.

COLLECTOR STREETS

Collector streets are designed to carry traffic from minor streets to the arterial streets. Collector streets provide connecting links, usually of shorter distance, and they carry lesser volumes of traffic, as a rule, than occur on the arterials. In larger

cities the distinction between collectors and minor streets is very evident, but in smaller cities, such as Live Oak, the difference is less apparent. Collector streets usually provide unrestricted access to property. Parking is usually permissible but should not be permitted to restrict a free flow of traffic.

At the present time the following streets of Live Oak are classified as collectors:

Second Street (west of Lime Avenue)
Duval Street
Helvenston Street
White Avenue
Suwannee Avenue

MINOR STREETS

Minor streets serve solely to provide access to abutting property, and as a rule, particularly in residential areas, they carry very low volumes of traffic.

EXISTING TRAFFIC CONDITIONS

The relative use of the most important streets for the movement of large volumes of traffic is identified in figure 7. Traffic volumes are indicated at various check points in terms of average daily traffic (ADT), which is the number of vehicles passing a check point in a 24 hour period. The figures represent average conditions, and fluctuations occur seasonally, daily, and hourly. Figure 7 will serve as a base in estimating the future traffic flow by volume and distribution.

Congestion:

Two-lane roadways, both urban and rural, are the most common in Florida today. These roadways give good service to volumes up to 3,000 ADT without resulting in any noticeable congestion. The average motorist usually considers volumes of 5,000 ADT as "congested," although two-lane roadways are capable of much higher volumes with considerable congestion.

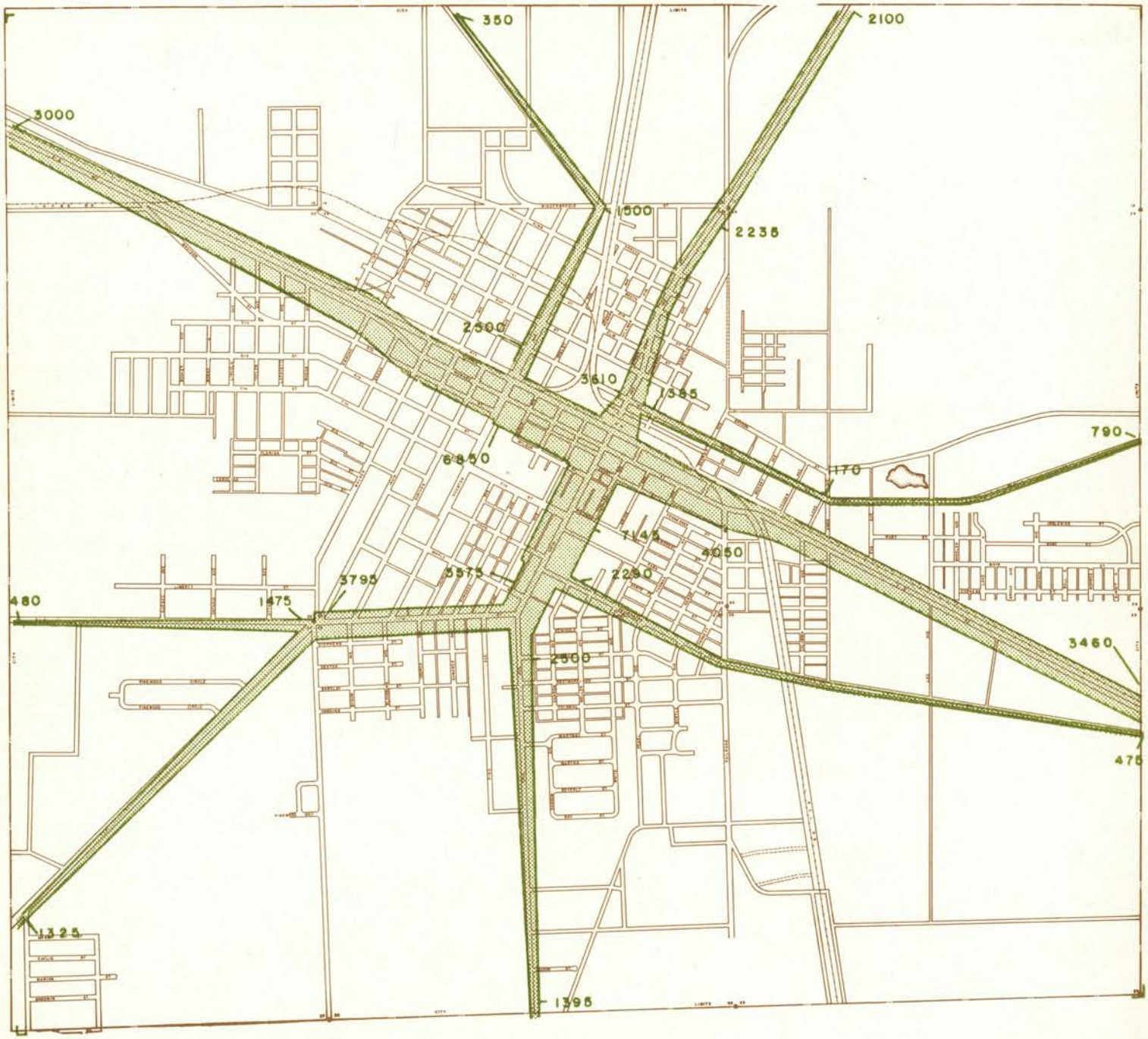
Figure 7 (ADT - 1962) shows a volume of 6,850 ADT at the intersection of Houston Street and U. S. 90. At the present time, although U. S. 90 is congested, it is not intolerable. Continued growth in traffic, however, will add to the inconvenience of motorists.

Four-lane roadways will carry much more than twice the volume of two-lane roadways. The design capacity for a four-lane highway is approximately 20,000 ADT. Only two streets in Live Oak - Howard Street (U. S. 90) and Ohio Avenue appear to have the congestion and traffic potential necessary to require four-lane roadways. Ohio Avenue is four-lane through most of the City where traffic is heaviest. Howard Street could be made four-lane by removing parking.

1962 AVERAGE ANNUAL DAILY TRAFFIC

5 000
CARS

Source: State Road Department



CITY OF LIVE OAK
FLORIDA

Figure 7

CONDITION OF STREETS

A survey of street conditions in Live Oak indicates that there are 62.4 miles of developed streets within the City; 57 per cent of which are paved. Platted but undeveloped streets account for 9.1 miles. The condition of the streets is summarized in the following table and in figure 8.

Table 2
STREET DATE - LIVE OAK (1963)

	Miles	% of Total	% of Total Paved
Streets Paved:	35.60	57.0	100.0
Good Condition	11.36	18.2	31.9
Fair Condition	20.30	32.5	57.0
Poor Condition	3.94	6.3	11.1
Streets Unpaved:	26.82	43.0	--
TOTAL DEVELOPED	62.42	100.0	--
Undeveloped Streets:	9.10	--	--

Because of the large number of vacant lots throughout the residential areas, a considerable amount of paving is required to serve the developed lots. To illustrate this point, the amount of paving required to serve each developed lot is 101 feet. If all of the potentially buildable lots were developed, only 69 feet of paving per developed lot would be required. Therefore, it can be seen that because of the low residential density in most housing areas, the City is faced with costly paving programs.

CONDITION OF STREET SURFACES

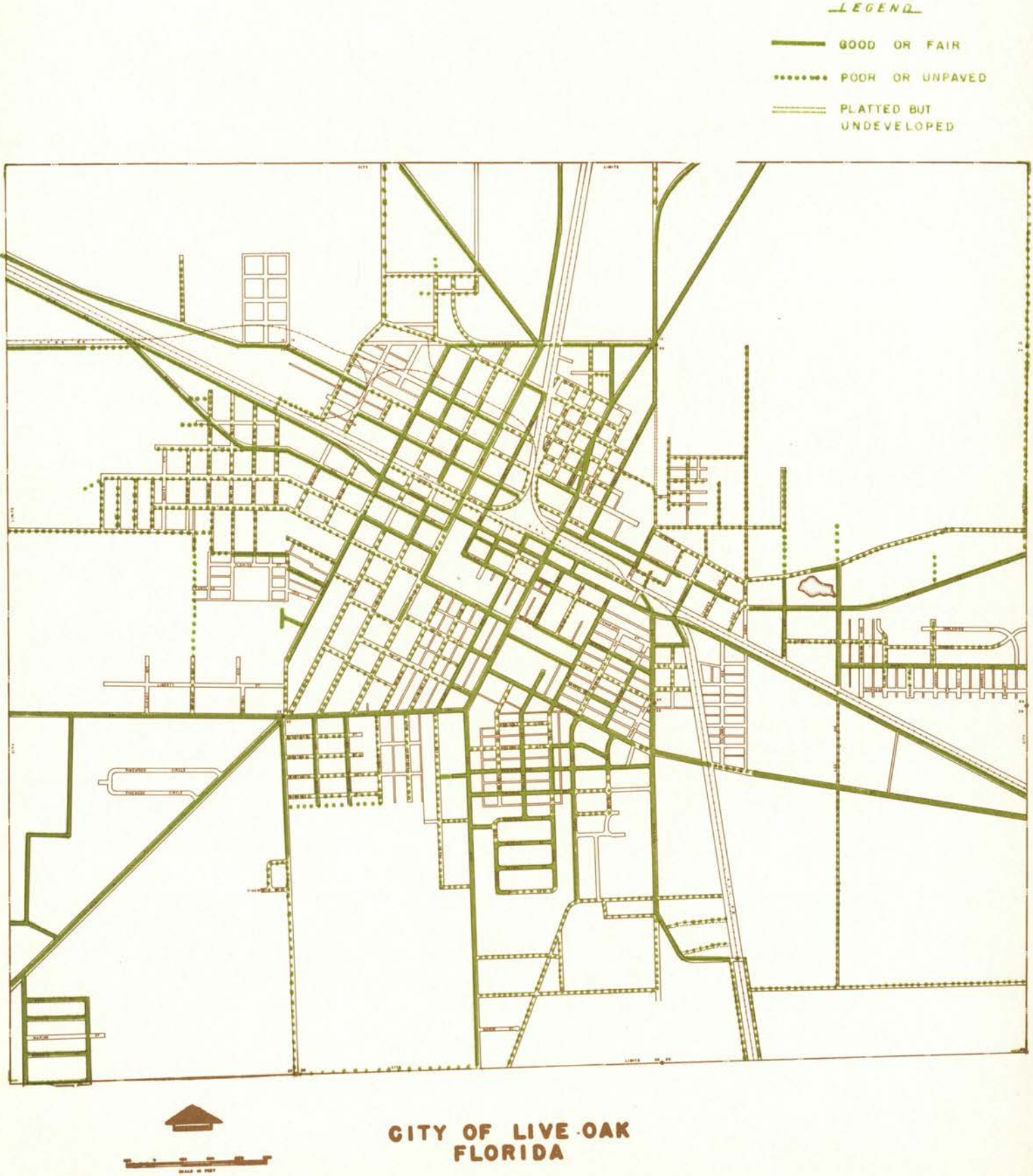


Figure 8

PAVING QUALITY

Live Oak has 36 miles of paved streets, but unfortunately only about one-third of these are classified as having good surface condition. Only the older streets were constructed with curb and gutter.

Many paved streets show deterioration to the point that they should be rebuilt. Other more recently paved streets show signs of wear indicating that they will require repairs within a few years. This is particularly true of the sand-asphalt type streets. By way of comparison, there are serviceable concrete streets that were constructed over 30 years ago, which appear to have years of useful life remaining. Standards should be established in any new paving programs to increase the life expectancy of the new streets to seventeen to twenty years.

The most common type road construction used in Live Oak is the "sand-asphalt hot-mix" process. According to State Road Department minimum standards, the specifications for construction of residential, low-traffic streets are as follows:

Limestone Base Course: 6" to 6½" minimum thickness.
Surface Course: 1" to 1¼" AC (asphalt-concrete) type 1.

or

Sand-Asphalt Base Course: 6" to 8" minimum thickness.
Sand-Asphalt Surface Course: 1" to 1¼" minimum thickness.

Specifications for major streets should be higher according to traffic conditions anticipated.

The City performs most of its street paving works, using County-owned equipment. Although initial costs of the street paving programs compare favorably with contractor prices, the City should re-evaluate its paving program

to determine standards and methods to insure higher quality paving work. Assistance in setting standards can be obtained from the District Engineers Office of the State Road Department. It is recommended that streets be constructed with curb and gutter.

PAVING WIDTHS

Throughout most of Live Oak paving widths are generally adequate for the purpose of moving traffic. There are, however, some streets which fall below the minimum paving requirements set forth in the design standards listed later in this report. Even though some streets are below recommended design standards, they are still adequate for the low traffic volumes existing at the present time. As demands increase, however, streets requiring improvements should meet the minimum design requirements.

Most residential streets are paved on 18 and 20 foot widths, some with curb and gutter but many, particularly the newer streets, without. Such narrow streets do not permit safe curb parking and uninterrupted traffic movement. Wider paving widths would offer more convenience and safety; a 26 foot width with curb and gutter is a commonly accepted standard for residential streets.

PLANNING FUTURE STREET IMPROVEMENTS

Planning future street improvements for Live Oak involves the projection of future traffic growth to determine improvements in the thoroughfare system, and a schedule and plan for future paving to improve the more numerous minor streets.

FUTURE TRAFFIC PROJECTIONS

In order to project traffic for 1980 an expansion factor of 2.1 was derived according to a standard method of vehicle-mileage forecasting.* This factor rests upon three basic determinants of equal weight:

Trends in Automobile Ownership

The number of persons per vehicle decreased from 3.5 to 1 to 2.4 to 1 for the State of Florida from 1950 to 1960. In Suwannee County the ratio dropped from 6.5 to 1 to 3.6 to 1 for the same period. This ratio is projected to be 3.0 to 1 by 1970 and 2.5 to 1 by 1980 for Suwannee County.

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* Highway Traffic Estimation, Eno Foundation for Highway Traffic Control.

Traffic Generated By An Increase In Population

Based upon the population projection of 9,300 persons in Live Oak by 1980, a future registration of 3,720 vehicles is indicated. In 1960, when population was 6,541, there were approximately 1,817 vehicles registered. By 1980, therefore, the number of vehicles registered should increase by 105%. This percentage is based on the assumptions of the population projection and vehicle registration projection.

Change In Miles Driven Per Vehicle

A comparison of trends in gasoline sales with those of vehicle registration, indicates that there will be very little change in miles driven per vehicle. This change amounts to only a 2% increase over the twenty-year planning period.

Total Effect From All Factors

The expansion factor of 2.1 represents the accumulated products of the ratios of the above listed determinants. (i.e., 1.42 X 1.44 X 1.02 = 2.10.)

Table 2

	1960	1980	1980 to 1960 Ratio
Change in population	6,541	9,300	1.42
Change in persons/vehicle ratio	3.6	2.5	1.44
Change in average vehicle use	1,444	1,479	1.02
Total			2.10

The significance of this ratio is in its value as a general indication in the future level of traffic increase, i.e., about one hundred per cent over current levels. It will apply principally to a projection of the City's major traffic arteries as they approach the center of the City. Other areas of the City may change very little, if at all. However, the southern part of the City, which will be the principal growth area, will experience a larger percentage of increase in traffic.

Effect of Interstate Highway

For the purpose of this study it will be assumed that all inter-county, east-west through traffic will use the Interstate Highway, which will pass 1.7 miles north of the City. Therefore, current traffic counts at the entrances to the City on U. S. 90 will be decreased by 40 per cent, which is the estimated proportion of current through traffic.

The Future Traffic Pattern

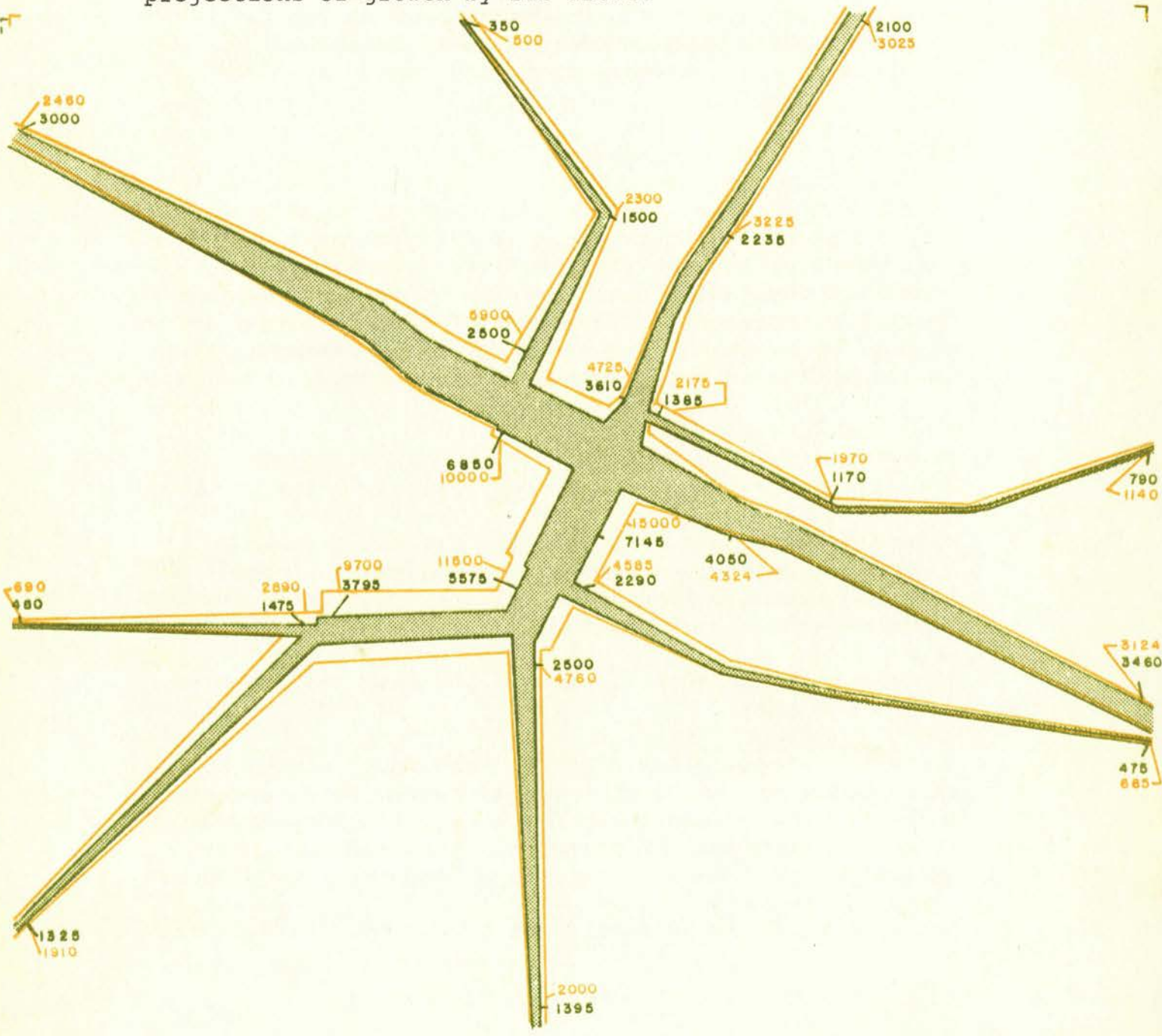
Figure 9 summarizes the projected traffic growth by volume in the various areas of the City. This projection is based upon the foregoing estimate of traffic increase and the proposals of the land use plan.

Traffic near the central area of the City is projected at 100 per cent.

The ADT projection for highways entering the City (traffic originating in the County) was increased by 44 per cent. This figure represents the percentage increase in the number of vehicles per person between 1960 and 1980. Since the total county population is not expected to change in any significant amount by 1980, population increase or decrease should not be a factor in projecting

external-internal traffic movement. Neither should the miles driven per vehicle be considered as a factor, since no significant change is expected during the planning period.

Traffic projections in the southern part of the City are generally higher but vary according to assumptions and projections of growth by sub-areas.



TRAFFIC VOLUME PROJECTED
ANNUAL AVERAGE DAILY TRAFFIC - 1980
ANNUAL AVERAGE DAILY TRAFFIC - 1962

Figure 9

Table 3 is based upon sub-area calculations. All projections are based upon estimated growth rates of 44% to 110%, as modified by future land use characteristics of the area.

Table 3
TRAFFIC PROJECTIONS
FOR MAJOR THOROUGHFARES - LIVE OAK, FLA.

Location	1960	1980
US 90 at West City Limits	3920	2460*
US 90 at Houston Avenue	6065	10000*
US 90 West of Ohio Avenue	7040	12000*
US 90 East of A.C.L. Railroad	4050	4325*
US 90 at East City Limits	3460	3125*
Ohio at South City Limits	1395	2000
Ohio at 11th Street	5575	11500
Ohio at Helvenston	7145	15000
Ohio at S.A.L. Railroad	5105	10465
Ohio at Duval	3610	4725
Ohio at Winderweedle	2235	3225
Ohio at North City Limits	2095	3025
S.R. 51 at W. City Limits	1325	1910
11th St. at W. of S.R. 51	1475	2890
11th St. at W. Ctiy Limits	480	690
11th St. at Houston	3795	9700
11th St. W. of Ohio	3355	8600
Helvenston E. of Ohio	2290	4585
Helvenston E. of Railroad Ave.	1530	2300
Helvenston at E. City Limits	475	685
Duval E. of Ohio	1385	2175
Duval E. of Hamilton	1170	1970
Duval at E. City Limits	790	1140
S.R. 249 at N. City Limits	350	500
S.R. 249 at Winderweedle	1500	2300
Houston S. of N.W. 2nd St.	2170	4100
Houston N. of S.A.L. Railroad	2485	5900

* Projections adjusted for 40% decrease upon completion of Interstate 10.

THE MAJOR STREET PLAN

The Major Street Plan is a diagram for major arteries and collector streets to be required in meeting the traffic needs projected to 1980. Most of the future major thoroughfares will be the same as today, but a few additions and extensions in rights-of-way and a number of roadway improvements will be desired.

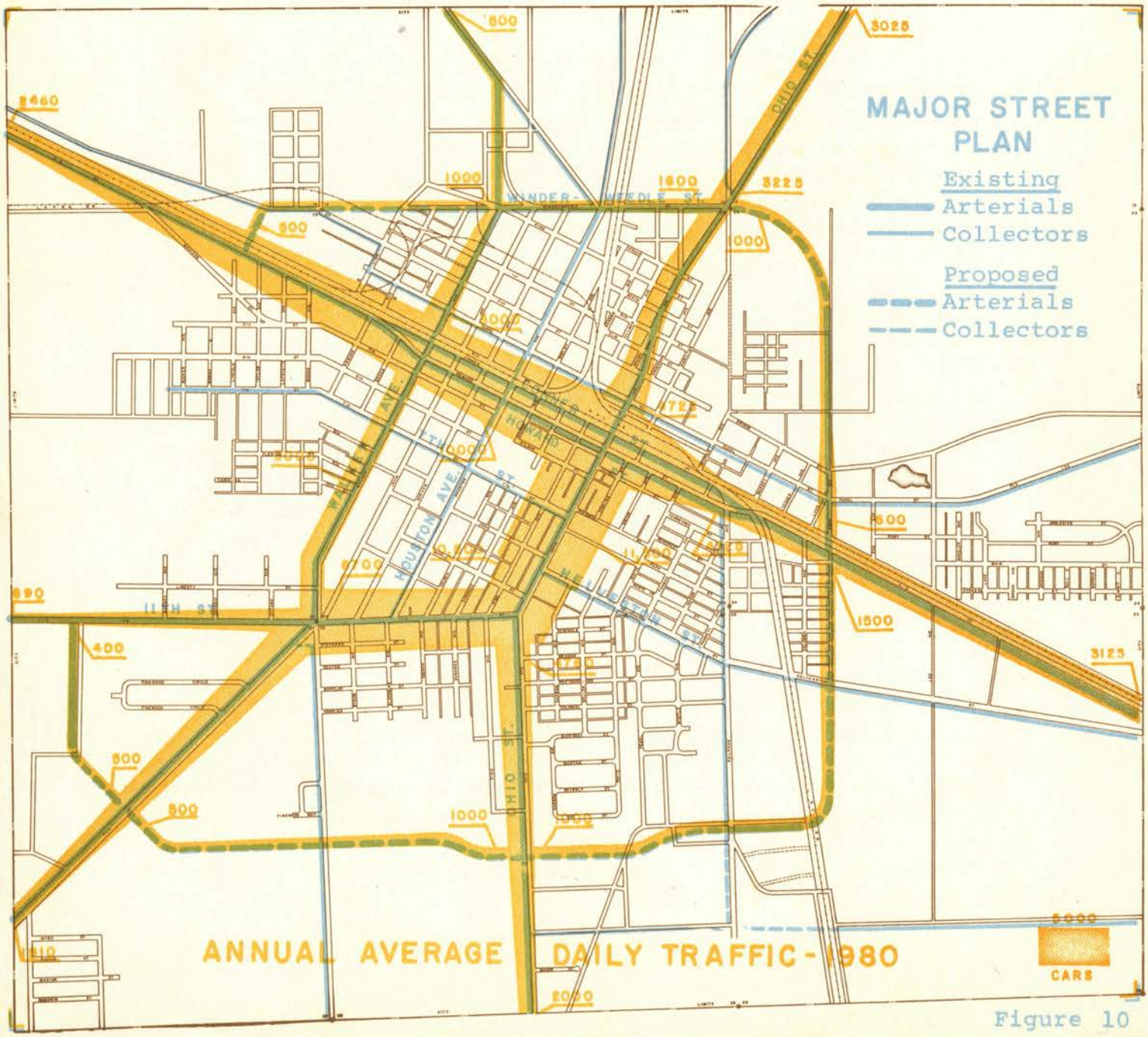


Figure 10

THOROUGHFARE IMPROVEMENTS

U. S. 90 is functioning slightly above its optimum capacity at the present time. By 1980 congestion along Howard Street (U. S. 90) will require the removal of parking in order to create four moving lanes. Even then the intersection of Howard Street with Ohio Avenue will probably constitute a bottleneck. For instance, the rated capacity of the intersection of Howard Street and Ohio Avenue, as computed on the basis of table 4, is 383 vehicles per hour in a single direction. By 1980 the projected ADT at this point is 12,000 vehicles. Since peak hour flow is estimated at 11 per cent of the ADT (and two-thirds of the peak hour volume is assumed to be in the direction of heaviest flow) a maximum demand of 880 vehicles per hour is expected in a single direction. The capacity of the intersection may be increased to 670 vehicles per hour by removing the existing parking. This, however, will not be sufficient to meet requirements in 1980.

Table 4
INTERSECTION CAPACITY
Vehicles Per Hour of Green Light
Per 10 Feet of Approach Width*

	Two-Way St.	One-Way St.
Howard Street Business District		
Without parking	700	800
With parking	400	550
With parking both sides	---	400

---

* For two-way streets, the approach width may generally be assumed as one-half the roadway width, but it can be more accurately figured from the edge of paving to the center divider for each approach if this distance is different than one-half. For one-way streets the approach width is equal to the entire roadway width. (Approaches are measured to include street space occupied by parking lanes.)

Table 3 indicates traffic will not increase on Howard Street (U. S. 90) at the east and west city limits, because through traffic will be by-passed. Local traffic, however, will continue to build up toward the center of the City on Howard Street, and some congestion will result. At such time as the need arises and congestion becomes intolerable, two solutions for relief are possible:

(1) Figure 11a shows a practical alternative to widening Howard Street, which would be very costly in the downtown area. A one-way pair could be established, using Connor Street by widening and completing some missing links.

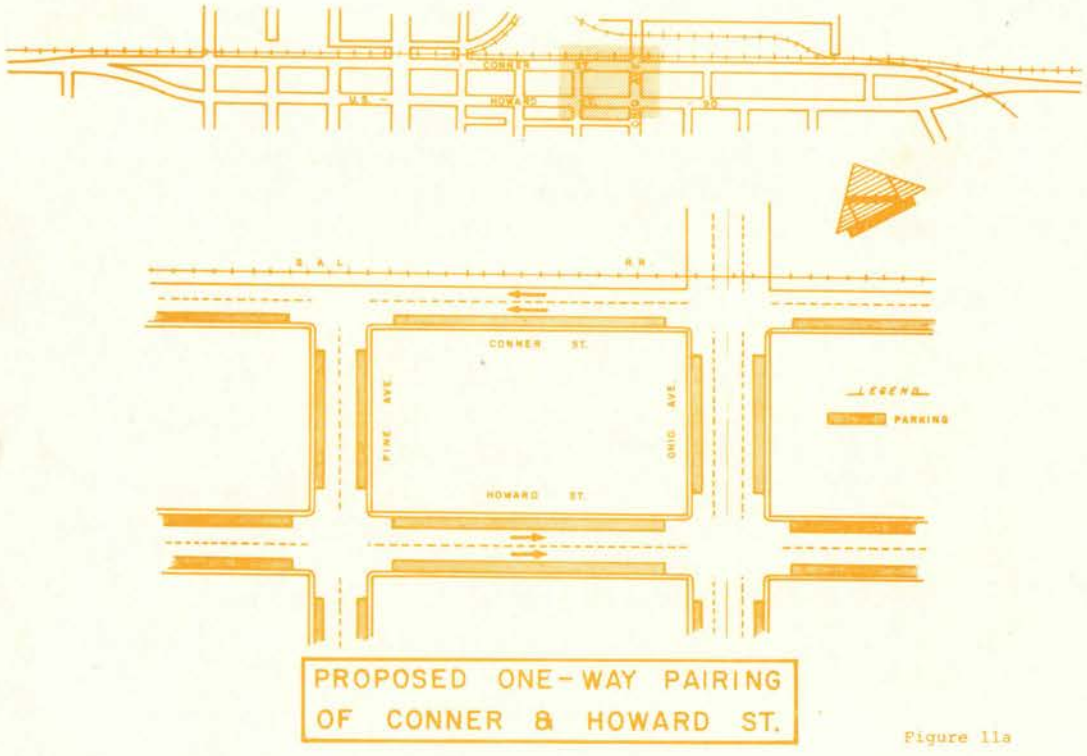


Figure 11a

(2) Ideally, Connor Street might someday re reconstructed into a wide thoroughfare, as illustrated in figure 11b. This solution would be part of a long-range downtown redevelopment scheme involving a slight relocation of the S. A. L. tracks, redevelopment of some warehousing properties, as well

as the development of a major new thoroughfare. This solution could be beyond the projected needs for traffic, unless found desirable and feasible in the future as part of an area redevelopment plan for the Central Business District.

Ohio Avenue is of sufficient width at the present time to accommodate future demands. Part of the future traffic which normally would be expected to use Ohio Avenue is expected to use Walker Avenue. Walker Avenue would provide an easy, unrestricted through movement of traffic and would serve as an arterial link between the northern and southwestern parts of the City.

Eleventh Street will require widening between Walker Avenue and Ohio Avenue. Four lanes with no parking is recommended on the existing 60 foot right-of-way. Increased width for turning lanes should be added at intersections with Ohio Street and Florida 51.

The construction of several links in a circumferential route, as indicated on Figure 11, is recommended to provide movement of traffic around the City, partially alleviating congestion in the central area. Where possible, this route, as proposed, would coincide with existing streets.

PLAN FOR STREET PAVING PROGRAM

— Existing streets recommended for permanent improvement

⋯⋯ New streets recommended or proposed for extension

---- Streets recommended to be left unimproved, to be vacated, or to be replatted

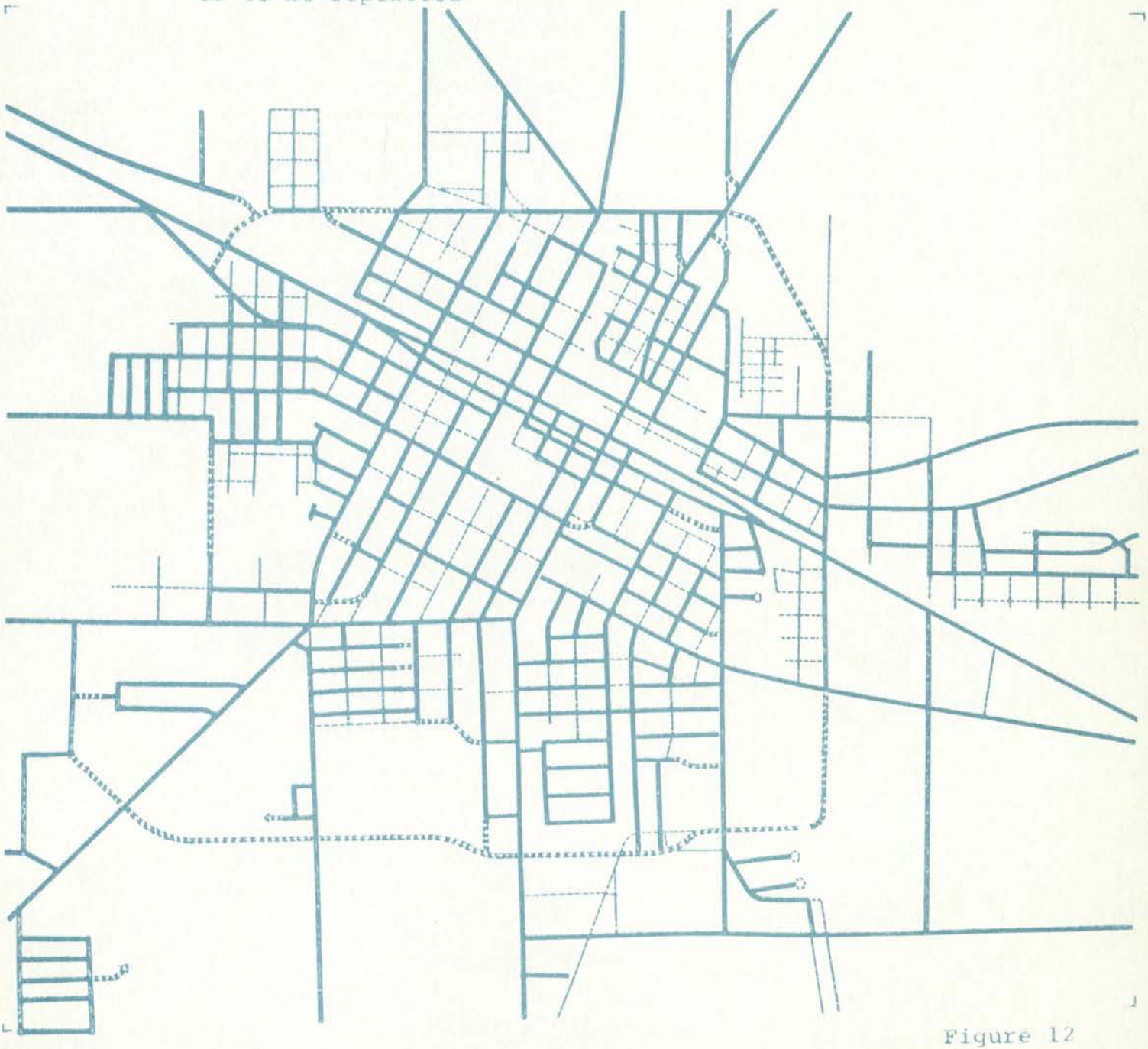


Figure 12

PLANNING MINOR STREETS

Most of the residential areas in Live Oak were designed on a grid system with relatively short blocks. This design resulted in the creation of many unnecessary side streets, thereby increasing the amount of money spent on maintenance. It will be possible and practical to vacate many existing streets where they are not needed. Also, there are several areas of the City which were subdivided years ago but never developed. These subdivisions should be vacated also, in order to obtain a more efficient street system at such time as they are resubdivided and developed.

Figure 12 is a proposal for a system of minor streets indicating general suggestions for closing unnecessary streets. In carrying out the objectives of this proposal, the City should establish a procedure whereby a proposal to vacate streets would be advertised for public hearing, before the Planning Board, and upon recommendation of that Body, the City Council would make a final determination.

DESIGN STANDARDS

Recommended standards for arterial and collector streets are shown in figures 13 and 14. Future lane requirements may be determined by assuming two-lane streets with twelve foot lanes can carry up to 5,000 A.A.D.T. For greater than 5,000 A.A.D.T. a four-lane roadway can carry up to 20,000 A.A.D.T.

ARTERIAL STREETS

The following cross-section is suggested as the minimum design necessary to carry expected traffic over the following named thoroughfares:

U. S. 90
Eleventh Street
Walker Avenue
Helvenston Street
Florida 51

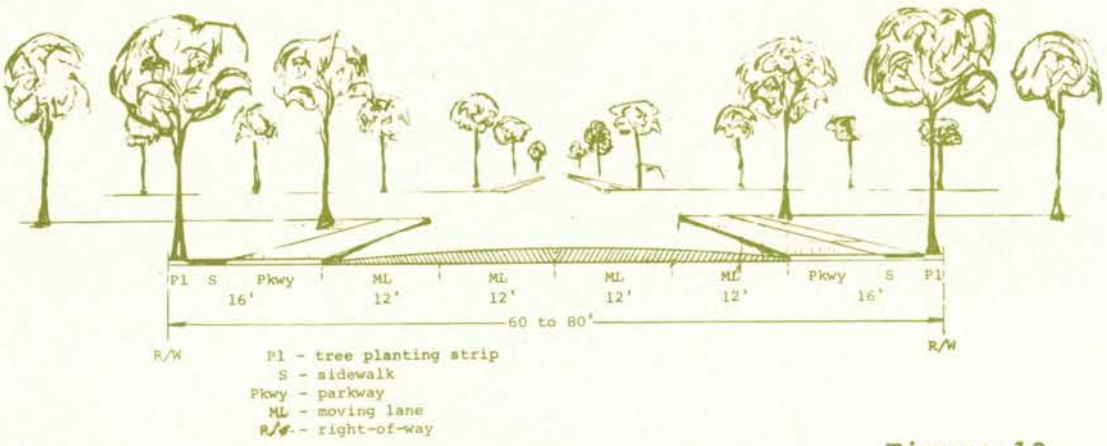


Figure 13

ARTERIAL STREET

The important features of this design are:

a. Four moving lanes utilizing a minimum right-of-way for arterial streets. At major intersections the roadway should be widened to accommodate left and right turn lanes according to needs as determined by observed traffic patterns.

b. Conflicts from cross movement of traffic should be relatively minor. Median strips or traffic dividers would not be required, although they could be added where feasible for safety and aesthetic advantages.

c. Tree plantings, which are recommended, should be located between the sidewalk and right-of-way line. In this way maximum horizontal sight distances would be preserved along the street. Two feet of space would be required for tree plantings.

d. Sidewalks of four or five feet should be constructed on both sides of the street, except through business districts, where ten-foot sidewalks are generally preferred.

NEIGHBORHOOD COLLECTOR STREETS

Although the collector streets are important in moving volumes of traffic from the minor to the arterial streets, in Live Oak these volumes will be small and 30 foot roadways will be adequate. Parking can be permitted along most sections of collector streets, but as volumes of traffic increase, parking should be restricted to one side of the street only. Near major intersections parking should be eliminated altogether.

At the present time the collector streets in Live Oak are limited to approximately 24 feet of paving. This is inadequate where parking is permitted and traffic is frequently restricted. In the future as collector streets are improved, paving widths should be increased to 30 feet. Until then, parking should be restricted to one side and in some sections prohibited altogether. Tree plantings should be established away from curbs adjacent to right-of-way lines. The cross section suggested below illustrates the design recommended. The following streets fall within this category:

Duval Street
Helvenston Street
Houston Avenue
South Walker Avenue
Seventh Street

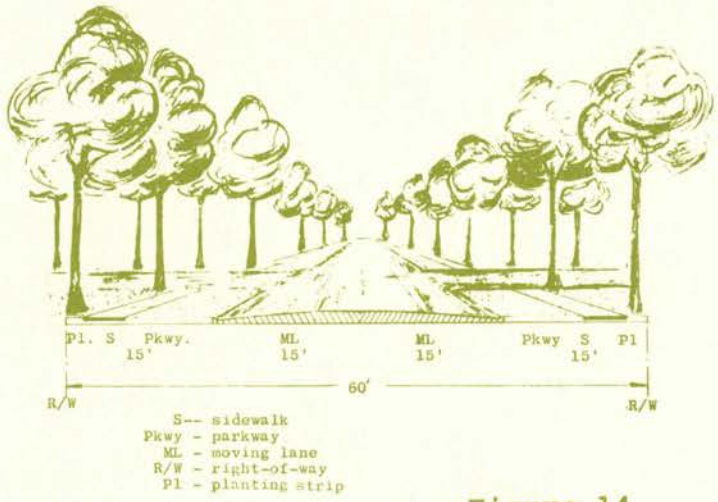


Figure 14

MINOR ACCESS STREETS

Minor, access streets should be developed with a minimum 26 foot roadway with curb and gutter in all residential areas. For the small volumes of traffic found on the minor streets of residential areas, this width would permit curb parking when necessary.

Minor, access streets in business areas should be no less than 30 feet. This width could provide parallel parking on one side and a 40 foot street would permit parallel parking on both sides.

HIGHWAY BEAUTIFICATION

A Highway Beautification program should be initiated to encourage more attractive boulevards and thoroughfares. This is particularly needed in the downtown area and would help improve the appearance of the business district. This program would include such items as:

1. Tree plantings, planters with shrubs on parkways.
2. Parkways or other green areas or small parks adjacent to highways.
3. Sign control and elimination of unsightly structures and fixtures.

When planting trees near intersections, great care should be taken not to obstruct the vision of the motorists.

PROPOSED AREAS DELINEATED FOR AN URBAN STANDARD AND A SUBURBAN STANDARD OF SERVICES

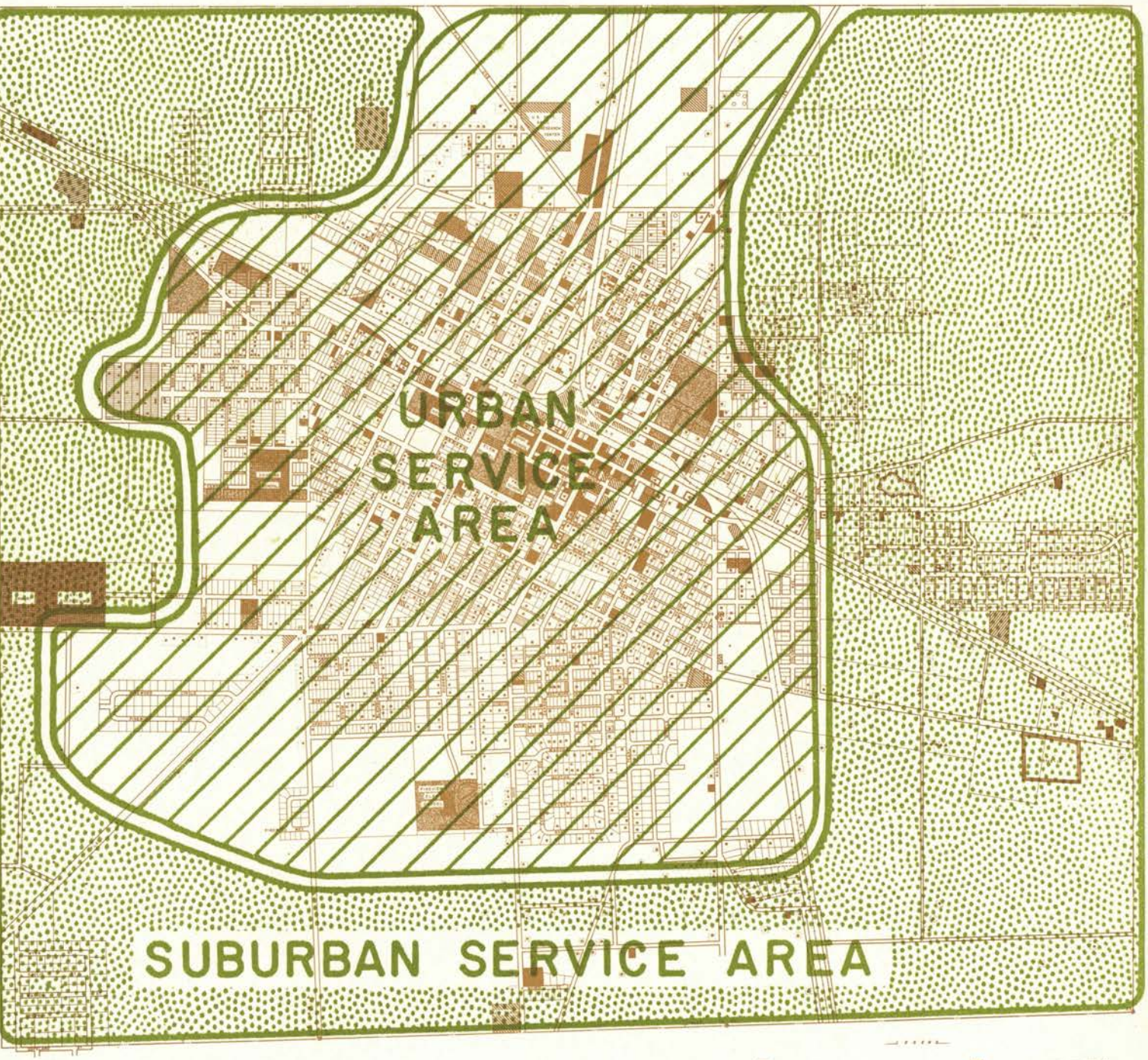


Figure 15

THE COMMUNITY FACILITIES PLAN

The Community Facilities Plan is a guide for the coordinated development of the city's utility, educational, recreational, cultural, and governmental facilities and services in accordance with the land use objectives of the Live Oak Comprehensive Development Plan.

Inasmuch as the quantity, location, and administration of these facilities will determine to a large extent the convenience, safety, and health of Live Oak's inhabitants, their development should not be left to unguided economic forces. Although some of these facilities are not owned and operated by the City it is desirable that their operations be coordinated with the objectives of the Plan.

LEVEL OF FACILITIES TO BE PROVIDED

Live Oak cannot anticipate in the foreseeable future the development if its entire corporate area at a density of population sufficient to support a full range of adequate community facilities and services. Without a plan to the contrary, Live Oak can look forward to over-extended facilities, particularly utilities, and services to serve scattered and/or low density population concentrations which are likely to occur at the extremities of an already very large corporate area. Live Oak inhabitants may then look forward to less efficient or unnecessarily expensive facilities and services.

DEFINITION OF TWO SERVICE AREAS

Live Oak's Land Use Plan, properly implemented, represents an alternative to the preceding situation. According to this proposal, two levels of services and facilities would be provided: one for an urban density of development, defined as the "Medium-Density, Urban Service Area"; and the other for a suburban density, defined as the "Low-Density, Suburban Service Area." Both areas lie within the existing corporate limits and are identified in Figure 15.

The Urban Service Area

The Medium-Density, Urban Service Area would provide a relatively compact area capable of containing all of Live Oak's anticipated population at a density sufficient for the provision of a full range of community facilities at the lowest possible cost. It should be the announced policy of the City of Live Oak, based upon its comprehensive plan for the promotion of the health, safety, and general welfare of Live Oak's inhabitants, to discourage premature or inadequate developments tending to scatter population outside of the Urban Service Area, where they cannot be efficiently served. Such premature and inadequate developments may be discouraged by the vigorous and appropriate administration of zoning and subdivision controls.

Within this area the City should anticipate development and encourage its orderly placement by extending facilities where needed to promote desirable growth.

The Suburban Service Area

The Low-Density, Suburban Service Area would provide a more limited range of services and facilities to the extent feasible in sparsely developed areas.

Recognizing the desire for some limited types of development in the fringe areas (such as isolated single-family, estate-type homes), the following principles are recommended for application to the low-density, Suburban Service Area:

(1) The City should not commit its limited resources to extending utility lines into this area except when development reaches a level in some part of the area to justify the specific extension.

(2) Lots should be required of a size which may be adequately served by septic tanks and private wells. Lots should be large enough to avoid future problems of pollution of potable water supplies even if a substantial area develops at the minimum standard. Unless established to the contrary by the State Board of Health, a minimum size lot of one-half acre is recommended.

(3) Zoning regulations should establish a low-density standard for the area, and the rezoning of land for higher density uses should not be authorized where the availability and efficient use of adequate community facilities is not assured.

(4) Many community facilities that are centrally located, fire and police protection, and services such as garbage and trash collection, can be made available to suburban areas of the City. However, the level of service and protection might, of necessity, be lower than for the areas located nearer the center and more densely developed.

(5) Some years in the future, as growth and economic trends indicate, it might be necessary to revise and extend the delineation of the Urban Service Area.

Any departure from the preceding approach in permitting premature development of the Suburban Service Area would detract from the orderly development first of the Urban Service Area. Therefore, the City should use every means of persuasion and regulation to prevent the former and should extend utility lines and services to encourage the latter.

Lack of Adequate Topographic Data

The lack of adequate topographic data is a severe limitation in the preparation of Live Oak's general plans, and particularly so in planning underground utilities. It is recommended that steps be taken early in the course of Live Oak's continuing planning program to acquire topographic maps depicting land contour intervals adequate at least for general planning purposes. The City might seek the cooperation of the United States Geological Survey in the earliest scheduling of topographic mapping for the Live Oak area. The many other sources of topographic data should also be investigated and compiled for the preparation of an authoritative topographic map.

WATER FACILITIES

Presently there seems to be no serious shortage of water in Live Oak. Consumption is approximately 101 gallons of water per person per day or about 700,000 gallons daily.[1] At the time of this report, however, there was no specific data available on Live Oak's maximum dependable draft of ground water.

THE WATER SUPPLY

In view of Live Oak's moderate population growth projection, water needs probably will continue to be met by pumping ground water from deep wells. However, it will be necessary to make pumping tests to make a reliable determination of the capacity of Live Oak's existing wells before the need for additional wells may be anticipated. Widespread use of municipal sanitary sewers rather than septic tanks is recommended so as to preserve the quality of Live Oak's ground water supply. Recharging the ground water supply by the appropriate placement of storm water collection basins may help to maintain the supply of ground water; however, additional knowledge of Live Oak's system of subterranean water courses is needed to prevent the further contamination of ground water supplies. Two of Live Oak's five wells are presently not in use due to contamination, apparently from storm drainage wells.

Based upon a generous standard for water system design purposes (150 gallons per person per day), which allows for commercial, industrial, fire fighting, street cleaning,

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[1] A Factual Economic Survey of Live Oak, Suwannee County, Florida, Fantis Factory Locating Service, New York-Chicago, 1960-1961.

and other uses, as well as domestic uses, Live Oak's anticipated population may be expected to consume 1,201,000 gallons of water daily by 1970 increasing to 1,395,000 daily by 1980.

THE WATER TREATMENT PLANT

Live Oak's Water Treatment Plant, located on Duval Street, is approximately 10 years old. This facility is considered by the Public Works Department to be generally adequate for service in the foreseeable future. Live Oak's water pumps are in daily operation with a pumping capacity of 1,368,000 gallons per day, which is sufficient pump capacity to meet anticipated water consumption well beyond 1970. By 1980, however, pumping capacity will most likely have to be increased to meet increased consumption demands. There is an immediate need for two emergency standby power units for Live Oak's existing pumps.

WATER STORAGE

Live Oak's water storage facilities presently consist of two standpipes and one ground storage tank, totaling 545,000 gallons. The standpipe capacities are 45,000 and 200,000 gallons while the ground storage tank capacity is 300,000 gallons. On the basis of projected water consumption and growth trends, additional water storage capacity will be necessary by 1970 in the southern section of the City. Live Oak should rely on the findings of a qualified engineer in determining the most appropriate location and type of additional water storage facilities needed.

THE WATER DISTRIBUTION SYSTEM

Live Oak water distribution lines consist of a network of pipes ranging in size from 10 inches to 1½ inches in diameter. In all but a few cases water lines are installed within street right-of-ways.

LIVE OAK WATER DISTRIBUTION SYSTEM

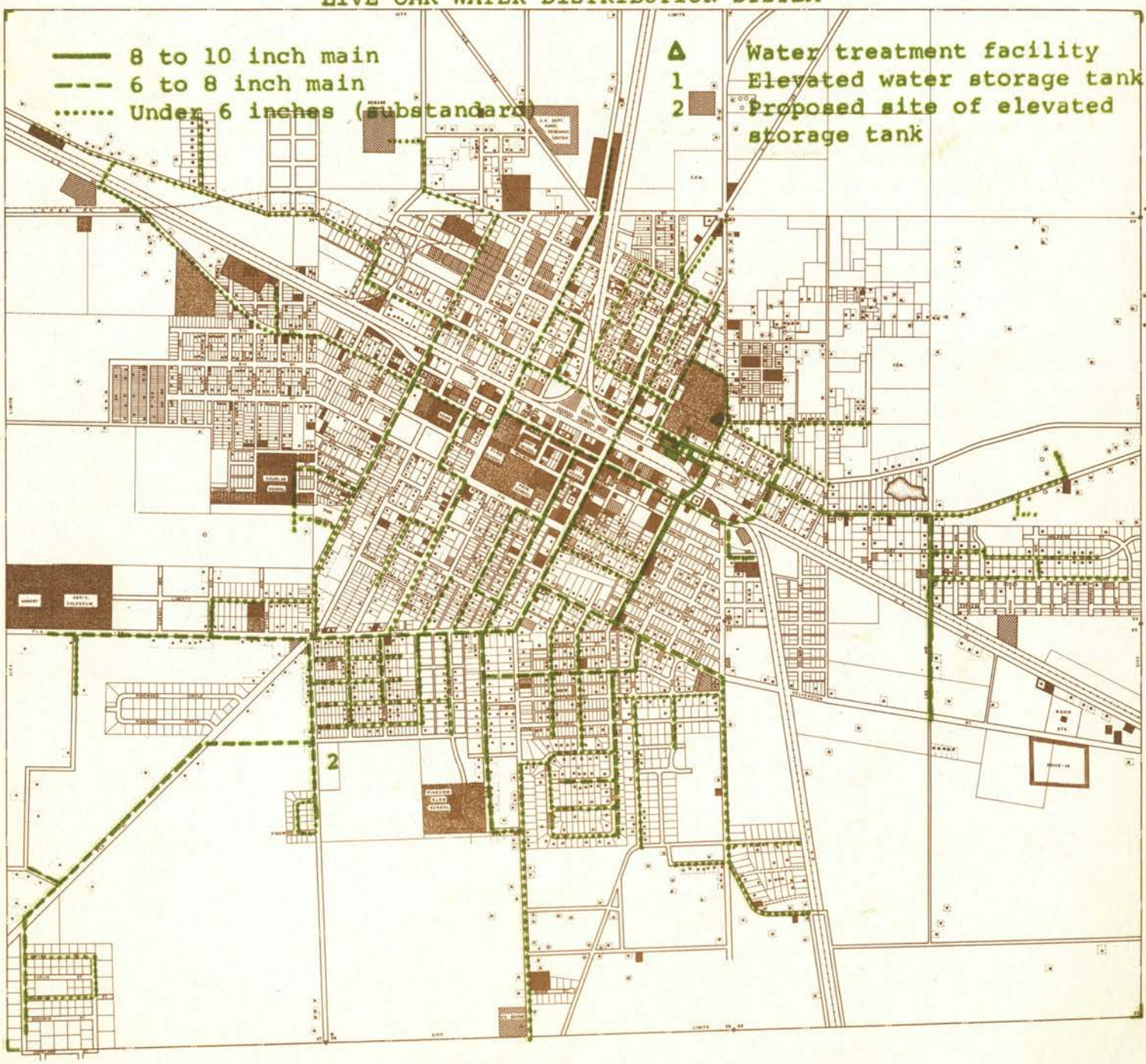

Figure 16

The water distribution system lines in many areas of Live Oak are inadequate. Modern residential development generally requires water mains at least 6 inches in diameter in order to provide adequate volume and pressure for fire protection purposes as well as for other domestic uses. However, not all pipes serving small areas of a few customers need be 6 inches so long as they form a "loop" with six inch or larger mains and provided fire hydrants are connected to six inch mains. Those areas presently served by less than six inch lines are indicated on figure 16.

Good design practice requires a minimum number of dead-end pipes in order to provide good circulation throughout the system.

The City is replacing substandard pipes with six inch pipes in many areas as time and funds permit. Correction of the several deficiencies mentioned in Live Oak's water distribution system will bring greater safety and convenience to Live Oak's citizens and should be a significant step toward dowering local fire insurance rates as well. An improved water distribution system is a prerequisite to encouraging greater, more economical population density within Live Oak's existing urban area. It should be the policy of Live Oak that municipal water service estentions be given first priority in those areas anticipated for urban type development and that water line extension beyond the proposed urban service area be extended only where development density makes such extensions financially practicable. Based on the findings of a more detailed investigation by a qualified engineer, a municipal water service district should be delimited which would serve the anticipated urban service area. Live Oak should have prepared, by a qualified engineer, an appropriate water system master plan adequate to meet anticipated 1970 and 1980 water consumption requirements, based in part upon the General Land Use Plan.

STORM DRAINAGE FACILITIES

Being situated in the center of the relatively high and porous table land of Suwannee County, Live Oak is not subject to flood damage on a large scale. However, as parts of Live Oak becomes more densely developed, additional paved parking areas, streets, and driveways, and roof tops will increase the rate of storm water run-off, making it necessary to provide additional adequate storm water collection and disposal facilities in low lying areas.

COLLECTION AND DISPOSAL

Storm water collection and disposal present an unusual problem in Live Oak. Inasmuch as there are few continuous well defined surface drainage courses into which storm drainage may be channeled, drainage of the lower areas of Live Oak has in the past been expedited through the digging of dry wells and storm water retention reservoirs into which storm water may be collected for sidposal underground. Presently the adequacy of storm drainage in Live Oak depends to a large extent upon the permeability of the soil and upon the capacity of the subterranean caverns into which much of the surface water flows.

Based on data made available from the City's Public Works Department, there are 32 dry wells in the City and 2 storm water retention reservoirs.

Live Oak relies on the use of natural subterranean limestone caverns for the disposal of storm water. It is the nature of water-bearing limestone foundations to dissolve away--sometimes caving in, plugging up, and impeding the flow of the underground channel for indefinite periods. In the event that a channel becomes obstructed, storm drainage may back up, contaminating water supply wells, and flooding to the surface in low lying areas. Also, local channels may become impeded due to saturating with drainage

water from the outlying areas of the watershed during prolonged wet spells. A dry well or storm water retention basin under these conditions may become a source of flooding rather than an aid to drainage.[1]

ADDITIONAL STUDIES REQUIRED

A thorough investigation of the routes and dependable capacity of Live Oak's surface and subterranean drainage channels by a qualified engineer is necessary in order that the potential capacity of Live Oak's existing storm drainage system may be evaluated in relation to anticipated storm water run-off. A plan for storm drainage facilities should be designed for the anticipated development of the City according to the densities and uses proposed in the Land Use Plan. Until the findings of such an engineering study are available, including adequate, general information on surface contours, little can be planned in regard to Live Oak's long range storm drainage needs. The findings of such a survey would also be invaluable in planning the location of future water supply wells, as well as in preventing the contamination of the existing wells.

For the present, however, with the questionable reliability of the present storm drainage system, precautions should be taken in the development of those areas adjacent to storm water retention reservoirs, natural sink holes and other potential ponding areas to minimize the damages in the event of an overflow. In newly developing areas, low land adjacent to water impounding areas or natural sink holes should be restricted to open uses such as parks or open spaces relatively unaffected by occasional flooding.

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[1] The Wilbur Street storm drainage retention reservoir has a history of erratic behavior - flooding the surrounding area on occasion.

SEWERAGE

In Live Oak's long-range plan, only sanitary sewers should be accepted as a solution to urban area sewage disposal problems. The use of septic tank sewage disposal on a large scale has proven to be inadequate in communities where population concentrations approach urban type densities.

Based upon a minimum standard for treatment plant designs (average daily flow of 75 gallons per person per day) Live Oak's treatment plant capacity should approach 600,000 gallons daily by 1970 - increasing to 697,500 gallons daily by 1980, in order to adequately serve Live Oak's anticipated population.

THE SEWAGE TREATMENT PLANT

The sewage treatment plant, being built to a design load of 750,000 gallons daily (based on average daily flow of 80 gallons per person per day), is fully adequate to meet the needs of Live Oak's anticipated population in the foreseeable future. The facility was constructed in 1959-60 on a 32 acre site and is capable of being doubled in capacity by the provision of additional units. The plant is of the Bio-filtration type, is operated by the City Public Works Department, and is capable of complete treatment. No improvements are anticipated in the foreseeable future.

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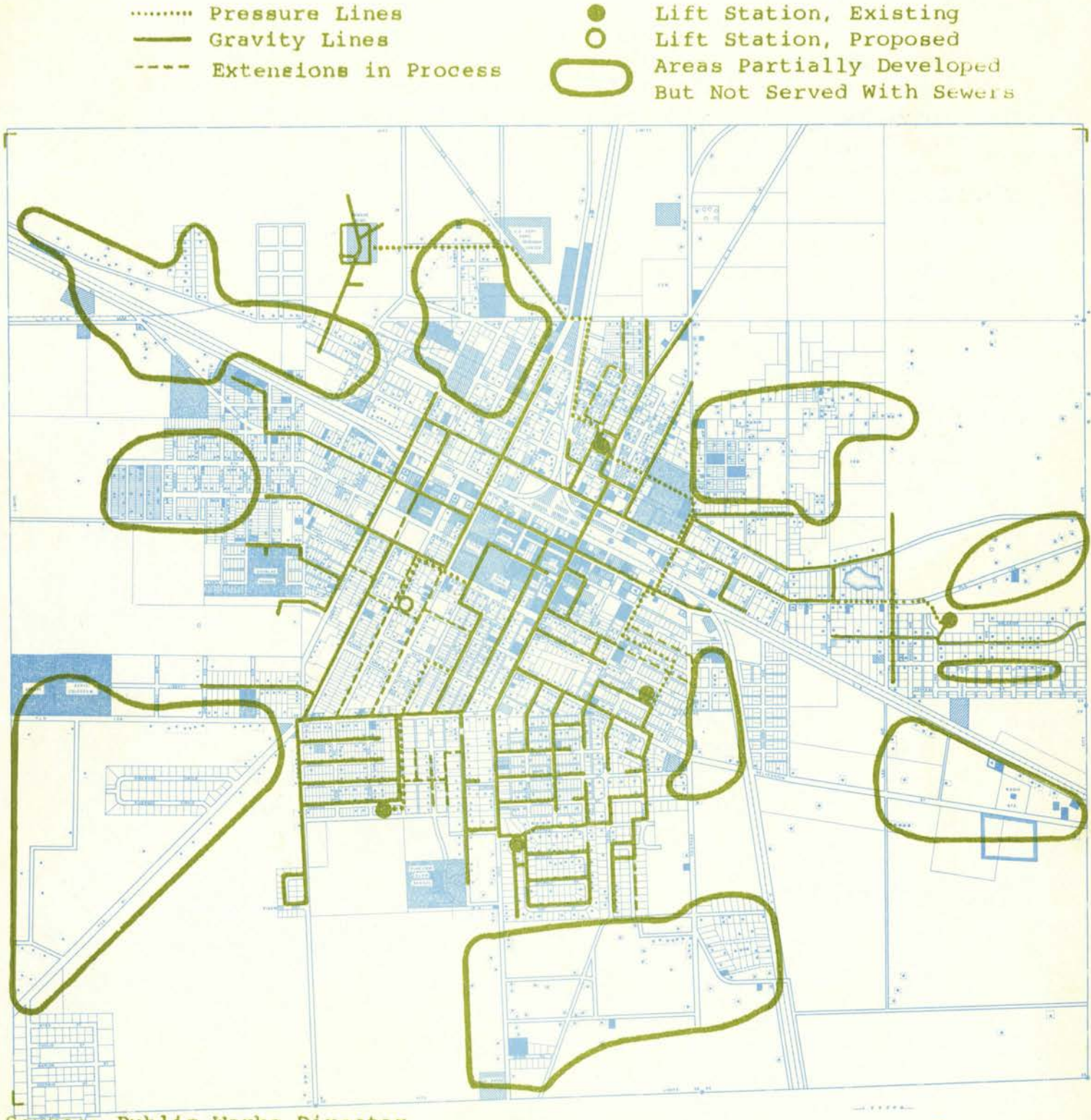
[1]Minimum Design Standards for Community Sewerage Systems Federal Housing Administration, Washington D. C., April,1963.

THE COLLECTION SYSTEM

The collection system consists of a network of pipes ranging in size from six inches to 24 inches installed underground generally in street rights-of-way. Presently the system serves an area considerably less than the area of urban development anticipated for Live Oak in the foreseeable future.

As noted in figure 17, there are presently areas within the existing urbanized area which are developed entirely without any sewage collection system.

LIVE OAK SEWER SYSTEM



Source: Public Works Director

Figure 17

RECOMMENDATIONS

It is recommended that a municipal sanitary sewerage district be delimited, based upon a thorough engineering study, so as to serve as nearly as practicable the anticipated urban service area depicted in Figure 15. The municipa; sanitary sewerage district would be large enough to provide for Live Oak's anticipated population, yet be compact enough for the efficient provision of sewer service at the lowest possible cost. Unitl such time as anticipated development densities assure efficient use of sanitary sewers, they should not be extended at the City's expense beyond the proposed district. Recognizing that some scattered or low-density development is likely to continue on the extremities of the corporate area, to which the extension of municipal sanitary sewerage would not be economically feasible, large lot sizes (one-half acre for single-family structures) should be required for the use of septic tanks.

Live Oak should rely on the services of a qualified engineer for the design of a sewerage system sufficient to serve the proposed urban service district.

WIRE UTILITIES

The Florida Power and Light Company holds the power franchise for Live Oak. Live Oak is supplied from a 66 KV transmission line. Emergency service is through a 13 KV line from Lake City, which is rarely needed. The supply of power is more than adequate for Live Oak's anticipated population in the foreseeable future.* Both the transmission line and steam generation plant are capable of additional capacity.

Telephone Service is presently provided in Live Oak by the North Florida Telephone Company.

RECOMMENDATIONS

As there are no serious impediments to the extension of adequate wire utilities in Live Oak, the primary concern with wire utilities for the purposes of its general plan is the effect on the City's appearance.

Telephone and power lines should be placed on the same poles, where possible, so as to eliminate the need for many poles. Pole line installations in new developments should be encouraged within adequate utility easements (not less than 12 feet wide) provided in mid-block along rear lot lines rather than in street right-of-way where they detract most from the appearance of the community. In existing developments, where pole line installations are due for replacement, consideration should be given to relocation in mid-block where service alleys already exist in many places, or where easements may be obtained.

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*The Florida Light and Power Company.

Wherever urban type development occurs, all streets should be well lighted, including double lighting at street intersections. In the suburban and rural areas of the City, lighting of street intersections only should be sufficient.

FIRE FIGHTING FACILITIES

Live Oak has two fire stations: Number 1 is located as part of the City Hall structure on the north side of the business district and Number 2 is located on the south side of the business district as a separate branch station. Two stations are required because traffic is frequently halted by trains through the middle of town, although one station ordinarily would be sufficient for a town of this size.

There are six full-time firemen, including the chief and assistant chief, who are assisted by volunteer firemen. Major equipment includes 1 pumper truck (1956) of 600 gallons/min., 1 pumper (1953) of 750 gallons/min., 1 pumper (1947) of 500 gallons/min., 1 pumper (1937) of 500 gallons/min., and 1 pumper (1918) of 750 gallons/min.

Live Oak has an insurance Class SEAU-2A and National Board Class 7, which is about average for a city of this size.

RECOMMENDATIONS

Station No. 1 is too small and should be enlarged to include a kitchen, dining, and recreation room for 5 men (an area of about 900 square feet additional space) plus a sleeping room for 3 more on-duty men (an area of about 240 square feet). Five more parking spaces are needed.

Although a minimum facility, Station No. 2 is adequate. One new pumper is needed now to replace the 1918 pumper, and another will be needed within 5 or 6 years.

In order to qualify for a higher insurance rating, the Live Oak Fire Department will need to add more full time firemen instead of relying on volunteer help. Also better water supply will be required by increasing the size of water mains and spacing hydrants closer in the built up areas.

ADMINISTRATIVE FACILITIES

The administration of the City and County governments requires sizable office buildings. Traditionally, city halls and courthouses are built as monumental buildings housing a multiplicity of central governmental functions.

THE CITY HALL

The City Hall is an attractive structure which appropriately symbolizes the center of municipal government. Built in 1908, the structure is still structurally sound and generally adequate for space needs. In addition to other administrative functions, the City Hall provides a headquarters for the Police Department and also houses the main fire station.

The building is not efficiently arranged, however, and remodelling of the interior could produce a more satisfactory, convenient, comfortable, and attractive facility. The site is adequate, attractive, and well located, but landscaping of grounds could be improved. Outside appearance of this imposing structure should be maintained by frequent painting of the wood trim and cleaning of the brick periodically.

THE COUNTY ADMINISTRATIVE CENTER

The courthouse is the main administrative center of County Government, although growing space needs have resulted in several other offices being constructed in the vicinity, principally the County office building housing the agricultural offices and the Board of Public Instruction.

The courthouse is a very appropriate and imposing structure built in the traditional style as a courthouse square in the middle of the downtown business district. The site is attractive and well located, although the square should be better landscaped. Unfortunately, the courthouse has been poorly maintained and fails to provide the attractive symbol of County Government that it should represent. The interior is quite dirty and in need of repairs and remodelling. The exterior is in need of repainting.

Unfortunately, the supplemental county buildings placed on the square fail to measure up to the standards of design of the original courthouse. They are modern, red-brick, economy-inspired boxes providing office space but little eye appeal. These buildings--the jail, library, and agricultural building--could be painted to better harmonize with the courthouse. Eventually, it would be desirable that they be removed and replaced with one or two structures designed to compliment the main courthouse structure. However, the buildings are structurally sound, and there is no need for their replacement within the next ten years.

The jail is considered adequate for present and future needs and probably will have to remain as a permanent fixture. However, any new office building (replacing the agricultural building) could connect with the jail to form one architectural unit.

Recommendations

Additional office space is needed now for County functions. It is recommended that this be provided by remodelling the interior of the courthouse, providing three floors instead of the present two, gaining about fifty per cent more space.

The courthouse square should be preserved as a spacious site to grace the courthouse and the entire downtown area; no additional structures should be added. If possible the area occupied by buildings should be decreased to provide more open space.

Parking is a problem for all functions of the County Administrative center. Approximately 50 spaces are needed to serve the courthouse. A minimum number should be permitted on the courthouse site; all others should be located on a site in an adjacent block.

The exterior of the courthouse should be cleaned and painted, and the other buildings on the square should be painted to harmonize with the courthouse brick.

General site plans for the County Administrative Center are indicated in figure 23, page 105, indicating a long-range design.

LIBRARY FACILITIES

The library of Live Oak is operated as part of a seven-county regional library system. In addition to the several small libraries in the system there are three bookmobiles, which are very useful in serving the rural areas. The Live Oak Library, which contains about 1500 square feet of floor area, is located in the Courthouse Square.

The analysis of future library needs will be limited to a discussion of facilities required for the population of Suwannee County and Live Oak.

Standards of the National Library Association indicate a need for ½ square feet of floor area for each person of the population to be served. Based upon the 1963 population estimate of Live Oak, there is a need for about 3500 square feet of floor area in the library. Based upon a projected population for 1980 of 9,000 for the City of Live Oak, a floor area of 4,500 square feet will be required. If the Live Oak Library is to serve the entire county population, as intended, up to 8,000 square feet of floor area could be utilized eventually.

RECOMMENDATIONS

The above standard indicates the maximum need for planning future library facilities, and any expansion up to 8,000 square feet can be gauged according to financial ability and use put to the library. At this time the Live Oak Library is very over-crowded, and a facility of three times the present 1500 square feet of floor area is needed. In planning any construction, the building should be designed for a future addition to provide for long-range needs of about 8,000 square feet. The present library location is convenient, and the building could be expanded. However, figure 23 proposes an alternate site as part of a long-range development design of the downtown area.

HOSPITAL FACILITIES

The Suwannee County Hospital is a modern facility of 77 beds, which was the first hospital in the United States completed with the assistance of Hill-Burton Federal funds. It is considered adequate for present and future needs, and the site is sufficient. A nursing home, of about 45 bedroom units, is needed and should be located in this area.

The area around the hospital should be developed primarily with doctors offices on 5th Street. This area would also provide a good location for a new County Health Center. The area also would be suitable for the development of apartment, particularly rest homes and low-cost housing for the aged, because of proximity to the hospital and related facilities.

SKETCH PLAN FOR THE DEVELOPMENT
OF A MEDICAL CENTER

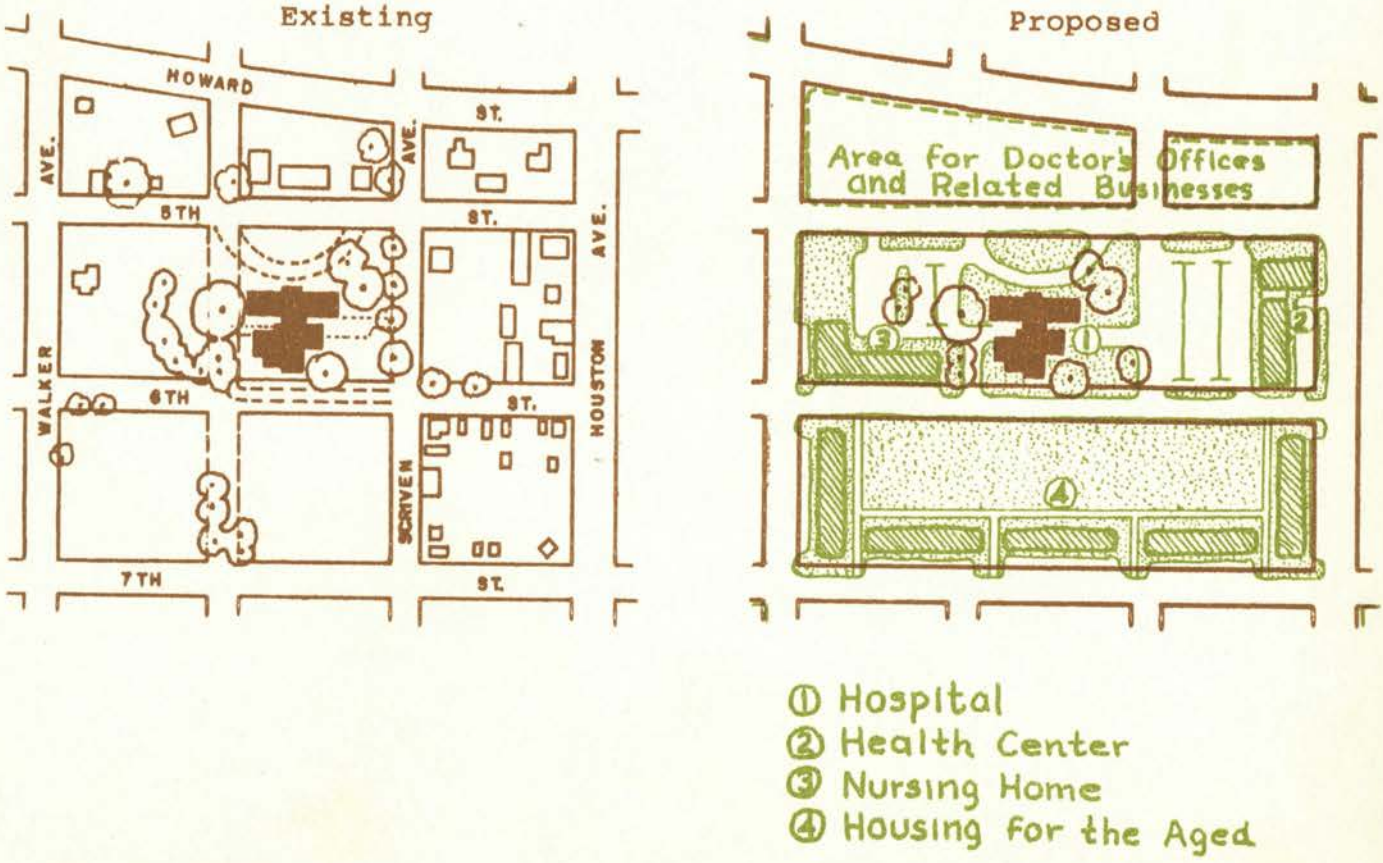

Figure 18

SCHOOLS

Planning of school facilities is the responsibility of the Board of Public Instruction with the assistance of the State Department of Education. A Comprehensive School Plant Survey of Suwannee County was prepared in 1953. A new survey was taken in December 1963, and the report, to be released shortly, will recommend a school improvement program for needs of the next six years.

School facilities in Live Oak were studied as a part of this comprehensive planning survey for the purpose of coordinating plans for residential development with community facilities. Also, school sites provide most of the City's playgrounds.

In order to encourage coordinated development, the following analysis of long-range school needs in Live Oak is provided.

EXISTING SCHOOL FACILITIES

In 1963 there are the following school facilities in use in Suwannee County:

The Live Oak School Center

This center is located adjacent to the business district, and on this site there is a primary school, a junior high school, and a senior high school. The site consists of approximately 14.5 acres.

The primary school is a one-story, modern facility for grades 1 - 3, located on the southeast corner of the site. School membership of this facility was recorded at 560 pupils in 1963.

The junior high school (Suwannee Junior High) is a two-story, older building for grades 7 - 9. Membership was recorded at 341 pupils in 1963.

The senior high school (Suwannee Senior High) is a two-story, older building for grades 10 - 12. Membership was recorded at 690 pupils in 1963.

At this school center there is a separate auditorium with a 462 seat capacity, a separate cafeteria, a football stadium, an agricultural building, and the old National Guard Armory now used as a physical education building.

The buildings of this school center include a collection of buildings dating from 1916, and they are poorly arranged for a modern high school program. Extensive modernization, if not replacement of old buildings, will be required if this center is to be continued as a high school.

Pineview Elementary School

This school is a modern facility built in 1956 for grades 4 - 6. The school and playground occupies an area of approximately 19.6 acres, but the total site, including land in reserve, includes about 55 acres. School membership is recorded at 551 pupils in 1963.

Douglas School Center

This school is a modern facility for grades 1 - 12. School membership as recorded in 1963 was as follows be grades:

Grades 1-3	-	293 pupils
Grades 4-6	-	280 pupils
Grades 7-8	-	190 pupils
Grades 9-12	-	208 pupils

The school site, originally 11.5 acres, is being expanded to include about 20 acres with the purchase of adjacent properties.

School Consolidations

Until 1953 there were as many as 27 different school centers located in Suwannee County, of which 3 were in Live Oak. Enrollment was small at most of the centers in the rural areas, and a complete program could not be offered. As a result of the 1953 School Plant Survey, many schools have been consolidated; today there are only 7 school centers in the county. Nevertheless, enrollment is quite low at all schools except those located in Live Oak.

SCHOOL MEMBERSHIP TRENDS

Trends during the past 12 years provide broad guidelines in projecting future school membership, expecially when based upon the population projections already developed for the County.

Table 5
SCHOOL MEMBERSHIP TRENDS
SUWANNEE COUNTY, 1950 - 1963

	White Membership			Nonwhite Membership			Total
Year	1-6	7-9	10-12	1-6	7-9	10-12	
1950-51	1725	704	471	925	199	78	4102
1951-52	1722	697	493	838	234	73	4057
1952-53	1723	683	488	786	244	82	4006
1953-54	NA	NA	NA	NA	NA	NA	NA
1954-55	1716	733	479	753	253	127	4061
1955-56	1661	729	469	429	149	141	3578
1956-57	1539	716	462	684	280	157	3838
1957-58	1504	699	463	687	252	167	3772
1958-59	1483	719	496	664	244	185	3791
1959-60	1517	742	521	661	251	190	3882
1960-61	1529	759	532	702	259	177	3958
1961-62	1570	736	559	703	287	172	4027
1980*	1649	765	565	516	210	155	

* Projection for 1980 explained on the following page.

The 1980 school membership projections will be based upon a population projection of 11,775 white persons and 3,225 nonwhite persons. This projection represents an increase of 887 white persons and a decrease of 848 nonwhite persons.

Following is a distribution of school membership by grades as a percentage of the total population, and as projected for 1980.

	Total Population	Grade 1-6	Grade 7-9	Grade 10-12
1950 White Population	12,001	14.4%	5.9%	3.9%
1960 White Population	10,888	14.0%	6.8%	4.8%
1980 White Population	11,775	14.0%	6.5%	4.8%
1950 Nonwhite Population	4,985	18.6%	4.0%	1.6%
1960 Nonwhite Population	4,073	16.2%	6.2%	4.7%
1980 Nonwhite Population	3,225	16.0%	6.5%	4.8%

The above calculations show the stronger holding power in the higher grades during the past 10 or 12 years, a trend particularly strong among the nonwhite population. School membership by 1980 will probably be distributed by grades as follows:

	Grades 1-6	Grades 7-9	Grades 10-12
Total 1980 School Membership	2165	975	720

Of the preceding 1980 projections, following is the estimate of membership by grades living within the City of Live Oak, based upon a population projection of 9300 persons.

	Grades 1-6	Grades 7-9	Grades 10-12
Live Oak 1980 School Membership	1302	605	446

SCHOOL STANDARDS

Optimum facilities for educational needs have changed over the years to require larger school plants, larger sites, and more accessory facilities than were found in the three or four classroom county school of a few decades ago. In recognition of this trend, numerous small Suwannee County schools have been closed during the past ten years, and students of the area are transported by bus to larger, centrally located schools. This trend will likely continue. With the growth of Live Oak including an increasing proportion of the total county population, Live Oak in the long run should become the location of all Suwannee County Schools excepting perhaps one elementary school in the Branford area.

Elementary School Standards

The minimum recommended size of an elementary school is 480 pupil capacity on a 10 acre site, although a capacity of 640 to 720 pupils on a 15 acre site is preferred. Ideally, urban areas should be served by an elementary school within one-half to three-quarters of a mile walking distance of residential areas. This standard can be approximated for most but not all areas of Live Oak. The distance standard cannot, of course, be applied to rural areas.

Junior High School Standards

Optimum size of a junior high school is based upon a capacity of 800 to 1200 pupils on a site of 20 to 30 acres.

Senior High School Standards

Optimum size of a senior high school is based upon a capacity of 1,500 to 1,800 pupils on a 40 acre site.

FUTURE SCHOOL NEEDS, RECOMMENDATIONS

Based upon the foregoing standards, Suwannee County will require in the long-run only 3 or 4 elementary schools (grades 1-6). At least 3 of these should be located in Live Oak, which is the current number. Each of the existing school centers in Live Oak are well-located to provide desirable long-range sites for elementary schools.

Only one junior high school (grades 7-9) will be needed to efficiently serve the County.

Only one senior high school (grades 10-12) will be needed, and there will not be sufficient pupils in these grades in Suwannee County to provide an optimum facility and program.

As an alternative, at least for the needs of the next ten years, Suwannee County might elect to continue operating two combined junior and senior high schools (grades 7-12).

A policy for school consolidation is recommended as the only practical way to economically provide a desirable program at the high school level; the Branford High School should be discontinued at an early date. Consideration should be given to the feasibility of consolidating high schools between Suwannee, Lafayette, and Hamilton Counties. Live Oak would provide the most central location for such a consolidated school.

One or both of the high school programs should be relocated from the Live Oak School Center:

(1) The preferred choice, in view of the site limitations, is to relocate both the junior and senior high schools to the Pineview School Center. The Pineview School was designed originally for use as a high school, and with expansion of buildings a desirable high school facility could be developed. Under this approach, the elementary school would be relocated temporarily from the Pineview site to the Live Oak School Center, utilizing existing usable capacity of the vacated high schools. But, in the future, another elementary school should be constructed at the Pineview site; additional area might be needed at the site, depending upon the design and placement of buildings on the site.

(2) An alternative for consideration is to convert the existing Pineview school to either a junior or senior high (probably the latter) and construct a new Pineview Elementary School at the same site. One of the high schools would be continued at the Live Oak School Center, and extensive modernization would be required. In the event this approach is taken, the site should be enlarged to its maximum practical size.

PROPOSALS FOR SCHOOL CENTERS

Existing Centers:

1. Live Oak Center: Primary, Junior and Senior High Grades.
2. Pineview School Center (Elementary).
3. Douglas School Center (Elementary, Junior and Senior High School.)

Long Range Proposals:

1. Redeveloped Entirely As An Elementary School Center.
2. Converted And Expanded As A High School Center.
3. Douglas Center Continued.
4. New Elementary School.

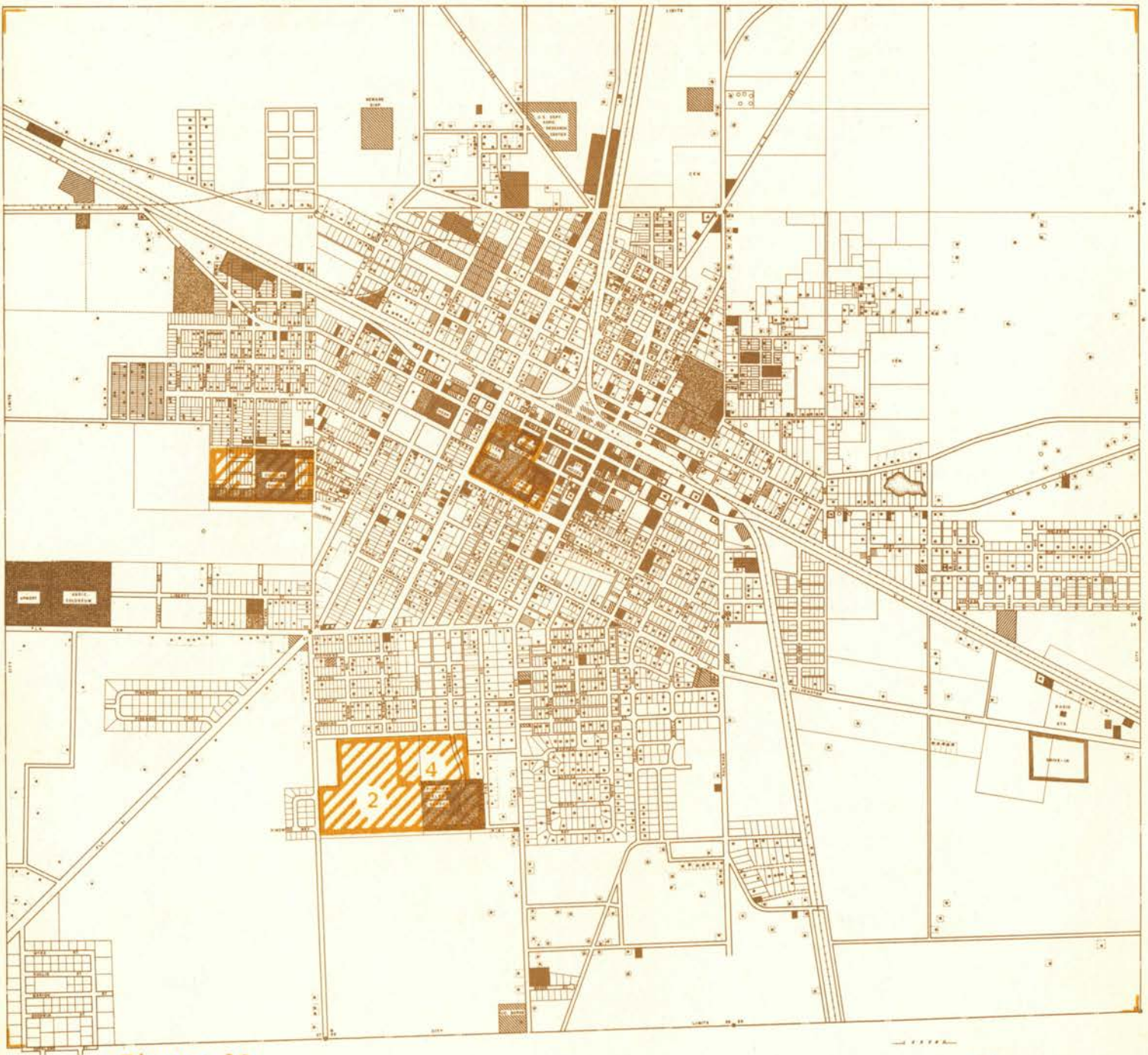

Figure 19
Page 81

CITY OF LIVE OAK
FLORIDA

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PARKS AND RECREATION FACILITIES

Parks provide a desirable amenity, although not essential to the city's welfare, which ought to be found in every city. Although small in size, Live Oak should establish appropriate parks to provide for recreational and aesthetic needs of the City. Some parks can be devoted entirely to active recreational purposes, and there ought to be a few reserved exclusively for beautification and aesthetic satisfaction of more passive forms of recreation.

EXISTING FACILITIES

In recent years Live Oak has become concerned with the need for recreational facilities. A recreation department has been established, a large recreation area and several small parks were acquired, and a community recreation building was constructed. In addition to the City owned facilities of about 25 acres of land, there are 22 acres in school playgrounds contributing to the total recreation facilities. Following is a list of available park and recreation areas:

City Owned Facilities:

Area 1.* This is the main recreation facility of the City of approximately 11.2 acres of land used for recreational purposes. On this site is located the City's recreation center building and most of the recreation facilities developed for use at this time. The City's swimming pool is located across the street on property of the City's water works. This area is large enough for a complete range of facilities needed at this time.

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* Area numbers are keyed to the map, figure 20.

PARK AND RECREATION FACILITIES

Existing Parks	
1 -	11.2 Acres
2 -	3.3 Acres
3 -	7.1 Acres
4 -	1.4 Acres
5 -	1.8 Acres
	24.8 Acres Total

Existing School Playgrounds	
A - Live Oak School	4.9 Acres
B - Pineview School	10.0 Acres
C - Douglas School	7.5 Acres
	22.4 Acres

Proposed Facilities
P - Park
R - Recreation Area
F - Forest Preserve

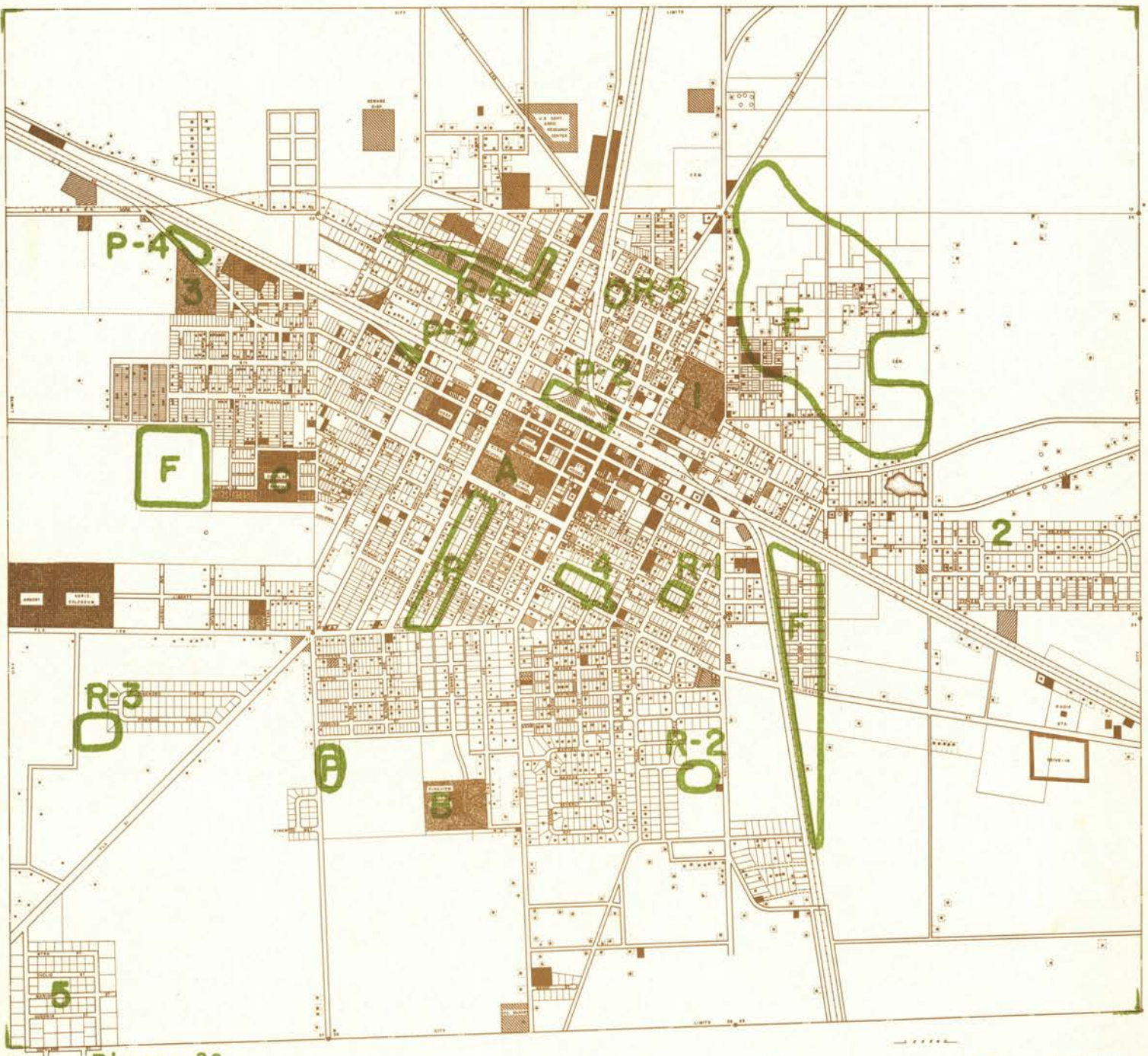


Figure 20

CITY OF LIVE OAK
FLORIDA

Area 2. A small park of 3.3 acres has been reserved at this site, although no development has taken place. On this attractive site is a small pond, and a few large trees (several live oak trees), which make this site a potentially attractive park for future development.

Area 3. This recreation area contains approximately 7.1 acres, and it is developed with a ballfield.

Area 4. Although this area is not designated as a park, it provides some limited value as an attractive neighborhood open space, providing some fishing for the children of the area. The site of about 1.4 acres contains a water retention reservoir for storm drainage purposes. The site could be expanded and made into a more useful, desirable park property.

Area 5. A small neighborhood playground of 1.8 acres is provided at this site. Although its development is not justified at this time, eventually there might be some use for it if the surrounding subdivision is filled.

School Playgrounds

A. The Live Oak School Center has a limited amount of open space available, but there are an estimated 4.9 acres in use as school recreation areas. In this Center there is a football stadium with stands and the old National Guard Armory, used by the physical education department.

B. The Pineview Elementary School playground contains about 10 acres of available land, although not all is used at this time.

C. The Douglas School has an estimated 7.5 acres of available playground area. Also available at this site is the school gymnasium and a swimming pool (under construction).

STANDARDS

Based upon a minimum standard of 1 acre of park and recreation area per 100 persons in the population, there should be approximately 70 acres of land in use at this time for such purposes in Live Oak. If the school playgrounds are counted, which is appropriate, this standard is being met in areas that available, although not all are fully developed.

By 1980, for a projected population of 9,300 some 93 acres total will be needed, or about 15 acres more than are now available. These standards indicate minimum needs, and a city may advantageously acquire and develop more area according to the specific need, interest, and willingness to pay and maintain a larger area.

In meeting future needs, the following standards will be helpful in selecting a site and determining its size.

Neighborhood Playgrounds:

All residential areas developed on an urban standard desirably should have a playground within one-quarter to one-half mile of every home. The major neighborhood playground, (of about 5 acres) where possible, should be developed at the neighborhood (usually elementary) school, although other small playgrounds and park areas (minimum recommended size of 3¼ acres) might be required to serve all areas.

In estimating the playground area needed for a particular neighborhood, the minimum size playground of 3¼ acres would adequately serve 2,000 population; to this, add 1 acre for each additional 1,000 population.

The neighborhood playgrounds do not require a supervised recreation program. It is usually sufficient that an area be available for group activity.

The neighborhood playground should be the major outdoor recreation facility for elementary school age children and should provide most if not all of the following activities:

1. Small area for pre-school children
2. Apparatus area for older children
3. Open space for informal play
4. Surfaced area for game courts
5. Sodded area for field games
6. Shelter building for arts and crafts instruction and for toilet facilities (when supervision is provided at the site)

Neighborhood Parks

Parks should be accessible to all residential areas, preferably within one-half mile of all homes. The parks may be small in area, according to the advantages of the particular site. One acre of neighborhood park area per 1,000 population of the neighborhood should be provided in the Urban Service Area. Neighborhood parks can be combined with the neighborhood playgrounds, or desirably might be developed on separate sites. Parks might take the form of greenbelts, buffer strips between residential and nonresidential areas, or parkways along some unusual natural or man-made feature - providing such strips have sufficient depth to provide a park-like effect inducing leisure use.

Shade, walks, benches, and pleasing outlook are the primary requirements for a neighborhood park site. Park space should be allocated so as to make the maximum contributions to the pleasing appearance of the community.

Community-wide or City-wide Facilities

For a city of the size of Live Oak, there is need for only one major community-wide recreation center providing major play fields, community buildings, and adult game courts. Such a facility should provide for all age groups and might include a gymnasium, auditorium, swimming pool, and a building for arts and crafts, workshops, meeting rooms, game rooms, and a teenage center.

Large city-wide parks can be provided in almost any amount according to the ability of the city to acquire, develop, and maintain them. As open spaces of scenic beauty, large parks can be left in a natural condition such as a forest preserve - to minimize development and maintenance costs until a need and resources are available.

Very often these large park areas can be selected to serve as land use separators (or buffers) to delineate residential areas from other areas of the city.

Large parks are desirable to provide attractive quiet areas for relaxation, picnicking, camping, boating and swimming, bridle paths, and hiking. They might contain active play areas and some structures, such as an outdoor theatre or museum. Not all of these large park areas need to be provided within the city. Such areas as the Suwannee State Park provide facilities of this type.

Additional small parks may be located anywhere in the city, particularly in the Downtown Area or at strategic locations as a focal point of heavy pedestrian or vehicular traffic. Their purpose is to embellish the city with beauty spots of open space, and are primarily landscaped areas with benches and walks for relaxation. The Court House Square, to some extent, provides an open space of this type in the Downtown Area.

RECOMMENDATIONS

The following recommendations are made in consideration of needs and opportunities for improvement that exist today plus future needs based upon the population projection and the Land Use Plan.

Neighborhood Facilities Needed

The major need for new facilities will be for the neighborhood playgrounds and parks. Where possible neighborhood playgrounds should be developed at school sites in order to obtain maximum benefit to both the city and school programs. A cooperative effort of this type is the development of the Douglas swimming pool on the site of the Douglas School.

Neighborhood parks will be less essential but are, nevertheless, desirable. Several proposed sites are indicated.

The following sites, shown in general location (figure 20), are proposed for development:

Site R-1 is proposed to provide a neighborhood playground in an existing residential section of the city not conveniently served with any recreation facility. The above diagram indicates one area as a possible site selection, which proposal involves closing a portion of Park Street in order to consolidate enough vacant lots into a usable property of appropriate dimensions and area (approximately 2.9 acres).

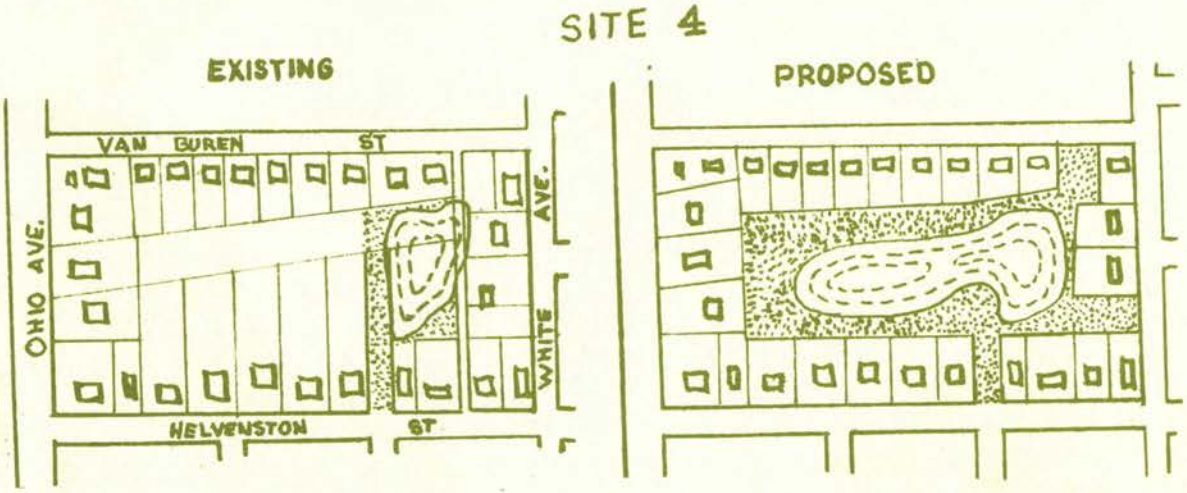
Site R-2 is proposed to provide a sizable neighborhood playground and park for a rapidly developing section of the city not currently accessible to any convenient facility. A site of 3¼ acres is recommended.

Site R-3 is proposed as a small neighborhood playground and park of 3¼ acres to serve an area having good growth potential and not accessible to any existing facility.

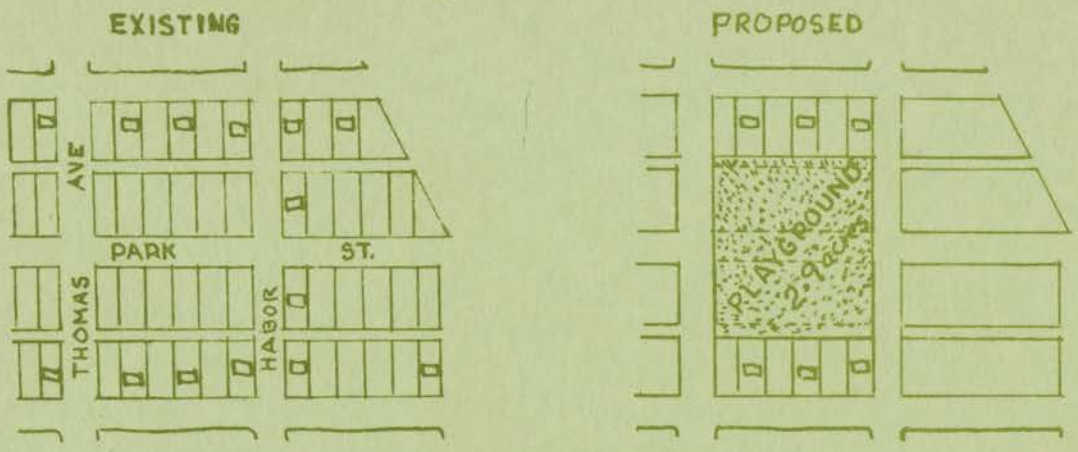
Site R-4 is proposed as a playground to serve a substantial residential area not accessible to any existing facility. The site proposed involves redevelopment of a non-residential use, a proposal discussed in more detail in the Area Treatment Program, Volume III. A site of 3¼ acres is recommended.

Site R-5 is proposed as another redevelopment site, (3¼ acres), involving clearing a substandard housing area and redeveloping it with a better residential environment, providing a playground and park, with adequate housing.

Site 4 is a proposed extension of an existing facility to provide a combination storm water retention basin and a neighborhood park of larger size, and more accessible, for public use.



Site R-1 proposes the creation of a long park, which features a mall extending from 11th Street to 7th Street on both sides of Church Avenue, which would be closed. This park might be obtained as part of an urban renewal redevelopment project, although primarily intended as a park, the area would be large enough to provide play areas for small children at several locations.



City-Wide Facilities Needed

No major new city-wide recreation facilities are recommended. The existing center at site 1 can be expanded with additional facilities as needed. The site should be enlarged by about 1½ acres to square the property and provide for long-range needs.

In the Downtown Area several park areas should be established to improve the attractiveness of the city. These sites, as proposed, are identified in figure 20, but are discussed in more detail in the section on the Live Oak Central Area. Sites P-2, P-3, P-4 are proposed as parks to improve the city's approaches and Downtown area. Downtown parks should be located to provide focal points of interest, occasional relaxation, and places for special events, band concerts, political rallies, and festivals.

Other large parks are recommended for development primarily as open spaces, with limited recreation facilities, to accomplish objectives of the Land Use Plan for land use separators. These areas will not be needed within the foreseeable future for intensive recreational use, but they would provide forest preserves available for hiking, camping, and picnicking. When acquired, the conservation areas could be planted in pine trees, which would eventually produce attractive wooded areas and perhaps provide some income to repay in part the cost of land acquisition.

THE CENTRAL BUSINESS DISTRICT PLAN

The central business area of Live Oak is the site of the majority of the City's business, professional, and governmental functions. The central business area contains 128.3 acres, only 2.9% of the total corporate area. Despite its relatively small size, it is here that the greatest diversification of goods and services are found, real estate values are highest, and employment is most concentrated.

LIVE OAK'S TRADE INFLUENCE

The central business area of Live Oak serves as a trade center for a large area comprising parts of several counties. In addition to being the primary shopping center for Live Oak and Suwannee County residents, it is also the primary shopping center for most of Lafayette County and a secondary center for some of the residents of Madison and Hamilton Counties. The estimated primary trade area population is 18,000, while the primary and secondary areas combined total 30,000.

RETAIL SALES

Statistics on retail sales emphasize the importance of Live Oak as the dominant retail center of Suwannee County. Past retail sales for the City and County are shown in Table 6.

Table 6
$(000)
RETAIL SALES

	Suwannee Co.	Live Oak	Live Oak as a % of County
1954	12,916	11,132	86.2
1958	13,888	12,074	86.9
1961	15,981	13,903*	87.0*

Source: U. S. Census of Business and Sales Management, 1962, "Survey of Buying Power."

The $13,903,000 in retail sales in 1961 is $5-6 million over the potential retail sales of the Live Oak population. This excess of retail sales is brought to Live Oak largely by the residents of the surrounding trade area, mainly of Suwannee County.

Regional Competition

What is the future of Live Oak as a regional shopping center? The cities of Lake City, Valdosta, Gainesville, and Jacksonville are already competing in the Live Oak trade area. After the completion of Interstate 10 and Interstate 75, driving time to these cities will be further reduced and competition from them will increase. In order to retain its present trade activity Live Oak will have to provide an attractive shopping area, adequate parking, and a variety of goods at competitive prices. This will be expensive to do considering the likelihood that the trade area population will continue to decrease.

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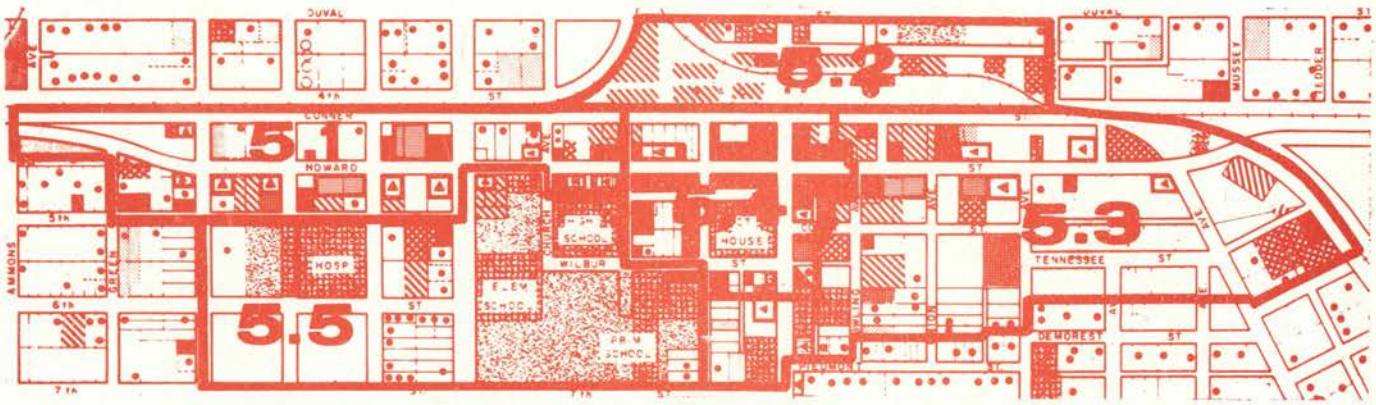
* Estimate

CITY OF LIVE OAK

CENTRAL BUSINESS AREA



- RESIDENTIAL - SINGLE FAMILY
- RESIDENTIAL - TWO FAMILY
- RESIDENTIAL - MULTI FAMILY
- RESIDENTIAL - MOBILE HOMES
- COMMERCIAL - GENERAL RETAIL
- COMMERCIAL - OFFICES & BANKS
- COMMERCIAL - OPEN LAND USE, CAR LOTS, ETC.
- LIGHT INDUSTRY, WAREHOUSING, MANUFACTURING, TRANSPORTATION.
- HEAVY INDUSTRY
- PUBLIC - SEMI PUBLIC - INSTITUTIONAL, CHURCHES, SCHOOLS, ETC.
- PUBLIC - SEMI PUBLIC - RECREATIONAL, PARKS, ETC.
- GASOLINE STATIONS

Figure 21

EXISTING CONDITIONS

The existing land uses are shown on the Central Business Area Map, the map outlines the central business area and further subdivides it for discussion purposes. Similarity of land use was the basis for the five sub-divisions.

AREA 5.1

The Highway Commercial Area contains approximately 30 acres of land in a narrow strip fronting on U. S. 90. It begins at Suwannee Avenue and runs west to Ammons Avenue. A majority of the business establishments in this area are highway oriented, e.g., there are eleven gas stations and several used car lots.

The uses in the area serve the local population but they also depend upon thru traffic using U. S. 90 for additional business.

Traffic flow and parking present no major problems at this time. Most uses in the area provide off-street parking for their customers, or adequate curb parking is available.

AREA 5.2

The Warehousing Area contains approximately 18 acres and is a rather narrow strip adjacent to the Seaboard Railroad mainline tracks. The land is being used primarily for warehouse and other storage facilities. The railroad station is located here. Parking is no problem in this area.

Ohio Avenue cuts thru this area and is heavily traveled (1960 average daily traffic was 5,105 vehicles.) The street is in good condition, has four lanes and is quite adequate to handle current and projected traffic flow. Occasional delays occur because of two railroad grade crossings. Other roads are in average condition.

The area is adjacent to the central retail core of Live Oak, and it presents an unattractive appearance as a whole. Some of its uses supplement the activities of the retail core area, but many do not and could be relocated from the downtown area.

AREA 5.3

The Agri-business Area contains approximately 38 acres of land and is located in the southeast part of the central business area. The land uses within this section are varied but there is a predominance of auto and farm implement sales and servicing. This is an important part of Live Oak's economic activity and should be permitted to remain within the central business area as a complementary function.

Large vacant parcels of land are available to provide adequate expansion area.

Traffic flow and parking present no serious problems in this area except where these sales and servicing facilities are adjacent to the central retail core. Congestion occurs on U. S. 90 when nearing the retail core area.

Condition of streets in the area range from good (U. S. 90) to very poor (Union Avenue). Some streets of this area are unpaved and provide poor sites for business development.

AREA 5.4

The Institutional Area occupies the southwest part of the central business area. Although there are relatively few businesses in this area, its close proximity associates it with the central business district.

In this area are located a primary school, elementary school, high school, and hospital. These uses plus vacant land take up nearly all 26 acres in the area. The vacant land, in addition to an area of substandard housing, provides adequate expansion area for institutional uses.

Throughout most of this area the parking and traffic flow problems are minor. Some congestion does occur at certain hours of the day in the vicinity of the high school.

The roads within this area are adequate in width but their condition ranges from average to very poor (unpaved).

AREA 5.5

The Central Retail Core contains approximately 17 acres, centrally located within the business district. Within this core are most of the retail trade and services, and governmental operations. Within the core are approximately 97,000 square feet of floor area devoted to retail sales and another 41,000 square feet to retail servicing. See figure 22

The original center of activity grew up about the mainline tracks of the Atlantic Coast Line Railroad and Seaboard Airline Railroad. Later when the courthouse was erected there was a shift of business activity to this area. The automobile again shifted the center of retail activity to where it now is - the intersection of Howard Street (U. S. 90) and Ohio Avenue.

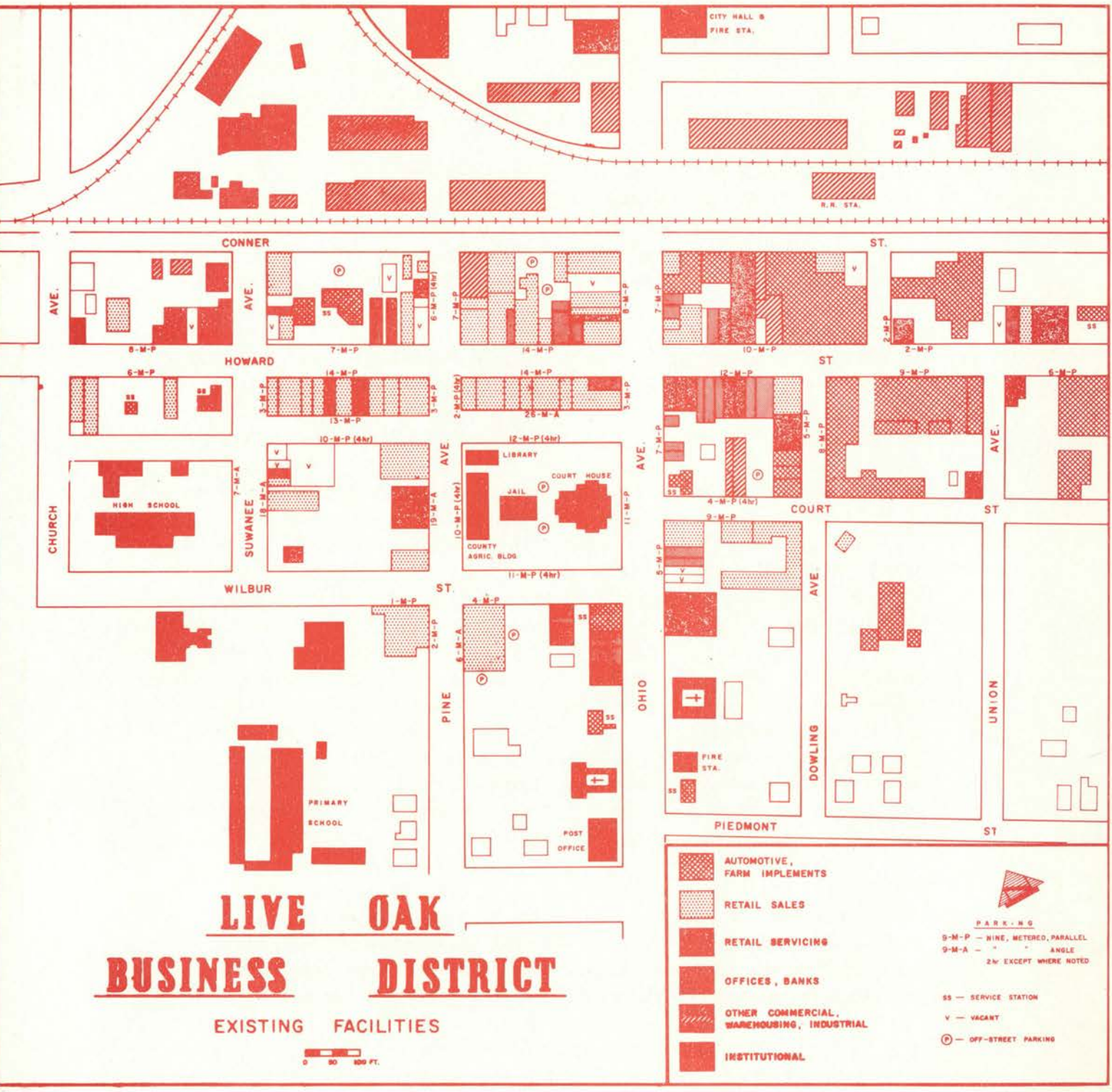

CITY HALL & FIRE STA.
R.R. STA.
CONNER
ST.
AVE.
HOWARD
ST
COURT
ST
CHURCH
SUWANEE
AVE
WILBUR
ST.
PINE
OHIO
AVE.
DOWLING
AVE
UNION
PIEDMONT
ST
HIGH SCHOOL
LIBRARY
COURT HOUSE
JAIL
COUNTY AGRIC. BLDG
FIRE STA.
PRIMARY SCHOOL
POST OFFICE
LIVE OAK
BUSINESS DISTRICT
EXISTING FACILITIES
0 50 100 FT.
AUTOMOTIVE, FARM IMPLEMENTS
RETAIL SALES
RETAIL SERVICING
OFFICES, BANKS
OTHER COMMERCIAL, WAREHOUSING, INDUSTRIAL
INSTITUTIONAL
PARKING
9-M-P — NINE, METERED, PARALLEL
9-M-A — " " ANGLE
2hr EXCEPT WHERE NOTED
SS — SERVICE STATION
V — VACANT
(P) — OFF-STREET PARKING

Figure 22

Many of the buildings in this core area are older and for lack of maintenance have become rundown in appearance. The overall appearance of the shopping area is not attractive, but there are several good examples (such as the bank) of how these older buildings can be restored or modernized to provide an attractive, clean, and progressive appearance.

Traffic flow within this area becomes restricted because of congestion. Howard Street is not only the major east-west thru route but also serves the retail core. Here the combination of thru traffic, local traffic, curbside parking, and pedestrian traffic contributes to congested conditions. After the completion of Interstate 10, much of the thru traffic will be diverted, thus easing congestion somewhat for a period of years.

Ohio Avenue is the other major street passing thru the central retail core. Although traffic on this street is as heavy as on Howard Street, it is a wider street and adequate to handle four moving and two parking lanes. There are no major problems of traffic flow on Ohio Avenue except occasional delays at the railroad grade crossing. Other streets of the core area are in average to poor condition.

Parking in the central retail core is not presently a very serious problem but there is an occasional shortage of convenient space. A recent survey of curbside parking spaces shows approximately 295 spaces of which 258 were metered. There are an additional 43 spaces in two unimproved off-street lots in the core area for a total of approximately 338 spaces.

Parking retirements based on 3.5 spaces per 1,000 square feet of retail sales area and 2 spaces per 1,000 square feet of retail service area produces a minimum requirement of 422 spaces. There is a deficit of approximately 84 spaces in the core area.

Decentralization of retail functions, a strong trend in many cities, especially larger ones, has not proceeded very far in Live Oak. Neighborhood stores, particularly small grocery stores, have long existed though. And in recent years other facilities, formerly desiring a central location, have been built outside the retail district. Lack of abundant, convenient parking and a general rundown appearance are factors present to the detriment of the retail core area, making it vulnerable to decentralizing trends.

In the future, however, the Live Oak retail businesses will suffer increasing competition from the retail centers of larger, nearby cities, as pointed out in the analysis of the economy. The convenience offered local residents, however, will always provide a need and opportunity for retail business in Live Oak.

GOALS

The gradual physical decay of the central business area will have to be arrested if the Central Business District is to maintain its present strong status as a regional trade center. In most instances the measures taken will be relatively simple, and easily accomplished; in others they will be more difficult and far reaching. The measures taken should take into account the changing forms and functions of the central area and increasing competition from other cities.

The central area recommendations, by their very nature, require the active participation of several groups, both private and public, and many individuals. The goals should bring into focus the basic issues and provide guidelines for future action. The following goals are proposed:

(1) A central business area that would conveniently serve the trade area with a maximum variety of goods and services economically feasible to supply a limited market.

(2) An efficient traffic circulation pattern that would provide a minimum of conflict between pedestrians and automobiles.

(3) An effective functional grouping of different type activities so that each is carried out with as much convenience to the customer as possible.

(4) The preservation of a compact retail core area where all facilities are within easy and pleasant walking distance between stores.

(5) Adequate off-street parking facilities, convenient to all facilities to be served.

(6) An improved appearance for Live Oak's central business district with particular emphasis on the central retail core.

Following is a discussion of the above stated general principles as they apply to the several functional parts of the downtown area.

AREA 5.1 (THE HIGHWAY COMMERCIAL AREA)

The continuance of the present land uses should be permitted and encouraged according to the following design considerations:

(1) Parking - All businesses should have off-street automobile parking facilities provided on the site of the individual business establishment.

(2) There are many short blocks in the area resulting in numerous intersections with U. S. 90. Too many intersections impede traffic and create hazards. It is recommended that Irvin Avenue between 5th Street and Conner Street be closed. Likewise with Green Avenue between 5th Street and Howard Street.

(3) Beautification - In order to effectively beautify an area it must first undergo a general clean-up. A clean-up drive would be aimed at removing unsightly articles from around existing buildings and also cleaning up vacant parcels of land. Outside storage should be made more attractive with landscaping, fences and screens. It is recommended that the block west of Walker Avenue between U. S. 90 and Conner Street be used as a small park area. The block is narrow and not suited for any substantial commercial usage. It would serve well as an open space to beautify the western entrance to the central business district.

AREA 5.2 (THE WAREHOUSE AREA)

It is recommended that the warehousing facilities be moved over a period of time to other locations and this area be redeveloped for more appropriate uses.

The Downtown Area Plan suggests a design for the reuse of the area; partly for parking and partly for parks.

Parking facilities in this area should be located as close to the businesses along Ohio and Howard Streets as possible, and concrete pedestrian grade crossings should be provided across the railroad tracks for ease of access.

AREA 5.3 (THE AGRI-BUSINESS AREA)

The uses of this district should be encouraged to expand, providing a convenient farm servicing center in the downtown area. Agri-business should continue to grow as an important function in the economy.

The appearance of the district should be improved; regular clean-up campaigns, including regular cutting of grass on vacant lots, should be carried out periodically.

Streets that are unpaved and which are part of the long-range plan for the area should be improved.

Figure 23 suggests the development of a buffer strip to separate the uses of this district from adjacent residential properties. Such a buffer strip should consist of screen plantings and screen fences to separate and protect the value and privacy of the residential area. Street access could be rearranged to prevent commercial traffic from passing through the adjacent residential areas, as indicated in figure 23.

AREA 5.4 (THE INSTITUTIONAL AREA)

Substantial vacant land exists at the hospital site, which should be held for long-range use for hospital and related facilities.

Porfessional offices and medical clinics should be developed in the vicinity of the hospital. An adjacent area of substandard housing and nonconforming businesses should be redeveloped for professional office uses, the area bounded by 5th and 7th Streets and Scriven and Houston Avenues.

The Live Oak School Center is proposed for continued use as a high school. Wilbur Avenue and Church Street should be closed to through traffic and redesign as part of the school campus.

This institutional area, as delineated, would provide a good location for future apartment developments, such as nursing homes and housing for the elderly.

Streets of the area should be improved; parkways should be made attractive and well-lighted. Off-street parking should be provided on the site of each use.

AREA 5.5 (THE CENTRAL RETAIL CORE)

Despite its fundamental advantages and central location, the retail core area is vulnerable to competition that may further weaken its position.

The population of the Live Oak service area is too small to justify shopping centers in Live Oak, and these should be averted by improvement of the downtown area. Future planning of the downtown area should be directed toward maintaining its current dominance as the major concentration of retail facilities.

There is an opportunity to improve and meet future competition:

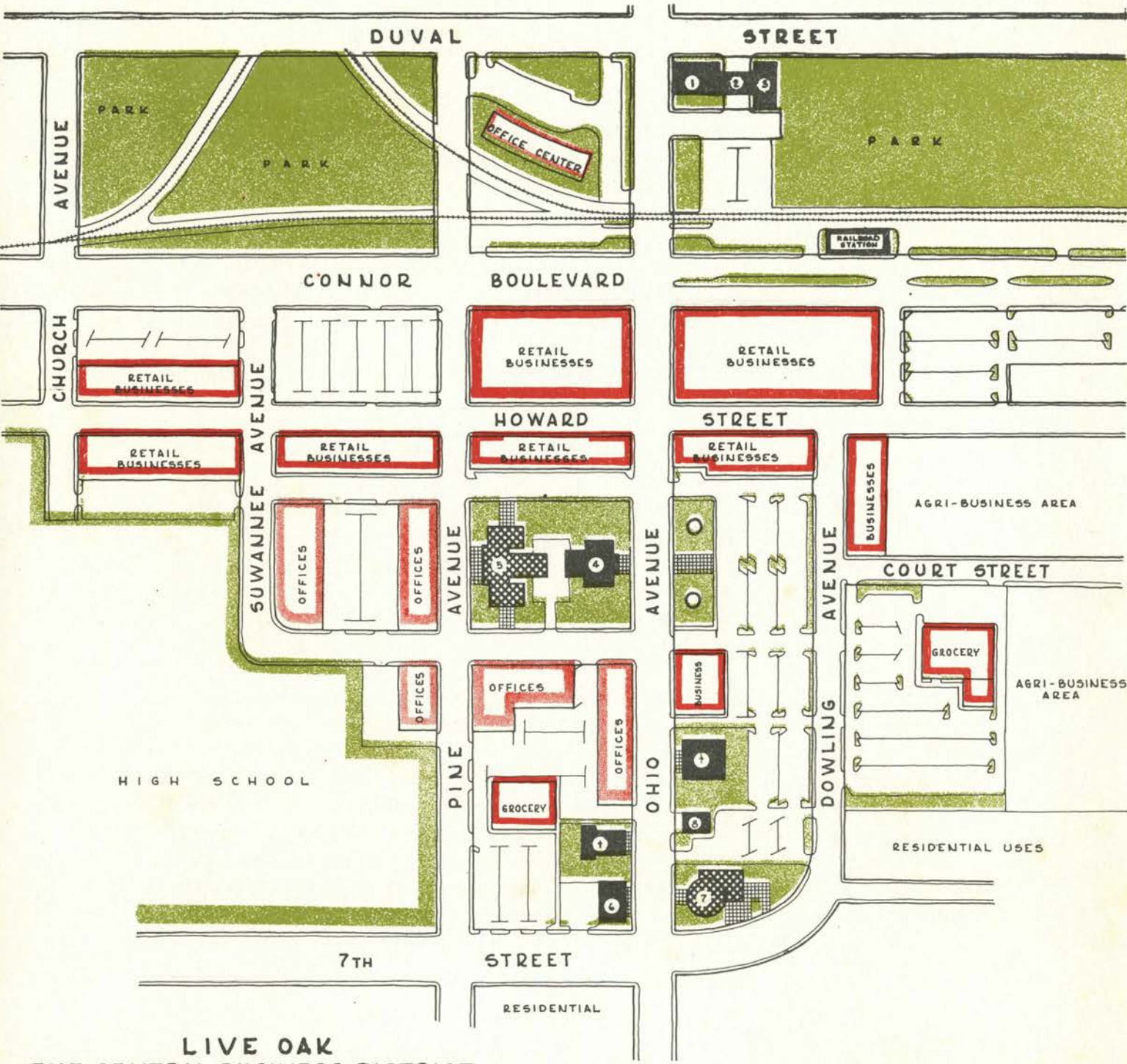
(1) By stressing convenience to customers of the established service areas. Off-street parking lots are needed close to the stores to be served. Community parking lots are recommended.

(2) By general improvement and rehabilitation techniques. To compete with larger centers in other cities, the retail area should be made as attractive as possible, utilizing the area's best attributes and eliminating as many as possible of the ugly, rundown features.

(3) By influencing desirable retail development to remain in a desirable location.

THE CENTRAL AREA SKETCH PLAN

As a general guide, figure 23 provides a sketch plan for long-range improvement of the downtown district. The area selected for special site study is large enough to provide adequate off-street parking and sufficient expansion area for the major retail sales and service uses. The sketch plan is not intended as a refinement to be followed rigidly, but should be used as a general design to guide site selection for parking lots, public buildings, and park areas. Functional areas are delineated for convenient grouping of retail stores, offices, and service uses.



LIVE OAK
THE CENTRAL BUSINESS DISTRICT
(AS PROPOSED FOR LONG RANGE DEVELOPMENT)

1. Existing City Hall (retained for administrative offices)
2. Fire Station (addition)
3. Police Headquarters (addition)
4. Court House (remodelled)
5. County Administrative Offices (proposed)
6. Post Office (retained)
7. New Library and Civic Center
8. Fire Station (existing)

Public Buildings
Retail Businesses
Offices
Public and Landscaped Areas

0 100 200

Figure 23

RECOMMENDATIONS FOR IMPROVEMENT PROGRAMS

The preceding discussion takes inventory of current facilities and conditions, identifies problems, and outlines general goals. Accomplishment of the general goals will require continuing effort on the part of public officials and individual property owners and merchants to carry out specific improvement programs. Most porgrams for improvement will involve both short-range and long-range projects.

The City Planning Board should exercise leadership in defining projects for the City and other governmental bodies. But most improvement programs will require private investment if the public improvements are to fully benefit the City. The merchants division of the Chamber of Commerce could assume responsibility for providing leadership among downtown merchants and property owners, perhaps through the establishment of a Downtown Committee. Or a new Downtown Merchants and Property Owners Association could be established, as has been donw in some cities.

(1) Commercial Facilities

Zoning policies should be directed toward downtown concentration for most retail and office uses, excepting businesses catering to the highway traveler. To accomplish the above stated objective, however, less reliance should be placed on zoning than on positive measures to correct downtown faults and to improve opportunities for retail investment.

Food stores are particularly suited to decentralized locations, but in Live Oak it is strongly recommended that these remain downtown. Of two supermarkets in Live Oak, both of which are located downtown, one is too small and has insufficient parking; a larger store on a site providing ample parking should replace this one. Food stores should be located on the fringe, rather than in the center of the retail area.

Most existing variety and clothing stores are small and in need of modernization. These uses also should remain downtown, essentially in their present location.

There is a tendency for offices to relocate outside of downtown areas. A professional office district has been discussed already as part of the institutional area (Area 5.4). Commercial offices are desirable as downtown uses; they supplement the retail functions, but offices generally should not be intermixed with retail stores, unless placed in the upper stories of buildings.

A major problem to be overcome by any business considering a major expansion will be site acquisition. Desirable business sites today must be larger than formerly required in order to provide for parking. Sites must front on a modern street offering ease of access, and currently there is not enough good, improved business street frontage in the downtown area. Too many downtown streets have narrow pavement with substandard surfaces. More business sites could be made available by initiating a paving program to provide several new wide improved streets. Howard Street and Ohio Avenue are currently the only wide downtown streets that provide desirable locations.

To avoid unnecessary decentralization of business, it is recommended that the proposed merchants and property owners association (or committee) establish necessary contacts to influence all new business developments to consider the advantages of a downtown location.

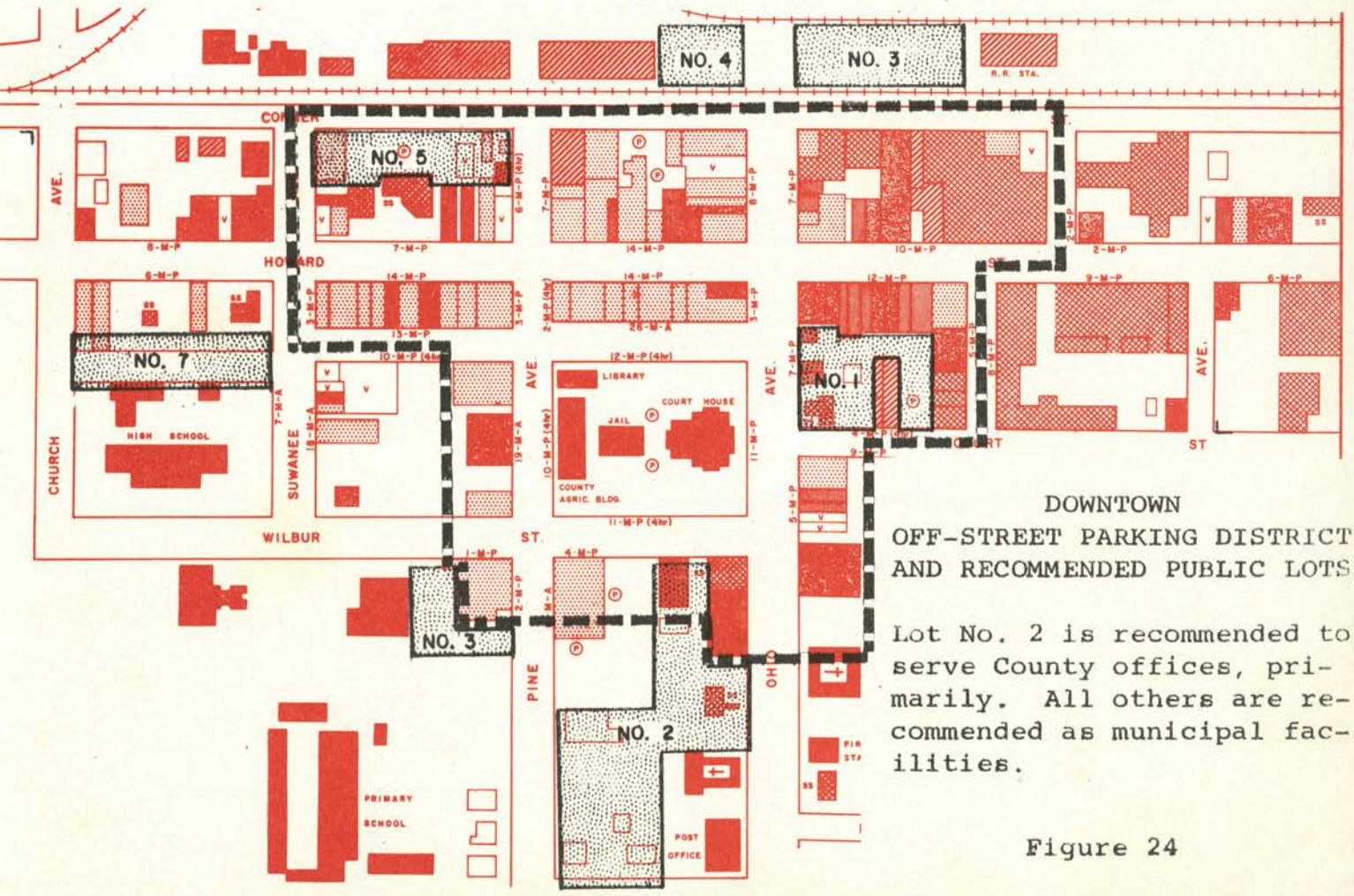
As a guide to future development projects, private and community, it is recommended that Downtown Live Oak strive to match the convenience and variety designed into the modern retail shopping center. Figure 23 sketches general ideas for grouping the retail functions and office functions, and suggests coordinated development around large parking areas.

(2) Parking

Off-street parking should be the individual responsibility of each business establishment, except for those located in the retail core area. Whenever possible, parking should be provided on the site of each business.

In the retail core area, where the land coverage by buildings is unusually high, it is not practical to require individual parking lots for each business. Furthermore, greater convenience can be offered customers by establishing community parking facilities. Through the use of community parking lots a customer is able to park once while making several business stops in the vicinity.

Figure 24 delineates the retail area proposed to be served by a community parking program. When initiated, it is recommended that this area be exempted from the off-street parking requirements of the zoning ordinance.



DOWNTOWN
OFF-STREET PARKING DISTRICT
AND RECOMMENDED PUBLIC LOTS

Lot No. 2 is recommended to serve County offices, primarily. All others are recommended as municipal facilities.

Figure 24

Several off-street lots would be beneficial if provided now, and more should be provided in time as part of a long-range downtown redesign. In the future it will be desirable to remove some of the existing on-street parking, according to the need to handle growing traffic, particularly along Howard Street.

Parking meters are now operated in the downtown area to regulate parking turnover and to produce revenue. The parking revenues should be earmarked for off-street parking improvements. Experience has shown that meters are not necessary to insure turnover of spaces, as long as downtown employees are not permitted to occupy prime spaces to the exclusion of customers. Eventually, it may be desirable to eliminate parking meters for the convenience of customers.

At the present time there is no serious shortage of parking, although prime spaces are occasionally scarce in the retail core area. Some prime spaces at the curb are occupied by downtown employees to the exclusion of customers, who should get first consideration. Employees should be encouraged to park in the less convenient locations. At least one off-street lot is needed to provide for employees of the courthouse and adjacent business establishments.

Off-street lots should be established without meters, if possible, to encourage their use. It will not be possible to find enough land available at low cost to place sufficient off-street parking immediately adjacent to the main retail concentration. In a small community, such as Live Oak, parking lots must be located very close to the primary destination of shoppers, not over 500 feet away and preferable within 30 feet.

When off-street parking lots are developed, signs should be placed on downtown streets to direct traffic to the municipal lots. Directional signs or lane markings should be placed in all lots to indicate direction of movement and ingress and egress points.

Figure 24 proposes areas for site acquisition and improvment projects to increase the amount of off-street parking.

(3) Traffic Circulation

Traffic of two types must be moved through the downtown area: (1) through traffic which can be by-passed or moved around the outer edges of the district, and (2) local traffic desiring to stop and do business.

The provision of by-pass and through traffic routes was discussed in the section on the Major Street Plan. Figures 11a and 11b illustrates a long-range proposal, not feasible at this time, to make Commor Street into another through street. Ohio Avenue will continue to serve adequately the needs for north-south through traffic.

Some on-street parking should be eliminated to facilitate traffic flow, particularly near intersections in the business district. Intersections should be clear of parking for 25 feet to provide an extra lane for turning and improved visibility for motorists and pedestrians. As an example, it is suggested that parking be removed on the east side of Pine Avenue south of Howard Street.

Traffic lanes should be marked on all downtown streets, indicating through and turn lanes. Whenever possible, separate turn lanes should be provided at intersections. Traffic flow can usually be increased by marking lanes so as to avoid stopping all traffic behind a car waiting for a chance to turn.

Many downtown streets need resurfacing; some need to have curbs and sidewalks added. In the past some streets have been widened by removing the old curb and adding a measure of asphaltic covering over the parkway (to provide parking). The result has been a ragged appearance; it is recommended thatsuch haphazard, poorly designed street widening be avoided.

(4) Beautification Projects

Downtown beautification is a subject receiving considerable attention in numerous cities. Most projects start with landscaping programs and end with a few planters on the sidewalks. While helpful, such superficial efforts should merely be the start of a series of beautification projects designed to give downtown a look of beauty and prosperity. A pot of geraniums in front of a rundown store front fails to convey either impression.

Beautification projects suggested for downtown Live Oak involve the following:

(a) Repainting, for immediate results at low cost. Whenever possible and appropriate, color schemes should be coordinated for each block or group of stores to achieve harmony.

(b) Landscaping projects could be initiated for quick results at low cost. Improved landscaping of the grounds of public buildings is very important, but numerous private businesses have small areas, particularly in parking lots, that could be beautified. Planters could be placed in appropriate areas on the sidewalks, where sidewalks are wide enough and abutting businesses provide a proper setting.

(c) Eliminate many excessive signs displayed over sidewalks, on the fronts of store windows, and particularly on vacant structures.

(d) Development of downtown parks. Small park areas could be added to the downtown area, especially in the areas around public buildings. Figure 23 includes many ideas for development of large and small park areas.

(e) Most parking lots should include substantial landscaping areas. Usually this can be done with little or no sacrifice in number of parking spaces.

(5) Rehabilitation Projects

Rehabilitation projects suggested for Downtown Live Oak include more costly improvements, depending on the condition of individual structures. Downtown Live Oak has too many old structures that have been allowed to deteriorate without routine maintenance. Many of the old buildings are basically sound and could be restored to their former condition. Old, distinctive buildings can be rehabilitated and made attractive with minor alterations and repainting. The Live Oak Commercial Bank provides a good example of how an older building can be restored as an attractive asset. Other, less distinctive old buildings should be modernized or replaced.