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OF FORT LAUDERDALE FLORIDA



COMPREHENSIVE CITY PLAN

of

FORT LAUDERDALE

FLORIDA

PREPARED FOR CITY OF FORT LAUDERDALE

by

GEORGE W. SIMONS, JR. PLANNING CONSULTANT JACKSONVILLE, FLORIDA

COMPREHENSIVE CITY PLAN of FORT LAUDERDALE FLORIDA

(Approved by a Vote of the People at a) (Special Election held on Marhc 18, 1947)

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PREFACE

"The object of making the Plan is to give guidance to the people of the Region and the governing authorities that represent and act for them, to enable them to so direct urban growth in the future that the greatest practicable measure of health, safety, convenience and general welfare will be secured for the inhabitants."

Regional Plan of New York and Its Environs, Page 131, Volume I.

The people who live and work in our cities are becoming increasingly conscious of the evils and high costs of planless city growth. They are plagued constantly by the needless and costly delays and hazards of traffic movements through inadequate street systems. They are sorely beset by the congestion in central business districts. The inability to find parking spaces readily is irritating. As they drive to and fro in the city they observe changing conditions that often reflect instability and changing values. Generally they are growing weary of disorder, crowdedness and dirt. With more leisure time at their disposal, the people also sense the gross inadequacy and poor distribution of park and recreational facilities, the inadequacy of school plants and the land spaces surrounding them. Such critical conditions as these, and many others, are stimulating a lively interest in plans for the future - plans to avoid and correct the errors of the past.

The people realize that their city cannot continue to grow and suffer as in the past. Knowing that industrial and commercial enterprise apply planning principles to their problems, they see no reason why their political enterprises cannot take stock and plan. They know that plans will lead to more economical, orderly growth and result in a more wholesome, convenient and better balanced place in which to live, work and play. They know that aimless, senseless growth can only mean a continuance of confusion and chaos.

The City Plan is primarily a guide to orderly physical development. It is a plan of strategy defining a course of action to be followed over a period of years, to avoid the errors of the past, yet conform to the needs of the future. The City Plan as herein conceived is not a set of detailed working drawings to be used by constructors, but instead it is a pattern predicated on broad principles, pointing out how the community should develop to improve and enhance its economy, its attractiveness and its liveability as a city of people.

Because the city is in a constant state of flux, no plan or guide to the future should be so rigid that it cannot be adjusted to changing conditions as they arise. It must be a continuing, flexible instrument. And too, the basic thinking incident to its preparation must extend beyond the fixed city limits into the surrounding region, to determine the effect of such tributary region on the life and character of the city.

"The objective of city planning is to so arrange the physical plant, the layout of the city in which the population lives and works, that it will minister to, and promote rather than impede the social and economic welfare of the community." Some of these objectives will be:

1. A sound wholesome development of the city. Such a development will stabilize property values and land uses. It will put right things in the right place.

- 2. Proper distribution and allocation of land uses. This will be accomplished thru zoning regulation.
- 3. Better traffic control and regulation. The proper design of the street system, the proper utilization of roadways for moving traffic and provisions for parking will accomplish much of this.
- 4. Better housing for all the people. The elimination of blighted and slum areas and protection by zoning will bring this about.
- 5. More adequate park and recreation areas. A complete system of playground areas for varying types of service and a system of parks, predicated on the neighborhood theory, will accomplish this.
- Fublic utilities serviceable to all properties is desirable.
- 7. Public buildings conveniently located for public usage.
- 8. Attractiveness of city. A development of personality.
- 9. Better land subdivision through subdivision regulations.

After completion, the City Plan must be activated constantly. To keep the people of the city informed as to the plan provisions, "action" committees should be enlisted to keep it alive and active. By processes of public enlightenment, the wisdom of broad planning should be kept before the people, and no capital improvements should be approved that do not conform to it.

GEOGRAPHY AND NATURAL CONDITIONS

Geography and natural resources are potent factors influencing the rate and character of community growth. When geographical location is favored by a salubrious climate, an ocean, and the potentials of an embryonic agricultural empire, then it is of still greater importance to future growth.

Fort Lauderdale is an infant among cities. Within the span of two generations it has grown from a pioneer trading post and fishing village into one of the most attractive commercial and home communities of America.

Situated on the edge of the Everglades where the New River breaks through to the sea, the City can be reached by two trunk line railroads, well paved highways, the intra-coastal waterway, air and ocean. It is also centrally located in that narrow coastal fringe lying between the Everglades and the ocean, extending from West Palm Beach on the north to Miami and the keys on the south - one of the fastest growing and most alluring sections of the United States. From 1920 to 1945 - a short span of 25 years, the population of the four principal counties comprising this region (Palm Beach, Broward, Dade and Monroe) multiplied nearly six (6) times, from 86,000 in 1920 to 500,000 in 1946 (Figure 1).

This relatively small region (ten per cent of Florida's area) of the lower east coast is easily accessible to sixtysix (66) per cent of the nation's population residing east of the Mississippi River exclusive of Florida. Direct through trains daily connect it with New York within twenty-four hours, and Chicago and the central west within thirty-one hours. By air, these respective sections are reached in a matter of hours.



FIGURE I

Such frequent, direct and speedy facilities are factors implementing the growth and development of this entire region.

Fort Lauderdale, located astride the deep waters of New River, one of the several natural outlets from the Everglades, has been called the "Venice of America" because of its more than 100 miles of navigable waterfront within its corporate limits. A mecca for sportsmen, fishermen and yachtsmen, the natural streams and man-made waterways are among its most valuable physical assets. The New River with its North and South forks, Middle River, Intracoastal Waterway, and the Atlantic Ocean with the Gulf Stream just off shore, combine to temper the climate, provide transportation and beautiful settings for parks, promenades, boulevards and dwelling places. Climatic conditions are favorable to the prolific growth of exotic shrubs and trees that contribute immeasurably to the scenic beauty of the City and its environs.

To the wost of Fort Lauderdale lies the great expanse of the Everglades, that area of mystery, romance and adventure, yet one of the greatest agricultural potentials in America.

South of the City is Port Everglades, the most easily accessible deep water port on the Atlantic coast, which will become increasingly important, not only as the port of Fort Lauderdale, but as a major port facility for the entire lower east coast and Everglades region.

EARLY TRENDS

From its inception, the many developers of Fort Lauderdale have been imbued with a desire to build a city of attractive dwelling places and other structures architecturally designed to meet the climatic and other needs of the City. Throughout its quick and active growth, an effort has been made to avoid the flamboyancy and garishness characteristic of some resort cities with their towering structures overcrowding the land. This commendable policy has impressed visibly an atmosphere of naturalness and hominess upon Fort Lauderdale.

In 1925-1926, the far-sighted officials prepared a plan which included river front improvements, street and street widening program and a zoning ordinance. The set back lines established pursuant to the provisions of that plan enabled the City to acquire much property, at little or no cost, for future street widenings. In 1947, the electorate of Fort Lauderdale substituted a new and more comprehensive master street plan for the earlier one. And, currently, the zoning plan is being revised to meet changing and new conditions. The effects of the earlier planning efforts on the physical structure of the City can be seen, also the results of the time and thought expended by the Planning and Adjustment Boards functioning currently to make Fort Lauderdale a good place in which to live.

Despite the best intentions, aims and purposes of civic minded citizens, mistakes were made in the hectic boom days of the 20's. Subdivision regulation was lacking. Too many small dimensioned lots were recorded, conducive to overcrowding of the land. Too often the monotony of the rectangular gridiron pattern was needlessly extended, much of which has not yet responded to development. Singularly, the best of development favored the more spacious lots. And, too, in the design of subdivisions, insufficient thought was given to the correlation of the subdivided area to the pattern of the community as a whole and such needs as recreation, parks and schools.

The meteoric growth of the City has emphasized other deficiencies not fully evaluated, even as late as the 20's. The extension and construction of interurban and interstate highways, and the increasing use of the automobile in the past twenty years, have imposed new and complicated problems on cities, especially on their central business districts. The congestion of traffic movements and the hazards incident thereto, and the inability to park cars, is influencing commercial decentralization with its resultant declines in assessed values and increase of blighted properties.

Streets formerly adequate to handle small traffic flows, and provide ample parking space, were suddenly jammed and inadequate. A railroad with its many grade crossings, that was no serious factor at one time to either growth or the flow of traffic, suddenly became a hazardous barrier. The bridges across the river, that once were the source of no delay, suddenly became the Nemesis of the central business district, influencing land uses and land values on both sides.

By continuous study of its deficiencies and problems, plans can be developed to alleviate and solve many of the perplexing situations confronting the City today, and plans can be developed to meet and solve them in anticipation of growth, and not after growth.

The diseases of urban growth are present. Their discovery urges prompt action to apply remedies before the cancerous growth of blight and decentralization make too great progress.

People make the City. They can also unmake it as a desirable place to live. It is these tendencies that must be controlled and directed into constructive channels to preserve the characteristics the early builders sought to impress upon the City.

HISTORICAL

Fort Lauderdale, and the region of which it is a part, has been closely identified with the colorful history of the Seminole Indians, the exploration and subsequent plans for the reclamation of the Everglades, and the pioneering railroad operations and land development of Mr. Flagler. These successive events have influenced immeasurably the growth and development of the region. It was a region populated by a sturdy and bold people.

Most of the early surveys, initial work and activity incident to the reclamation and development of the Everglades stemmed from Fort Lauderdale. The first dredging operations were in the New River to the west. Obviously these activities, together with the gradual growth and development that was taking place along the coastal fringe, greatly influenced the growth and character of Fort Lauderdale. In those days the civic minded citizens and leaders made decisions that are still affecting the growth and life of the community and its people.

Throughout its relatively brief period as a corporate entity (37 years), the objectives of the pioneers to create and build an outstanding, attractive and liveable City have never been altered. Mistakes referred to previously were made, but they were honest mistakes of judgment rather than intent. Mangrove swamps were replaced with numerous islands, connected by graceful spans. Boulevards and parkways were planted with tropical trees and shrubs to enhance the beauty of the scene. Subdivisions were highly restricted. The resources and potentials of the environment have been capitalized to develop a pleasing attractive City - one between the flamboyancy of Miami Beach and the austerity of Palm Beach.

-4-



FIGURE 3





WAL ENGINEERING FIGURE 5

Fort Lauderdale currently is in the midst of its most intense growth and development. Caution must be exercized, therefore, to retain the gains of the past and continue building along sound, orderly lines. Those leaders entrusted with the destiny of the City in these active times should keep the standards high and resist those efforts to make liveability and attractiveness subservient to commercialism - the spiritual assets that have made Fort Lauderdale what it is today.

ECONOMIC BACKGROUND

The economic future of Fort Lauderdale will revolve primarily around its one major support, climate. Climate will bring more people into the region, which, in turn, will mean additional servicing businesses and industries. Climate will also favor agricultural and truck expansion in the tributary area. The importance and growth of Fort Lauderdale in this region will be influenced by the following developments which will augment the future economy of the City:

- 1. The extension of cultivation of, and production from, Everglades lands to the west, resulting from improved drainage.
- The increased utilization of Port Everglades as a regional port.
- 3. The continued growth and economic development of the nearby communities, Hollywood, Dania, Oakland Park, Fompano and Boca Raton, and lands tributary thereto.
- 4. The expansion of commercial and industrial establishments necessary to service the continued growth of the City.
- 5. The continued attractiveness and orderly development of the City as a winter time dwelling place and vacation area.
- 6. The expansion of such industries as boat repairs and building, mill works and canneries.

As the entire region grows from West Palm Beach south, the resultant economy will improve proportionately as it relates to the various communities.

Fort Lauderdale and its immediate environs will find their greatest future in the development of an environment which balances the permanent acquisition of homes against the demands of the tourist trade. At the same time, development in the county must nourish the expanding agriculture which will provide the growing community with fresh garden truck and local dairy products without interrupting the winter vegetable or beef cattle production for the larger markets. In offering the winter tourist a community designed for permanent living avoiding the impermanency and superficial commercialism of typical "tourist towns," attractive only to the casual tripper sampling a new thrill, the City will make an investment in restraint which will yield dividends over an extended period far in excess of those possible from a short term exploitation of the natural resources.

POPULATION GROWTH AND DISTRIBUTION

When incorporated in 1911, Fort Lauderdale had a popula-tion of about 300. Since that date it has experienced a more phenomenal growth than any other major city of Florida, includ-ing Miami, but excepting Miami Beach. Assigning a value of 100 to the 1920 population of each of a group of comparable Florida cities, Table I reveals how the growth of Fort Lauderdale has progressed since 1920.

TABLE 1						
	1920	1930	1940	1945		
h	100	1,000	4,350	5,000		
	100	342	585	650		
Beach	100	308	390	467		
	100	390	510	643		
ersburg	100	284	426	596		
	100	294	394	540		
ERDALE	100	420	870	1,270		
	b Beach ersburg	TABL 1920 100 100 Beach 100 100 prsburg 100 100 100 prsburg 100 100 100 Prsburg 100 100 100	TABLE I 1920 1930 100 1,000 100 342 Beach 100 308 100 390 brsburg 100 284 100 294 ERDALE 100 420	TABLE I 1920 1930 1940 100 1,000 4,350 100 342 585 Beach 100 308 390 100 390 510 ersburg 100 284 426 100 294 394 ERDALE 100 420 870		

From 1915 to 1945 while the population of Miami was multi-plying 11.3 times, and that of West Palm Beach 8.9 times, the population of Fort Lauderdale was multiplied 13 times, from 1,870 to 26,185 (Table 2), the decade 1920-1930 being the period of greatest growth. But even in that decade the rate of growth of Fort Lauderdale exceeded that of Miami. In the five year period, influenced by war activity, when the population of Miami increased only 11.6 per cent, that of Fort Lauderdale increased 45.5 per cent. 45.5 per cent.

TABLE II

POPULATION GROWTH OF MIAMI, FORT LAUDERDALE, WEST PALM BEACH

			1915-1945			
Year	MIA Population-	MI Increase	FORT LAU Population	DERDALE -Increase	WEST PAI Population	M BEACH
*1915	15,592		1,870		4,090	
1920	29,571	13,979 (90%)	2,065	195 (10.5%)	8,659	4,569 (111%)
1930	110,637	81,066 (273%)	8,666	6,601 (320%)	26,610	17,951 (208%)
1940	172,172	61,535 (56%)	17,996	9,330 (108%)	33,693	7,083 (26.6%)
*1945	192,122	19,950 (11.6%)	26,185	8,189 (45.5%)	40,599	6,906 (20.5%)
INCRI	EASE					

176,530 24,315 1,132% 1,300%

890%

36.509

*State Census - others Federal Census





*



Since the State Census of 1945 was taken the rate of growth, as revealed by building permits issued and construction activity, has continued its remarkable upward trend. Between September 1, 1945, and May 1, 1948, permits were issued for more than 3,000 dwelling units, apportioned approximately as follows:

1,800 single family dwelling units

650 dwelling units in duplexes

1,200 dwelling units in apartments

On the basis of 3.58 persons per family (unit used by the Southern Bell Telephone Company), these new dwelling units would account for an additional 13,000 people since 1945, or a probable normal 1948 population of about 40,000. Obviously these figures do not reflect the seasonal influx of people, of which no accurate estimate is available.

The population growth record of the past is clear, but of primary concern now are the probabilities of future growth. What trend will the growth curve take in the years that lie ahead, and how many permanent people will the governing body be required to prepare and provide public facilities for? The rate of growth of a community or region is influenced by a number of factors, among them being general economic conditions, opportunities for employment, the productivity of the natural resources and the desirability as a place in which to live, work and play. Competition between different sections of the country and between sections of the same state are also decisive factors.

Although, numerically, the population of the nation is still increasing, the rate of growth is leveling off or stabilizing. From July, 1940, to July, 1947, the population of thirteen states declined, but in that same period certain states and regions experienced population increases of 22 to 41 per cent. Florida was in the latter group with an increase of 25.4 per cent - the only southern state to register such a marked increase. These population changes resulted directly from the war time migrations from section to section for war purposes. Locations considered temporary during the war often became permanent afterwards. These shifts and resultant population increases demonstrate the selectivity of the people - their desire to locate and live in regions of economic opportunity and pleasing environment. They also emphasize the importance of competition between localities. These movements reveal that the reservoir of people is not only approaching stabilization, but that the people in the reservoir are responding to the impulse to change their places of abode, which can be done so easily. Such movements of people are of particular concern to the growing community whose future is so dependent on climate, attractiveness, order and beauty.

Population growth trends of Fort Lauderdale have been projected by several independent agencies, and in each case the projections follow similar courses. It is conceded generally, barring an economic collapse, that the City will continue to experience a substantial rate of growth, but in all probability at a diminishing rate, as projected in Figure 6, from which the following probable populations are taken.

1950	42,000
1955	55,000
1960	65,000
1965	78,000
1970	90,000
1980	110,000



From these projected estimates, it is apparent that the population of 1945 (26,185) will be doubled by 1955 and tripled by 1965, less than twenty years hence. The rate of these trends may be retarded by a general economic recession, but judged by the experience of the 1930-1935 and 1935-1940 periods, the rate will be accelerated following any reaction.

In the beginning the population of Fort Lauderdale was concentrated in a relatively small area centered by the river and the railroad. In the years of growth and expansion that followed, the population spread over wider areas somewhat as shown in Figure 7, but not at a uniform rate. Figure 8 illustrates how the population growth of the different sections has increased since 1930.

While the population of the City as a whole increased 202 per cent from 1930 to 1945, the population of its several sections increased at varying rates. The area of most intense growth since 1930 was that lying between the New River on the south and Sixth Street on the north and east of the railroad, in which the population increased from 1,985 to 8,625, or 334 per cent. The next area of greatest growth was that south of the New River, east of the railroad, the population of which increased from 1,321 to 3,704, or 181 per cent. Victoria Park is in the former area and Rio Vista in the latter. The latter also includes the industrial port area. The third area of greatest growth was that lying west of the railroad and between Sixth Street on the north and the South Fork of the New River, in which population increased 166 per cent, from 3,040 to 8,085. The fourth area, north of Tenth Street - Progresso - increased 123 per cent, from 1,542 to 3,439. The area of least growth was that between the railroad and the South Fork, which increased 118 per cent, from 615 to 1,339.

From these figures and an examination of Figure 8, the retarding influence of the railroad on growth west thereof is noticeable, as well as the retarding effect of the river on growth south thereof. An examination of these data in conjunction with a study of the distribution of building activity, as revealed by building permits (Figure 9), shows that the trends of predominant growth are east, northeast and north. Growth to the south, west and southwest, however, should not be discounted. As the framework of major streets is realized with its overpasses, and river traffic is so regulated to avoid the delays incident to it, the south and western portions of the City will react with greatly accelerated growth. In these areas are land tracts and vacant properties that will respond to development once they are more accessible. Similarly, industrial activity around the Port, and the construction of a highway to the beach will greatly stimulate activity in that section.

The population of the United States as a whole is slowly aging, i. e., the percentage of the population over middle age is steadily, if slowly, increasing. This portends that eventually the nation will reach a static population where births just equal deaths, but if the trend continues then the total population of the country will begin to decline. This trend in the Miami Region (as throughout Florida) is augmented by the relatively large number of people of retirement age who have either become permanent or winter residents because of the salubrious climate and the accompanying lower cost of living, which is particularly attractive to those living on a fixed income. A few figures from Figure 10 will illustrate this trend. In 1930, those below 35 years of age constituted 61% of the population, in ten years they were only 56.5% of the residents. Of the group over 35, those of retirement age, 65 and over, were but 4.6% in 1930, but rose to 6.4% by 1940, an increase of almost 40%. During the same period the group of 19 and under dropped from 33.3% in 1930 to 27.9% in 1940, a reduction of 16%. This regional population was 75% white in 1930 and 76.2% in 1940, while the State figures were 70.5% and 72.8% respectively. The sexes were evenly divided.





Fort Lauderdale partially follows the regional trend. The sexes are evenly divided, and the population shows the same augmented aging (Figure 11), the group below 35 dropping from 60.4% to 57.5% and the retirement age group increasing from 5.4% to 7.0%. The white percentage dropped, however, reversing the regional trend, from 76% in 1930 to 71.2% in 1940. The active mature group of great economic importance from 25-54 years of age remained practically stable, rising less than one per cent from 45.5% in 1930 to 40.4% in 1940.

If these trends are projected along the population curve (Figure 6) and age groupings estimated for 1975, it is found that the retirement age group will approximate 12% of the population. The next eldest group, 45-64 years, will comprise 26.7% of the ; residents. Thus, 38.7% of the population will be over 45 years, old, a group that in 1940 was only 26.5%. The youth group, under 19, which was 28.3% in 1940, will decline approximately 10% to 25.5% after the bulge of the "war babies" has passed its majority. There will remain a group between 19 and 45 constituting 35.8% of the population, which in 1940 was .45.1%. The negro population will decline to less than 20%. These estimates have a great bearing on the type and extent

These estimates have a great bearing on the type and extent of certain developments in Fort Lauderdale. The older retired group, if they are to be attracted and retained, must have passive recreation, wide sidewalks, easy curbs and gutters, and adequate protection from traffic accidents, as well as frequent resting places. The more active sports will not require the expansion that a straight doubling of the population would assume. The development of centers of activity, commercial, recreational, cultural, rather than indiscriminate dispersion will assist in maintaining and enhancing the community's appeal. There will be a tendency to segregate the tourists and their attractions from the residents and their way of life. This tendency must be resisted if the lure of the community is to be maintained so that the principal industry may flourish.

The people of the City are variously employed. The study of the economic background revealed that industry as represented by manufacturing plays a minor role in the economy. Agriculture, cattle raising and dairying is playing an increasingly conspicuous part, but commerce and trade catering to the tourists, with all the collateral activities are the economical mainstays. Thus the employments follow this pattern. In 1940, there were 7,674 people in the Fort Lauderdale labor force. These occupations are set forth in Table III:

TABLE III

OCCUPATION STATUS - FORT LAUDERDALE, 1940

Professional	428	Semi-Professional 119
Managers .	109	Proprietors, Managers,
Clerical, Sales	1,164	Craftsmen, Foremen, etc. 792
Operatives	704	Domestic Servants 946
Service Workers	995	Farm Labor 625
Labor, except Farm	774	

These people were employed by industry as follows:

Agriculture	832	Construction	947
Manufacturing	366	Transportation -	562
Wholesale	175	Retail	1,573
Services	2,270	Professional, Gov- ernment,c	tc. 931







FIG.14

Only 42 per cent of the population is in the labor force, which is 10 per cent less than that of the three-county area. This indicates that many of the Fort Lauderdale residents are retired. The retired class (over 65) has increased from 11.2 per cent of the metropolitan population in 1930 to 14.5 per cent in 1940, which proportion is steadily increasing. The absence of economic opportunities except in the tourist trade and agriculture determines the development which will eventuate. But, on this basis, an economy based upon gracious living, can be erected.

Any large scale development of Port Everglades would increase the number of workers in the transportation field. Similarly, the location of any new manufacturing plants in or around the City would increase the number of industrial operatives. It is unlikely, however, that a manufacturing plant for processing raw or semi-finished materials of sufficient size and employment capacity to effect the existing ratio will be established at either the Port or within the immediate vicinity of the existing city limits. Fort Lauderdale's greatest stock in trade is not an adequate trained labor force but climate and a place to live. This is its attractiveness and its magnetic force.

The phenomenal growth of Fort Lauderdale will be maintained, though at a slowly decreasing tempo, only so long as the high standards which have obtained in the past are maintained and strengthened. It is these high standards which have been the attractiveness and the magnet that have drawn distinctive people to a distinctive community. The future population following the national and regional trends, and augmented by local conditions, will have a large proportion of older people. Their requirements must be anticipated or competitive areas may prove more attractive. Economic opportunity will be found in trade and commerce catering to the tourist trade and serving the older permanent population. Industry must not be allowed to interfere with the tourist and residential potential of the community and its development should be restricted to the Port area.

LAND USES

Since its day as a pioneer trading post the ideas, spirit and plans of many people have entered into the formation of the mosaic pattern that today is Fort Lauderdale. Great credit is due those bold developers of the twenties who carved the many spacious dwelling areas from the virgin land and protected them by strict deed covenants, and, also, commendation to the City Commission that initiated and adopted the first zoning ordinance, one of the first in Florida, that has done so much to shape the land use pattern of today.

Figure 12 shows how the various land uses are distributed throughout the corporate area and Figure 13 shows the extent of vacant undeveloped lands. Table IV and Figure 14 show the distribution of land uses in different quadrants of the City.

TABLE IV

LAND USE DISTRIBUTION (ACRES) BY QUADRANTS

-	GROSS AREA (ACRES)	NORTHEAST QUADRANT	NORTHWEST QUADRANT	SOUTHEAST QUADRANT	SOUTHWEST QUADRANT
Single Family Duplex Multiple Family Commercial Industrial Railroad Water Streets Vacant	940 64 73 146 38 115 1,105 2,504 5,980	394 32 57 86 9 19 577 641 1,620	162 10 14 14 43 57 1,004 1,770	203 10 10 38 8 20 408 596 1,070	181 12 2 7 17 33 63 263 1,520
Public & Semi- Public	906	416	<u> 45</u>	33	412
	11,871	3,852	3,113	2,396	2,510
Northeast Northwest	Quadrant: Quadrant:	north of north of n	river, east river, west	of F.E. of F.E.	C. C.

Southeast Quadrant: north of river, west of F. E. C. Southeast Quadrant: south of river, east of F. E. C. Southwest Quadrant: south of river, west of F. E. C.

From these data it is interesting to note that less than ten per cent of the gross corporate area is occupied by dwellings and less than five per cent by commerce and industry. By far the greatest amount of land is vacant and platted in streets which together accounts for more than seventy per cent of the gross corporate area. These studies also reveal the directional trends of building. Relatively more land is utilized for dwelling purposes in the Northeast Quadrant than in the others.

The following table shows how the present land uses at Fort Lauderdale compare with like uses in the average American City.

TABLE V

	FORT L PRES	AUDERDALE ENT USE ACRES PER 100 PERSONS*	ACRES PER 100 PERSONS AVERAGE 22 CITIES	FORT LAUDERDALE LAND NEEDED FOR 70,000 PEOPLE
Single Family Duplox Multiple Family	940 64 73	3.60 0.25 0.28	2.94 0.14 0.07	2,520 175 196
TOTAL DWELLING USES	1,077	4.13	3.15	2,891
Commercial Industry	146 38	0.56	0.18	392 105
COMBINED COMMERCIAL & INDUSTRIAL	184	0.71		497
Public & Somi-Public	906	3.48	1.10	2,436
Railroad	115	0.44	0.46	308
Streets	2,504	9.60	2.82	

*Predicated on a 1945 population of 26,000

The above figures clearly reflect the residential quality of Fort Lauderdale, 4.13 acres per 100 persons as compared with 3.15 acres per 100 persons in the average city. The prependerance of streets is also shown. Although the amount of land occupied by duplexes and apartments is relatively greater in Fort Lauderdale than elsewhere, their distribution is greater in the northeast quarter than in other sections. During the past year more land has been utilized by single family development than by apartments.

These land use studies, in conjunction with the distribution and location of new construction (Figure 9) during the past decade, show the trend of land uses on which the revised zoning plan was predicated. Using the figure of 4.13 acres per 100 persons as a base in computing future residential land needs, a population of 80,000 will absorb about 3,300 acres of land, which is three times more than currently occupied by dwelling uses. The proposed zoning ordinance will satisfy that requirement. Within the corporate area of Fort Lauderdale there are now nearly 6,000 acres of vacant land which could readily accomodate any projected needs for many years to come.

The revised zoning ordinance has simplified many provisions of the earlier one and added other provisions to strengthen and improve it. The zone classifications and their respective provisions have been modified to conform better to existing trends and needs. Provisions have been introduced which zoning procedure and legal interpretation elsewhere have justified. In its entirety the ordinance is modern and to a great extent will preserve and continue the high class of development that so notably characterizes Fort Lauderdale as an outstanding city.

THE STREET SYSTEM

The street system is one of the most important, if not the most important, element of the City's physical structure. Streets enable people to travel from their dwelling places to their places of employment, to their shopping centers and from one section of the City to another. Streets are also the paths of travel from areas outside the City into and through the City. The relative location of streets, their orientation and freedom from deficiencies and defects determine their usefulness and relative importance as carriers of traffic.

Not all streets are of equal importance. State and federal highways into and through the City, direct thoroughfares leading from neighborhood areas to the central business district are of primary importance. Inter-neighborhood streets and those that are parts of circumferential routes are of secondary importance, whereas streets providing circulation within neighborhoods, or merely access to dwellings or other places, are of minor importance. Correlated, however, these streets of different functions constitute the basic framework around which the City will grow and develop.

In the platting of a city, subdivision by subdivision, the street system is created and streets are dedicated as public ways, often far in advance of corporate expansion. At such times of rapid development, little or no thought is given to anticipated growth and future needs. No land use pattern defining orderly growth, no subdivision regulations or controls or no skeleton framework of principal streets are available. In the absence of directional guides and plans, subdividers freely plat land use patterns yielding the maximum of return, regardless of the effect such patterns will have on the ultimate growth and development of the community. Such unregulated practices encourage and promote the wrong kind of land uses, overcrowding of land and result in many unnecessary street jogs, abrupt terminations or dead ends and constricted street widths, which in the succeeding years of development penalize the street system as a municipal



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utility. Minimum, simple standards of subdivision design, applied in the carly stages, would have obviated many of the glaring defects and deficiencies that today are the source of many headaches.

The initial plan of Fort Lauderdale was a rigid rectangular pattern, platted on both sides of the river and the railroad. With few exceptions, this initial rectangular pattern, slavishly extended throughout the City by successive subdividers (Figure 3) has resulted in a street system with many jogs and abrupt terminations (Figure 15) and varying street widths (Figure 16). Although streets 50 feet wide are predominant throughout the corporate area, there are a number of streets of generous widths (80 feet and over) in sections of the least growth.

The central business district is the focus to which most of the circulating traffic is directed during the course of the day. It is estimated that some time during each day, every car travels into or through the central business district. To reach this central focus, traffic habitually gravitates to those few streets that afford the most direct, easy and safe access with a minimum of defects and obstructions. As a result of this habit, certain streets attain a degree of importance that through the years resolve them into the semblance of a street framework. In Fort Lauderdale parts of this framework were established pursuant to the Schemmerhorn plan of streets.

The flow of traffic in Fort Lauderdale is predominantly north and south (Figure 17). East of the railroad (Florida East Coast), Andrews Avenue, Sixth Avenue (Federal Highway) and Atlantic Boulevard along the beach are the principal north and south arteries. On the west side of the railroad there are no similar continuous north and south streets, but instead, several streets are utilized with brige crossings over the river at Seventh and Eleventh Avenues, Southwest. Andrews Avenue crosses the railroad at Seventh Street continuing north thereof to the city limits.

The railroad, bisecting the City from north to south, is a distinct obstruction to traffic moving from the west to the east side of the City. This barrier has been a retarding influence to growth and development west of the railroad (Figure 8).

No street extends unobstructed from the west limits of the City to the beach. Tenth Street on the north extended westerly, however, can be developed into such a street. Sixth Street, Broward Boulevard and Las Olas Boulevard north of the river, and Sixth, Seventh and Twenty-Fourth Streets, south of the river, are hhe principal east and west streets. Las Olas Boulevard is the only street extending casterly to the beach area from its dead end intersection at Andrews Avenue. South of the river there is no street extending to the beach area.

One of the objects of a master street plan is to provide a coordinated framowork of streets that will:

- 1. Provide easy, safe, unobstructed traffic flow into and between any section of the City.
- 2. Provide circumferential routes around the central business district to distribute the traffic load and thereby relieve much congestion now encountered.
- 3. Promote a better balanced, more uniform development; improve utility value of areas now inaccessible.
- l. Provide direct arteries of adequate capacity to meet needs of more rapidly developing sections.
- 5. Encourage the integrity and distinctiveness of neighborhood dwelling areas.



6. Provide a framework adequate to meet the land use needs as defined in the zoning ordinance.

The framework of major streets should be designed to serve the corporate area as a whole and the areas tributary to it. It should be designed primarily to accommodate the increasing volumes of fluid traffic with ease, safety and speed. The component parts of the master street plan perform services comparable to those performed by a system of drainage channels. The capacity of the principal mains or arteries must be adequate to receive the contributions from the tributary areas which, in turn, are served by laterals and branches of lesser capacities.

The relative capacities of the several component parts depend on the volume of traffic generated by the tributary areas now and in the future, which, in turn, depend on the rate of growth and development of the tributary areas and the incidence of automobile ownership.

Street widths, property line to property line, should be adequate to accommodate not only roadways (pavements) of sufficient width to discharge present traffic volumes but roadways that can be widened subsequently to meet future needs. Where street widths are not sufficient to accommodate widened roadways later, set-back lines should be established to which the street can ultimately be widened.

Automobile ownership and usage throughout the United States and the South has increased tremendously since World War I, as shown in Figure 18. In Florida and Broward County it is increasing annually, as shown by Table VI.

TABLE VI

PASSENGER CAR REGISTRATION, FLORIDA AND BROWARD COUNTY 1927-1947

YEAR	BROWARD COUNTY	STATE	PERSONS PER PASSENGER CAR(BROWARD)
1927 1928	6,655 5,110	309,677	2.26
1929 1930 1931 1932	4,917 4,556 4,658 4,543	286,766 271,901 268,852 246,746	4.40
1933 1934 1935 1936 1937	3,966 4,969 6,029 7,312 8,963	231,129 274,679 341,941 315,838 346,680	3.82
1938 1939 1940 1941 1942	9,792 9,900 12,653 14,387 12,078	346,953 376,375 412,145 361,456 417,243	2.43
1944 1944 1945	10,230 11,563 13,214	399,568	3.81
1940	21,19?	413,925 549,577	3.5 (?)

	P	OPULATION	AUTOMOBI	LE REGISTRATION	PERSONS PER PASSENGER
YEAR	BROWARD	FORT LAUDERDALE	BROWARD	FORT LAUDERDALE	CAR (BROWARD)
1950 1955 1960	78,000 90,000 110,000	42,000 55,000 65,000	22,300 25,800 37,000	12.000 16,000 21,600	3.5 3.5 3.0



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This table shows that the passenger car ownership in Broward County has multiplied three times since 1927, that since 1940 it has doubled. Although registrations declined during the war years, since V-J Day they have continued the upward trend. In 1930 there were 4.4 people for every registered passenger car, but in 1940 this figure had been reduced to 2.43 and in 1945 it was 3.8. It is apparent from the trend that on the average there will be one car for every family. This would indicate that by 1960 the passenger car registration in Broward County will be nearly twice what it is today. In other words, the street system of Fort Lauderdale must be able to accommedate a normal fluid traffic volume twice the present size in 1960, plus the great influx of transient seasonal traffic, the volume of which has been variously estimated at nearly double the normal volume. Obviously this will be a burdensome load.

Traffic flow studies were made throughout the City in late 1946 and early 1947, which were supplemented by studies previously made by the Florida State Road Department. Figure 17 diagrams the relative magnitude in the principal channels of traffic flow. These studies of traffic flow throughout the City were augmented by studies within the district surrounded by Broward Boulevard on the north, Federal Highway on the east, the river on the south and the Florida East Coast Railway on the west. From these studies it was estimated that more than 50,000 cars per day were using the streets in the central district. The traffic studies emphasized the prominence of Andrews Avenue, Federal Highway, Tenth Street, Las Olas Boulevard, Broward Boulevard, Seventh Avenue, Fourth Avenue and Twenty-Fourth Street as principal traffic arcerles.

The distribution of and relative population growth by sections was presented previously. In 1947 there were some 11,000 dwelling units in Fort Lauderdale which by 1967 will increase to some 28,000. These will be distributed throughout the Citv approximately as shown in Figure 19. These additional dwellings will be the source of the additional automobile volume to use the streets.

These several studies relating to population growth and trends, automobile ownership and traffic circulation were the basis of the Master Street Plan approved by the electorate of Fort Lauderdale on March 18, 1947. This plan shows the principal elements of the street plan, also their ultimate widths.

Since the preparation and adoption of the Master Street Plan, the State Road Department has selected a right-of-way for the Inter-Regional Super Highway (U. S. 1) through Fort Lauderdale, as shown on the general Master Plan (Figure 20). This new highway, following the Seabeard Air Line right-of-way in the western part of the City, will greatly relieve the present Federal Highway of much through traffic without a destination within the City. In all probability points of access to this highway should be limited to those at Tenth Street, Broward Boulevard and Twenty-Fourth Street on the south. But, notwithstanding, this super highway will be a valuable adjunct to the Master Street Plan, especially in the development of lands in the western part of the City.

The compact contral business district of Fort Lauderdale restricted on the south by the river and on the west by the Florida East Coast Acilway - is currently plagued by an increasing traffic congestion that threatens to destroy it as an economic base. Unless corrected by bold and daring action, a functional decentralization will set in that will blight a greater part of the area and greatly diminish its value as a tax base. Within the past two years banks and other businesses formerly within the center have constructed new structures remote from the center where there is more freedom of movement and an ability to park. First Avenue, which once was the principal commercial street, is beginning to show evidences of deterioration, the unseen tentacles of which will gradually extend, unless checked,





to Andrews Avenue, and with each successive extension encircle additional areas and choke them with blight and degeneration. The future of this central business district, its character and scope of expansion, is one of the pertinent problems confronting the City.

The streets included in the Master Street Plan as approved in March, 1947, with their ultimate widths, are shown in Table VII, also on Figure 21.

The various component parts of the Master Street Plan were selected because of their respective locations and the practicability of integrating them into a well balanced, coordinated structural framework. They are spaced far enough apart to surround the relatively large dwelling areas tributary to them, yet close enough to permit ready access to any part of the City without the necessity of crossing and recrossing the central business district. Particular care was given to correlate the system of primary streets west of the Florida East Coast right-of-way with the system east of the tracks. By the construction of overpasses at Tenth, Twelfth, Twenty-Fourth and Broward Boulevard, the east and west of the City can be connected more intimately, and with the construction of these overpasses, many of the existing grade crossings could be closed, thereby channeling all traffic over the viaducts. This would obviate the hazards and delays now resulting from long train movements and stoppages.

TABLE VII

	COMPONENT PARTS OF MASTER STREET PLAN	
	DESCRIPTION OF STREET	WIDTH IN FEET
1.	Ocean Boulevard from North City Limits to its junction with North Atlantic Boulevard	60
2.	Atlantic Boulevard (North and South) from its junction with Ocean Boulevard south to its junction with Seabreeze Avenue at Harbor Beach Subdivision and continuing south along Seabreeze Avenue in Harbor Beach Subdivision	80
3.	Southeast Fifteenth Street from Intracoastal Water- way west to Southeast Sixth Avenue (Federal Highway)	100
4.	Southeast Seventeenth Street from Intracoastal Water- way west to Southeast Sixth Avenue (Federal Highway)	100
5.	Northeast and Northwest Tenth Streets from Atlantic Boulevard west to Northwest Ninth Avenue, and Chateau Park Drive to Northwest Tenth Place, and Northwest Tenth Place and Northwest Tenth Place Extended to the Seaboard Air Line Railroad	100
6.	Northeast Sixth Street from Victoria Park Road west- ward to Northeast Fifteenth Avenue	60
7.	Northeast and Northwest Sixth Street from Northeast Fifteenth Avenue to the Seaboard Air Line Railroad	70
8.	East Las Olas Boulevard from South Atlantic Boule- vard over Intracoastal Waterway and over the Cause- way on said East Las Olas Boulevard to the west thereof	80
9.	East Las Olas Boulevard from the western end of the Causeway westward to Sospiro Canal Bridge	100
10.	East Las Olas Boulevard from Sospiro Canal Bridge westward to South Andrews Avenue	80

	DESCRIPTION OF STREET	WIDTH IN FEED
11.	Victoria Park Road from Northeast Eighth Street to East Broward Boulevard	60
12.	East Broward Boulevard from Victoria Park Road westward to Southeast Sixth Avenue (Federal Highway)	80
13.	East and West Broward Boulevard from Southeast Sixth Avenue (Federal Highway) westward to the western City Limits	70
14.	Southeast and Southwest Ninth Street from Southeast Sixth Avenue (Federal Highway) westward to Southwest Fourth Avenue	70
15.	Southwest Nineteenth Street from Southwest Fourth Avenue westward to Southwest Seventh Avenue	80
16.	Southeast and Southwest Twelfth Street from Southeast Sixth Avenue (Federal Highway) westward to Southwest Ninth Avenue	80
17.	Southwest Twelfth Street from Southwest Fifteenth Avenue to Seaboard Air Line Railroad	80
18.	Southeast Eighteenth Court from Southeast Sixth Avenue (Federal Highway) westward to South Andrews Avenue	80
19.	Southeast and Southwest Twenty-Fourth Street from Southeast Tenth Avenue westward to Southwest Ninth Avenue	100
20.	Northwest Eighteenth Avenue from Northwest Tenth Place to Northwest Sixth Street	70
21.	Southwest Eighteenth Avenue from Southwest Ninth Street to Southwest Twelfth Street (Davie Boulevard)	70
22.	Northwest Ninth Avenue from North Corporate Limits to Northwest Tenth Street	100
23.	Northwest and Southwest Seventh Avenue from North- west Tenth Street to Southwest Ninth Street	80
24.	Southwest Fourth Avenue from Southwest Ninth Street to Southwest Twenty-Fourth Street	100
25.	North and South Andrews Avenue from Sixteenth Street (Northeast and Northwest) to Eleventh Street (South- east and Southwest)	70
26.	South Andrews Avenue from Eleventh Street (Southeast and Southwest) to junction with U. S. Highway No. 1	100
27.	Northeast Fourth Avenue from North City Limits to Progresso Drive	80
28.	Northeast and Southeast Third Avenue from Flagler Street to Southeast Second Street	80
29.	Southeast Third Avenue from Southeast Second Street to Northeast River Drive	70
30.	Southeast Third Avenue from Southeast River Drive to Southeast Eighteenth Court	80
31.	U. S. Highway No. 1 from the North City Limits to the South City Limits	100

	DESCRIPTION OF STREET	WIDTH IN FEET
32.	Northwest and Northeast Fourteenth Street from Northwest Ninth Avenue to Northeast Fifth Terrace	60
33.	Northeast Fourteenth Street from Northeast Seventh Avenue to Northeast Ninth Avenue	60
34.	Northeast Fourteenth Avenue from Northeast Thirteenth Street to Northeast Second Street	60
35.	Southeast Fifteenth Avenue from East Broward Boul- evard to East Las Olas Boulevard	60
36.	Southwest Eleventh Avenue from West Broward Boulevard over North Fork of New River to South Fork of New River	60
37.	Southwest Seventh Street from Southwest Coconut Drive eastward to Southwest Seventh Avenue	60
38.	Northwest River Drive from Southwest First Avenue wes along the north bank of New River to Southwest Fourth Court, and Southwest Fourth Court to Southwest Sevent Avenue	t h 60
39.	Southwest River Drive from Southwest First Avenue ald south bank of New River to Southwest Sixth Avenue, th along Southwest Sixth Avenue to Southwest Fifth Place thence along Southwest Fifth Place to Southwest Seven Avenue	ong hen hth 60
40.	Southwest Second Street from South Andrews Avenue to Southwest Second Avenue	70
41.	Southwest Second Street from Southwest Second Avenue to Southwest Seventh Avenue	80
42.	Southeast Sixth Street from South Andrews Avenue to Southeast Sixth Avenue	70
43.	Northeast Flagler Drive from North Andrews Avenue to Northeast Tenth Street	66
44.	Northwest First Avenue from West Broward Boulevard to Northwest Second Street	70
45.	Southeast Second Street from Southeast First Avenue to Southeast Sixth Avenue	60
46.	Southeast Second Street from South Andrews Avenue to Southeast First Avenue	60
47.	Northeast First Street from North Andrews Avenue to Northeast Third Avenue	70
48.	Northeast First Street from Northeast Sixth Avenue westward for 100 feet	70
49.	Seabreeze Avenue from East Las Olas Boulevard south to Coast Guard property	70
50.	Northwest and Southwest Third Avenue from Northwest River Drive to 125 feet northwest of Sixth Street	60
51.	Northwest and Southwest Fourth Avenue from Northwest River Drive to 125 feet north of Northwest Sixth Street	60
52.	Northwest Fifth Avenue and Southwest Fifth Avenue from Northwest River Drive to 125 feet above Sixth Street on the east, and continue north on the west to Northwest Ninth Street	60

		DESCRIPTION OF STREET	IN FEET
53.	Northwest and Second Street	Southwest Sixth Avenue from Southwest to Northwest Ninth Street	60
54.	Northwest and Second Street	Southwest Ninth Avenue from Southwest to Northwest Tenth Street	60
55.	Southwest Nint south to South Road 84	th Avenue from Southwest Seventh Street hwest Twenty-Fourth Street, or State	60
56.	Northeast and Eighth Avenue berg and McKee	Northwest Fourth Street from Northwest to the center line of Block 5 of Holm- e Subdivision	70
57.	Northeast This 150 feet east	rd Street from Andrews Avenue east to of Federal Highway	70
58.	Northeast and Eleventh Aven	Northwest Second Street from Northwest ue east to Northeast Seventh Avenue	60
59.	Northeast First to Northeast east of Northe Avenue	st Street from Northeast Third Avenue Sixth Avenue and from a point 100 feet east Sixth Avenue to Northeast Seventh	70
60.	Southeast Seco 150 feet	ond Court from Federal Highway east	60
61.	Southwest Six Seventh Avenue	th Street from Andrews Avenue west to	60
62.	Southeast and Avenue Southwo	Southwest Seventh Street from Seventh est to Southeast Sixth Avenue	70
63.	Northeast Firs and Northeast to 125 feet no	st Avenue and Northeast Second Avenue Third Avenue from Progresso Drive nort orth of Northeast Tenth Street	h 60
64.	Northeast Eigh from the cente Avenue and And	hth Street and Northeast Ninth Street er of the block between Northwest First drews Avenue east to Progresso Drive	60
65.	Progresso Driv east Fourth Av	ve from North Andrews Avenue to North- venue	60
66.	Southeast Four north to Secon	rth Avenue from East Las Olas Boulevard nd Street	60
67.	Southeast Fift north to Sout	th Avenue from East Las Olas Boulevard heast Second Street	60
68.	Southeast First Broward Bouley	st Avenue from Northeast River Drive to vard	60
69.	Southeast Second to Southeast 1	ond Avenue from East Las Olas Boulevard First Street	60
70.	Southeast Firs Southeast Thin	st Street from South Andrews Avenue to rd Avenue	60
71.	Ocean Boulevan of Lauderdale	rd from Lots 94 through 107 of Block 1 Beach Subdivision	80
72.	Oakland Park H Lot 107 of Blo	Boulevard from Lot 1 of Block 20 and ock 1 of Lauderdale Beach Subdivision	70

Circumferential movements of traffic around the central core were also given consideration because much of the confusion and congestion in the central section can be minimized by providing and utilizing circumferential routes in traveling across town. Inner, outer and intermediary circumferentials are desirable. By the improvement of Seventh Avenue Northwest and Southwest, and the improvement of Ninth Avenue Southwest and Southeast, an inner circumferential will be established with Broward Boulevard and the Federal Highway the additional components. An intermediate circumferential will be established by the improvement and utilization of Sixth Street Northwest and Northeast, Federal Highway, Seventh Avenue Northwest and Southwest and Twelfth Street Southwest and Southeast. The outer circumferential of Tenth Street, Atlantic Boulevard, Eighteenth Avenue Northwest and Southwest and Twelfth Street Southwest and Southeast requires the completion of either Fifteenth or Seventeenth Streets to the beach area.

Currently, the only highways to the beach are Tenth Street on the north and Las Olas Boulevard from the center of the City. Most of the traffic originating west of the railroad and south of the river travels Las Olas Boulevard to the beach. This situation should be relieved as early as possible by a highway to the beach in the south part of the City comparable to Tenth Street in the north. The selection of this southern route should be governed by the cost of land acquisition and construction, and upon the attitude of the State Road Department relative to participation in its costs. The State may have good reasons for preferring one route to the other because such a road would doubtless become a link in the State system between Atlantic Boulevard and the mainland. From a purely service standpoint, one route would be as acceptable as the other.

These three circumferential routes would give the City a system of well-spaced ring streets.

As direct radials into the central core from the peripheral areas, Andrews Avenue, Federal Highway and Broward Boulevard are still predominant, however, Andrews Avenue and the Federal Highway are being supplemented by Third and Fourth Avenue, Northeast and Southeast, from the City limits on the north to Eighteenth Court on the south. Third Avenue, lying midway between Andrews and the Federal Highway, with a bridge over the river, will be a factor in broadening the central business district and also providing a direct connection with the Court House south of the river. Third Avenue should be widened now from Sixth Street Northeast, southward.

With the construction and completion of the new super expressway on the west side of the City, a large portion of the through traffic now utilizing the Federal Highway will use the new route, but, notwithstanding, the Federal Highway will become an increasingly heavy traveled artery because of its access to the fast growing areas in the northeast part of the City. The through traffic will merely be replaced by local traffic. And, too, much of the through traffic will continue to use the Federal Highway.

The river crossing is the most critical point on the Federal Highway. During the season, the 1,200-1,500 bridge openings per month create congested conditions north to Broward Boulevard and beyond, but more particularly at the Las Olas intersection. To relieve the congestion at this point one of the following methods should be employed:

- 1. Require all charter boats to operate from wharfs removed from the central part of the City.
- 2. Replace the present low level bridges with high level structures or tunnels.



FIGURE 21

3. Coordinate the flow of land and water traffic to minimize bridge openings.

The selection of either bridge or tunnel should be predicated on economic conditions, primarily.

The erection of a new Florida East Coast Railway passenger terminal in the vicinity of Northeast Third Avenue and Northeast Ninth Street would require the elimination of the Northeast Third Avenue grade crossing at this point. A station plaza at this location, however, would favor Third Avenue Northeast as the route into the central district.

West of the Florida East Coast Railway, Seventh Avenue would be established as the principal north and south artery between Northwest Tenth Street and Southwest Ninth Street, and thence via Southwest Fourth Avenue to Twenty-Fourth Street Southwest. And farther west, Eighteenth Avenue would be utilized similarly.

Broward Boulevard will become increasingly important as the City grows. In all probability, its development as a commercial boulevard is not far distant, which will convert it into the principal central cross town artery feeding from the Seaboard Depot and City properties on the west to the central core of the City. These possibilities emphasize the necessity of an overpass over the Florida East Coast Railway tracks.

With the development of the northern parts of the City, Tenth Street will also become increasingly important, not only as a distributor of traffic but as a commercial street.

Between Broward Boulevard and Tenth Street lies Sixth Street, that ultimately may be developed and extended to the beach as a secondary service street.

The plan proposes the improvement and widening of Victoria Park Road between Tenth Street and Broward Boulevard, which will relieve the Federal Highway of traffic originating in the newly developed sections adjacent to Tenth Street and east of the Federal. Highway.

Such a network as proposed here will enable the increasing volumes of traffic originating in various parts of the City to circulate freely and safely at all times and avoid the congestion at the center. It will also promote a more uniform development of the lands within the City.

ROADWAY WIDTHS

The master street plan defines an arterial framework on which roadways or pavements are constructed. The street widths indicated on the master plan (Figure 21) are the ultimate to accommolate roadways of adequate capacity to receive and discharge the increasing flow of traffic resulting from the active development of the different sections of the City.

Figure 19 illustrates the probable distribution of dwelling units throughout the corporate area of Fort Lauderdale in 1970. These probable rigures were determined from a count of vacant building sites and from estimates made by the Southern Bell Telephone Company. These data reveal that the area east of the railroad (Florida East Coast) and north of the New River will experience the most intensive development, a trend based on the population movements reflected in Figure 8. All the other sections of Fort Lauderdale will likewise experience a proportionate development. These successive growths will increase the volume of automobile traffic originating within each area. Traffic volume originating in the various sections of the City will gravitate to established channels of flow. As an illustration, traffic originating in new developments north of Tenth Street, east of the Federal Highway will seek Tenth Street and the Federal or Victoria Park Road in traveling to the central commercial focus. Tenth Street, therefore, will become increasingly important from the west to east limits of the City as the northern and northeastern part of the City develops. Today a roadway twenty feet in width is adequate, but in twenty years the roadway from the railroad eastward to the beach should be at least sixty-four feet wide (two thirty-foot roadways, divided by a four-foot parkway strip). West of the railroad a roadway thirty-six to forty feet wide should be adequate.

The Northeast Quadrant will be served primarily by:

- 1. Tenth Street.
- 2. Broward Boulevard.
- 3. Las Olas Boulevard.
- 4. Sixth Avenue or Federal Highway.
- 5. Atlantic Boulevard along the coast.
- Of secondary importance to the growth of this area is:
- 1. Sixth Street.
- 2. Fourteenth Avenue.
- 3. Fourteenth Street.
- 4. Victoria Park Road.

The gradual improvement of these several streets will distribute the increasing volumes of traffic over wider areas and simultaneously appreciate the value of lands tributary to them.

South of Tenth Street, the Federal Highway (Sixth Avenue) will continue to be an important north and south artery even after the construction of the Super Highway. Much through traffic will continue to use it, which will be supplemented by that from the rapidly developing northeast areas. The ultimate roadway width of this street should be at least sixty-four (64) feet, fourteen (14) feet wider than it is now.

The importance of Las Olas Boulevard from the central business district to the beach will become greater, not only as a commercial thoroughfare, but as a major feeder to the central beach area. It is the sole access to many of the growing island developments. Because of its strategic location in the land use pattern, the type of development along Las Olas Boulevard and its scenic qualities should be preserved in the future. Nothing should ever be permitted to destroy the present qualities of this street. Ultimately, the roadway of Las Olas Boulevard should be sixty-four (64) feet wide to the canal, and thence to the beach be equipped with two thirty (30) feet roadways.

Atlantic Boulevard is an alternate State Road, and in the future will be used increasingly by through traffic from the north, especially when the proposed connection with the mainland at the south end of the City has been provided. This roadway will be heavily traveled, and, therefore, should have a generous width, from fifty-two (52) to sixty-four (64) feet. A clover leaf at the Las Olas connection would be highly desirable.

Broward Boulevard should be developed into a major east and west artery in the central part of the City. It will be particularly serviceable in directing volumes of traffic flow away from the center. West of the railroad (Florida East Coast) the roadway should be forty (40) feet, and east of Andrews Avenue, sixty-four (64) feet. An overpass at the railroad would be very desirable.

Sixth Street, Victoria Park Road, Fourteenth Street and Fourteenth Avenue should have roadways at least forty (40) feet wide ultimately.

Between the railroad and the Federal Highway (Sixth Avenue) the principal addition to the major framework is Third Avenue, which from Tenth Street south should have a roadway at least forty (μ 0) feet wide. This roadway will serve greatly to relieve the increasing congestion on Andrews Avenue and further serve the needs of an expanded business district.

West of the railroad (Florida East Coast) the streets requiring special treatment are:

- 1. Seventh Avenue.
- 2. Eighteenth Avenue.
- 3. Eleventh Avenue.
- 4. Fourth Avenue.
- 5. Seventh Street Southwest.
- 6. Twelfth Street Southwest.
- 7. Twenty-fourth Street Southwest.

All of these streets should ultimately have roadway widths of at least forty (40) feet.

THROUGH STREETS

A special ordinance of the City should establish the several component members of the master street plan as "Through Streets," streets on which the traffic has the right of way over that entering from side streets. The north and south and east and west "through streets" should include the following:

NORTH AND SOUTH	EAST AND WEST
Andrews Avenue	Tenth Street
Seventh Avenue	Sixth Street
Third Avenue	Fourteenth Street
Sixth Avenue (Federal)	Broward Boulevard
Victoria Park Road	Las Olas Boulevard
Atlantic Boulevard	Ninth Street Southwest
Fourteenth Avenue	Twelfth Street Southwest
	Twenty-Fourth Street

TRAFFIC CONTROL AND PARKING

Observations and checks reveal that most of the traffic volume flowing through the street channels of the City daily is of local origin; a relatively small percentage of it originates beyond the boundaries of the City. Although a large volume of traffic flows through Fort Lauderdale daily over the Federal Highway, and during the winter months much transient traffic flows in and out, these volumes combined are relatively small compared with the traffic volume of purely local origin. During the course of a normal non-season day, it is estimated that some 25,000-30,000 cars pass through the central business district, a volume which practically doubles during the season months. A great percentage of these cars entering the business district during the course of the average day desire to stop and park, consequently in contemplating any plan of future development, cars at rest are as important as moving cars.

The component elements of the Master Street Plan were selected to distribute traffic of ever-increasing volume over a wider area, and thereby minimize its concentration and resultant congestion at the center. But, notwithstanding this distribution, the control and regulation of traffic movements within the central core, and the storage and parking of cars, will continue to be problems of magnitude to be met if the economic integrity of the central area is to be maintained.

Cruising to find parking spaces and double parking retard traffic movements, intensify congestion and enhance the probability of accidents. Congestion and delay in the central district are further aggravated by the frequent openings of the river bridges and the blocking of the railroad grade crossings by long trains. The effects of these barriers in hours of heaviest movement are felt throughout the whole central area.

Congestion has a direct economic bearing on land uses and values. In some cities the assessed values of central business properties have declined 25 to 30 per cent in the past decade because of unfavorable traffic conditions. When conditions become too complicated and acute, people begin to seek trade outlets where parking facilities are available and where traffic can move more freely and safely. Enterprising and progressive merchants and others are conscious of the trends. Some are moving from the old established centers into more spacious areas where adequate parking facilities can be provided. Others are providing "off street" parking services for customers on their properties or on property near by. Super markets are illustrations of the former types of business, and Burdine's the latter. As the population of the City and its immediate tributary area increases, these various problems incident to traffic will multiply and become more acute.

Studies made in a number of cities disclose that the drivers of cars, regardless of their respective missions in the central district, will seldom walk more than 1,200-1,500 feet from a parking space to the point they transact business, a fact which further emphasizes the importance of the problem.

The roadways of the central City should be of adequate width to permit the free, safe movement of the traffic volume through them which implies the regulation of traffic movements as well as parking. Roadways should be marked off into channels or lanes, each moving lane preferably twelve feet wide and each parking lane eight feet wide. All traffic should be kept rolling in the moving lanes, and no double parking permitted. When the traffic volume in lanes becomes congested and the flow is retarded, parking at the curbside should be prohibited. Curbside parking reduces the carrying capacity of the roadway. Whatever its width, parking reduces the carrying capacity by an amount varying from 43 per cent for wider roadways to 47 per cent for narrower roadways. A 40-foot roadway with no parking at the curb has the same capacity as a 68-foot roadway on which parking is permitted. Roadways are provided primarily for the moving of traffic and not for its storage. Storage or parking is a remnant of horse and buggy days, but as long as it is permitted, it, too, must be rigidly and strictly controlled for the use and welfare of the greatest number. Loading and reserved zones for more or less private use should be minimized in both number and footage so as to release the greatest lineal footage of curb to the public. Specially reserved zones are easily and frequently abused.

Curbside parking space is never adequate to accommodate the cars desiring to use it, and as the automobile population increases, desirable spaces will become scarcer. In recent years the parking meter has moderated the situation, and simultaneously increased the revenues of the City. Parking meters have gone far to eliminate the all day parking nuisance, but, notwithstanding, they require close scrutiny and supervision.

It is costly and difficult, if not impossible, to widen roadways in central business districts. This means that ultimately the curbside parking privilege will be abolished. In anticipation of such a time, many progressive cities and businesses are currently providing "off street" parking facilities to meet the demands of the increased traffic volumes. They realize that such facilities must be provided to afford parking services and preserve values.

"Off street" parking facilities can be established and operated in one of several ways:

- 1. By the municipality.
- 2. By a created Authority.
- 3. By private enterprise.
- 4. Jointly by municipality and private enterprise.

In many cases the municipality assumes full responsibility, which seems to be preferable. In some cities "Parking Authorities" have been created by the legislature, having power to "construct, maintain and operate places for the parking and storage of vehicles by the public." Such authorities have been authorized in Miami and Richmond, Virginia. In Michigan, the legislature recently passed an enabling act under which municipalities "may acquire, improve, enlarge, extend and operate automobile parking facilities and may finance them through the issuance of revenue bonds." In Minnesota, the city of Saint Paul was authorized by the legislature to create a "Central Business District Authority" with power to acquire property, finance and develop parking facilities, but in addition, rehabilitate rundown, obsolete business properties.

In Philadelphia, the city is acquiring and equipping the facilities, but leasing the operations thereor to private enterprise. In several cities, notably Wachington, D. C., and Cincinnati, Ohio, private enterprise (department stores mainly) has erected and operates "off street" parking facilities. In Cincinnati, one store has erected a 1,200 car storage garage for transient use, on the ground floor of which are small shops and a restaurant. In Allentown, Pennsylvania, the merchants of the central business district created a corporate body to acquire and operate "off street" parking facilities, which operation has been very successful. In Cakland, California, a "Downtown Merchants Parking Association" was formed to establish parking sites. Today they operate six lots with a capacity of more than 800 cars. Regardless of the method employed to accomplish the results, by either public or private initiative, the facilities provided are self-liquidating through the receipt of service charges. Open lots are provided with stalls, each equipped with a parking meter (Miami Beach).

To assure the financial success of "off street" parking facilities, it is necessary to regulate curbside practices rigidly and strictly. Where a number of curbside spaces are reduced, a like number should be provided elsewhere to compensate for the reduction.

According to information recently gathered by the International City Manager's Association, 345 cities out of 875 reporting, now have one or more "off street" parking lots in operation, marking a 63 per cent increase over 1942 when only 211 cities operated such facilities.

Traffic is one of the major forces influencing the character and growth of cities, consequently, the control and regulation of traffic movements and parking are of utmost importance to the City as a whole, but more particularly to the central commercial nucleus. Ordinances should regulate the flow and distribution of traffic through the streets, define speed limits and speed zones, designate "through" streets, "one-way" streets and establish a system of directional guides and lights, and regulate the practices of parking. loading and unloading. The purpose of such regulations is to keep traffic rolling safely with reasonable speed and a minimum of delay.

Traffic circulation and parking are especially acute in the central area of Fort Lauderdale, bounded by the railroad (Florida East Coast), Broward Boulevard, the Federal Highway and the New River, in which lies the principal high value commercial district. All other sections of the City are tributary to and quite extensively dependent on this relatively small, compact area. The complexity of the traffic and parking problems of this area are accentuated by its proximity to the river on the south with its two bridges, the railroad on the west with its hazardous grade crossings and the abrupt termination of Las Olas Boulevard at its intersection with Andrews Avenue (Figure 22).

Outside of, and extending from, this central district are other commercial areas, north and south along Andrews Avenue and the Federal Highway, westerly along Second Street and easterly along Las Olas Boulevard (Figure 12), in which the traffic and parking problems are of importance but only secondary to those confronting the central core.

Commercial activity within this central district is confined principally to First Avenue Southwest, First Avenue Southeast, Andrews Avenue, Second Street Southeast, Las Olas Boulevard and the Federal Highway. The High School property occupies a considerable area in the northeast corner of the district. Much of the area (east of First Avenue Southeast and north of Las Olas) is still residential, but in a state of transition to commerce. Because of this land use pattern, major traffic movements are concentrated on Andrews Avenue and Las Olas Boulevard. The expansion of commercial activities into those sections now residential, the improvement of Third Avenue Southeast and Second Street Southeast, will tend to distribute the traffic flow over a broader area, but such expansion will be accompanied by a commensurate increase in population and number of motor vehicles.

In that part of the central district devoted predominantly to commerce, wherein the problems of traffic circulation and parking are the most acute (Figure 23), there are approximately 1,465 available parking spaces - curbside and off street. Of





the 608 curbside spaces, 283 are metered and 325 unmetered. The latter should be metered now. There are also 607 spaces "off street" for public use and some 250 for private or semi-public uses. Included in the latter are about 80 spaces on railroad property south of Second Street between the depot and Flagler Street Southwest, also spaces adjacent to restaurants, hotels, Elk's Club and stores. Excluding the 250 spaces for customer service, there remain 608 curbside and 607 "off street" spaces available to the public, 1,215. Short time parkers are more interested in curbside spaces than in "off street" lots because of the tariff differential, which imposes a heavy demand on curbside space. Then, too, there is no charge or time limit on some of the curb space, Outside the contral district there are about 100-125 additional meters and several "off street" parking places.

Assuming that all the available parking spaces (1,465), curbside and "off street" were used as much as five times per day, which would be a high rate of turnover, they could accommodate in the aggregate about 7,300 cars per day. They do not, however, accommodate this number because many of the spaces are occupied by cars for the entire day. Then, too, only 600 of the spaces are curbside. When it is realized that a majority of the cars circulating through the district daily (25,000-30,000) want to park near the place they transact business, the nature of the problem can be appreciated. Also, these calculations are predicated on present conditions, not on conditions produced in a City whose population is several times what it is now. It is apparent that there are not enough parking spaces available for short time parking. There should be now at least 1,000 to 1,200 metored spaces in the district to accommodate the demand.

Increased growth will impose additional restrictions on the use of roadway channels. One-way streets will be introduced, curbside parking will be curtailed and many land parcels now operated as private parking lots will be occupied by structures further limiting the number of parking spaces. The situation is critical now, but not as acute as it will become if resolved to the course of least resistance.

To preserve the value and integrity of the central commercial district, attention should be focused now on future parking provisions before commercial expansion becomes too active in the district. It would be advisable, therefore, for the City to consider the acquisition of properties for utilization as "off street" parking facilities - either lots or structures. It would also be advisable to urge the developers of commercial properties within this area to provide "intra block" parking facilities, either individually or in conjunction with adjoining property owners, a practice which is being followed in a number of cities. Usually within blocks - at the rears of stores - enough land can be set aside to provide for both customer parking and "off street" loading and unloading. Figure 24 illustrates how the area between the river and Las Olas Boulevard might be treated to provide not only additional shops but parking facilities. Land parcels acquired by the City for "off street" parking facilities can be financed by revenue bonds redeemable from parking meter revenues, a practice that is also being followed.

In the not-too-distant future, when the High School moves to a site farther north, a large part of the gract should be allocated to "off street" parking. This area could be prepared readily to accommodate several hundred cars, and, later, as the demand justifies, be improved with a multi-storied parking structure. This tract of land lies in the line of commercial development, not too far from the intersection of Las Clas Boulevard and Andrews Avenue. A parking facility located in this area could be equipped with parking meters adjusted to different time periods - one, two and three hours.



In the secondary business districts, which will continue to expand, blocks or lots should be acquired also for "off street" parking. Although the parking problem is not yet serious in these sections, the time will come when a little anticipation now may prevent crisis later. Again the developers of property should be encouraged to consider "off street" parking lots in the future improvement of their properties. Along Las Olas Boulevard, east of Federal Highway, some of the commercial establishments and apartments have already provided "off street" parking - a practice that should be commended.

Super markets and other businesses locating in neighborhood business districts have already demonstrated their belief in "off street" parking facilities for customers. Such practices should be encouraged as assiduously as providing set-back lines for street widening.

Along Atlantic Boulevard in the beach section extensive parking lots should be provided, one of which might well be in the Birch State Park north of Tenth Street, and another in the Coast Guard property south of Las Olas Boulevard.

The development and maintenance of "off street" parking facilities is being recognized increasingly as a governmental function predicated on relieving congestion in streets, promoting safety and the general welfare.

The critical focus of traffic congestion is in the heart of the highly concentrated central business district, the "T" intersection of Las Olas Boulevard and Andrews Avenue. Increasing population and vehicle registrations will cause the present bad situation to become steadily worse. No one remedy can relieve the result of the several causes. Traffic must be directed and conducted into suitable channels, Broward Boulevard, the inner circumferential system. Traffic must move, flowing steadily without unnecessary delays and stops, away from and not to critical points. The elimination of left hand turns at Andrews and Las Olas, and Andrews and Wall Street, will help in guiding the traffic into other parallel thoroughfares. When the Third Avenue Bridge is opened, a definite clockwise, or right hand, traffic pattern can be instituted by making Andrews Avenue one way north-bound and Third Avenue one way south-bound. There will be several results. The central business district will tend to expand as the traffic volume picks up on commercially undeveloped blocks. Delays due to left hand turns at principal intersections will be eliminated. Intersectional traffic will be able to avoid critical intersections. The increased speed that will be possible in the central business district will enable more people to frequent the enlarged area daily.

BRIDGES - TUNNELS - VIADUCTS

The trend of land uses, population movements and commercial development shows the effects of the river and railread on the growth of the City. Progress north and east has not been retarded by these barriers to the extent 10 has not herd west. To encourage a more equable growth and stimulate a greater development in these latter sections, the influences of the barriers must be overcome.

The ideal plan for the future development of Fort Lauderdale would relocate the Florida East Coast Railway in the western part of the City, and convert the present right-of-way into a parkway, or elongated parking area. The current rapid growth of the City, however, cannot await the realization of this project. It is, therefore, imperative that the City consider such other measures that will overcome the retarding influence of the railroad to growth westward. This can be most easily and readily accomplished by connecting the east and west sides of the City by several viaduets over the railroad right-of-way and closing all grade crossings. Such plan will then require all traffic flowing between the two sides to follow fixed routes, as is done in many American cities confronted by similar situations (Chattanooga, Nashville, Columbus, Georgia). Overpasses erected at Twenty-Fourth Street and Twelfth Street on the south, Broward Boulevard in the central section and Tenth Street on the north will distribute the traffic flow equally between the two sides free from the delays and hazards now encountered frequently. Conditions now critical will become increasingly more critical in later years unless corrected in a manner here proposed.

The closing of all grade crossings would climinate dangers incident to them, and at the same time enable the railroad to save time passing through the City.

In all probability the viaducts at Twenty-Fourth and Tenth Streets could be undertaken by the State Road Department as State projects, leaving only the Broward Boulevard and Twelfth Street overpass to be constructed by the City.

On an average day, some 30,000-40,000 cars flow north and south over the Federal Highway and Andrews Avenue bridges - the only two crossings located east of the railroad. During the winter months this volume of traffic increases considerably. Because of river traffic, especially high during the season, the flow of traffic over the bridges is frequently blocked by bridge openings, which in some months have exceeded 1,200 times. Observations show that bridge openings are more frequent during the evening rush hours of traffic flow. At such times, traffic piles up, often impeding the smooth flows of east and west movements along Las Olas Boulevard and Second Street. Not only are these frequent stoppages of the north and south lines irritating and dangerous, but the economic loss due to delays is tremendous.

This critical situation can be improved in any one of three ways:

- 1. By requiring all charter boats to operate from wharves removed from the central part of the City.
- 2. By replacing the present low level bridges with high level structures or tunnels.
- 3. By coordinating the flow of land and water traffic to minimize bridge openings.

Despite the strong sentiment against any regulation of river traffic, the question for the people of Fort Lauderdale to decide is whether the economic benefits derived from an unobstructed flow of land traffic are greater than those derived from river traffic. As the traffic volume into the central area increases, the delays caused by the frequent bridge openings will become increasingly serious and dangerous.

A high level bridge or a tunnel on the Federal Highway should be considered very seriously by the poople. And, further, regardless of what else is done. a study of river traffic should be made to determine ways of coordinating is with land traffic movements.

To the east along Las Olas Boulevard, the bridge across the Intracoastal Waterway should be replaced by a bridge adequate to carry the traffic.

The effects of the railroad and river on the future growth and development of Fort Lauderdale must be considered as major problems. Mere relief by bridging or tunneling for the Andrews Avenue and Federal Highway river crossings, which might be sufficient under the present traffic load as it may be diminished in the future by the super highway, will be inadequate to handle the traffic volume as reliably projected for 1960-1975. To properly care for this future load and develop a traffic pattern to serve the expanded business district, population and motor vehicle registration, it is proposed that another river crossing at Third Avenue be made. It has been suggested that the Andrews Avenue bridge structure be re-erected at Third Avenue when it is replaced by a new bridge. This will promote easier access between the central business district and sections north and south of the river. As recommended earlier, the Third Avenue bridge will be the key to the central business district traffic situation. With Andrews Avenue one-way northbound and Third Avenue one way southbound, traffic movements into and through the central business district will be smoothed and speeded.

PARKS AND RECREATION

Parks and recreational facilities are being recognized increasingly as essential governmental functions supplying the needed tonic to a mechanized, fast moving civilization. They not only promote health and afford means of relaxation, but minimize the crimes and misdemeanors resulting from prolonged idleness. Years of observation and experience have taught that the amusement and wholesome recreation of people cannot be left wholly to the devices of private interests. Much of the thirst and hunger for physical, mental and spiritual stimulation can be satisfied only through the channels of publicly-owned and supervised recreation facilities for both youth and adults. One need but observe the activities around the various schools, in open vacant lots, the beach, the casino and in Stranahan Park to vouch for the veracity of this statement. It is, therefore, desirable in projecting a future pattern of needs to provide ample open spaces for parks and recreation purposes in advance of development, located advantageously to serve the growing population centers with adequate programs of diversified recreation.

The importance of recreation in the City pattern is too often minimized because of its popular association with the activities of children. Currently, however, the needs of adults should receive just as much consideration as those of the younger age groups. This is particularly true in Fort Lauderdale, visited annually by thousands of winter residents and tourists who seek relaxation and recreation. The ability of the City to continue its appeal to these people, to retain and make residents of them, will depend largely on what recreation possibilities are available for the occupation of their idle hours.

The recreation problem of Fort Lauderdale is unlike that of many cities where only the requirements of a normal population must be projected. In Fort Lauderdale there are two classes of people for whom park and recreation facilities must be provided:

- 1. The local normal population.
- 2. The winter resident and tourist.

The needs of the local population will revolve principally around:

- 1. Neighborhood parks and playgrounds and play lots for the younger age groups.
- 2. Playfields for the older youth.
- 3. Athletic fields.



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- 4. School recreation facilities.
- 5. Neighborhood community centers.
- 6. Auditoriums.
- 7. Yacht or boat basins.

Many of the facilities provided for the normal population can be used by the tourist also, but the needs of the latter will be more specialized. The tourist will require easily accessible facilities for the less active pursuits, such as shuffleboard, horse shoes, roque, card games, as well as community centers where meetings can be held and lectures and entertainment enjoyed. The tourist will also be interested in the exotic botanical gardens and river esplanades and yacht basins where boats may be docked and serviced. The tourist is more selective than the normal year 'round resident.

Through the activities of its City Commissioners and its Park and Recreation Board, Fort Lauderdale has made commendable progress in providing for and anticipating its park and recreation needs. In the twenties the City erected the Casino on the beach, which through the years has been one of the outstanding attractions of its kind on the east coast of Florida. The City also built a golf course and beautified its river front; and only recently property was acquired for a City Park. Table VIII enumerates the existing facilities, some of which are in process of development and others still in a virgin state. The relative locations of the various facilities and areas within the City are shown in Figure 25.

TABLE VIII

EXISTING PARK AND RECREATION AREAS FORT LAUDERDALE AND VICINITY 1948

SPECIALIZED TROPICAL SANCTUARY International Park	250.0	acres	250.0	acres
LARGE PARKS Birch State Park City Park	160.0 85.0		245.0	
NEIGHBORHOOD PARKS Park east end Broward Boulevard Colee Hammock Park Hospital Park Davis Park Neighborhood Park Tenth Street Area	2.0 2.0 1.0 2.0 2.0 30.0		39.5	
PLAYGROUNDS Warfield Park (North Side School) East Side School West Side School South Side School School Site (south side) Dillard School (negro) Saint Anthony Catholic School Pinecrest School	6.0 5.0 12.00 2.0 3.0	(Private) (Private)	42.5	
SPECIALIZED AREAS Golf Course Ball Park Stranahan Park Central High & Elementary School Tennis Club Casino Coast Guard	180.0 4.0 1.0 12.0 6.0 1.0 40.0		244.0	

821.0 acres

The Hugh Taylor Birch State Park is owned by and presumably will be developed by the State of Florida. It is the only large park area located on the Atlantic coast of Florida. Because of its size and location, this virgin, undeveloped tract can be transformed into a most attractive, useful large park and recreation area. A portion of it in the vicinity of Atlantic Boulevard and Tenth Street, as recommended previously, should be allocated to "off street" parking. Also, one of the City's new fire stations, to service the beach area, should be located in this area on Tenth Street near Atlantic Boulevard. On the western side of the tract a yacht basin could be established. The plans of development of this tract should provide a combination playfield-playground, picnic sites with outdoor ovens and shelters, game shelters, community building for meetings, bridle paths and gardens.

A second large tract of importance, also owned by the State and which can be developed into one of the most noteworthy exotic parks in America, is the <u>International Park</u> of 250 acres, located west of the City on the upper reaches of the South Fork of New River and accessible from Road 26 or by boat. This unusual area was a gift to the State from Governor Robert H. Gore. Because of its sub-tropical jungle character, completely unspoiled, this area should not be used for any active recreation. It is covered by cyrress and low-lying, lush swamp land adjoining the Everglades with several streams running through it. "Lost Lake," a particularly beautiful spot covering some ten acres which is almost inaccessible on foot, has been discovered from the air - a natural habitat of the alligator and unusual water fowl. Several varieties of the native rubber tree, strangler fig, cypress, forns and rarest orchids abound here. This area should be retained in as near its virgin state as possible, as a sanctuary for the rapidly disappearing wild life of the State. Throughout Florida, gardens of different types are the mecca of tourists, but few have the rare, virgin potentialities of the International Park if developed wisely.

In the northeast quarter of the City, 35 acres have been acquired by the City for development as a <u>City Park</u>. Plans already prepared for this area include:

- 1. A Stadium with 10,000 scating capacity.
- 2. Baseball Park.
- 3. Outdoor Theatre and Bandshell with seating for 5,000 people.
- 4. Softball Fields.
- 5. Tourist and Community Center.
- 6. Playground and Playfield Facilities.
- 7. Auditorium.
- 8. Parking.
- 9. Picnic Areas.

This park area, properly equipped, will become one of the principal recreation certers of the City, also an attractive beauty spot. It will serve to relieve much of the pressure from Stranahan Park.

Stranahan Fark, located in the central business district, is the most popular and most intensively developed recreation area in the City, for tourists, primarily. In this small area is a bandshell with 600 seats, a large card game pavillion and 35 shuffleboard courts. During an average month, from 10,000-20,000 people use these facilities. The Women's Club building is also located at the north end of the plot facing Andrews Avenue.



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The <u>Central High School</u> site occupying 12 acres in the heart of the City is equipped with a football field, 4 basketball courts and a gymnasium. The activities on the site are only those incident to the school. Ultimately, in the course of City development, this large site should be devoted to other public uses.

The playground facilities for the school age youth of Fort Lauderdale are centered around the respective elementary schools. Although the several sites do not conform to requisite area standards, they do serve a constructive purpose. Warfield Park, adjacent to the North Side School, approaches more nearly the the standard area requirements. Other areas are located in connection with the East Side, West Side and South Side School sites. An examination of Figure 26 shows, however, that these playground areas do not service many developed areas of the City.

The sole recreation facility for negroes is located adjacent to the Dillard School. There are no parks or swimming facilities for negroes.

The <u>Casino</u> on the beach, with the only public swimming pool in the City, is one of the most creditable recreation facilities in the entire southeast region. To the west of the Casino, and adjoining the recently acquired Coast Guard property, the City also owns three acres equipped with shelter and picnic facilities. More than 1,500 persons per average month use the Casino pool.

Although the City owns and controls some 2-3 miles of beach, there are no other organized playgrounds or playfields in the beach section. The Hugh Taylor Birch Park will be able to fill the needs of the northern portion of the beach as it develops, and the recently acquired Coast Guard property can be developed to meet the requirements of the central and southern beach areas. These several facilities should be adequate to meet the needs of the beach section for many years.

Other facilities now available are:

- 1. The Tennis Club.
- 2. The Ball Park on West Broward Boulevard.
- 3. The Golf Course.
- 4. Playground facilities at Saint Anthony's Catholic School and the Pinecrest private school.

At the Tennis Club, on South Andrews Avenue, there are nine tennis courts, a club house with locker rooms and showers and ping pong tables. The Ball Park, in the west part of the City, is used by the Florida International League, and during the winter as a training ground for northern baseball teams.

On Tenth Street, east of the present Federal Highway, the City owns a thirty-acre borrow pit designated for park purposes. Because of the proximity of this area to the City Park and the Hugh Taylor Birch site, its desirability and necessity as a park site has been greatly discounted. This site might be used more advantageously for some other purpose.

With an aggregate of 821 acres of land (Table VIII) dedicated to parks and recreational uses, it would seem that Fort Lauderdale could dismiss the problem of recreational sites until its population approaches 80,000, for which the present area is theoretically adequate. But it cannot. Three aspects of the problem, ownership, distribution and development, remain as barriers.



Half of the aggregate area (410 acres) is owned by the State. International Park is highly specialized in function, lies outside of the City, and is only about five per cent developed. The Birch Park is totally undeveloped. Of the half owned by the City, thirty per cent of it is in two large undeveloped tracts, 85 acres in the City Park, and about 40 acres in the Coast Guard property. Within the City, only ten per cent of the aggregate area of dedicated land is available as active developed recreational and park areas. Seventy per cent of the City-owned land is developed for a single highly specialized use beyond the City limits - the Golf Course.

By reference to Figure 26 and Table VIII, it is realized that the available ten per cent is inadequate in size, scope, function and distribution to properly serve the present or future permanent population. Even were the acquired sites developed in accordance with the proposals herein, there would still be large segments of the present population too far from them to make use of their facilities. Thus, the present status of a proper program in Fort Lauderdale is relatively high in potential, but less than ten per cent in actual availability.

To realize the full potential of existing sites will require the utmost cooperation between the State and the City.

Obviously, in the development of the two State tracts, there should be worked out between the State and municipal officials an integrated and coordinated plan that will prevent unnecessary duplication of facilities and take advantage of the natural characteristics and location of the various sites. Such cooperation would benefit both the State and municipal programs and make each more eminently desirable.

As stated earlier, there are two phases to the Fort Lauderdale recreation problem:

1. That pertinent to the year 'round population.

2. That pertinent to the tourist or winter resident.

The former relates principally to the school and pre-school age group; the latter to the adult group, both resident and transient. Although limited public facilities have been made available for adults, areas for organized play and active sports for the younger element have been neglected. The limited facilities at school playgrounds can be disregarded for their extreme paucity. With the possible exception of certain adult facilities which youth has been forced to share, there are no playgrounds or playfields for them.

Located as it is on the ocean, with an excellent beach readily accessible and also having large areas of vacant lots available in sparsely developed but rapidly growing sections, the need for a comprehensive balanced system of public parks and recreation facilities has probably been minimized. But this condition cannot continue indefinitely. As the various sections of the City are more densely built up, the vacant play lots and tracts used by children today will disappear, and, too, the beach will be less desirable as a children's playground.

The permanent population of a dynamic city, living and working together in this age, must have places to play together. Regulation public recreation programs should be available to the people at a number of accessible and conveniently located sites, adequate in area and equipped to provide diversified programs for the various age groups tributary to them - from young to old. Once an overall plan of facilities has been defined and coordinated to the needs of the increasing population, it can be realized in stages as justified by the population grow th. In anticipation of that population growth and resultant need,



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however, it behooves the City to select and acquire desirable sites of ample area in advance of development. Only by pursuing such a policy will the City be assured of an orderly balanced system of recreation facilities in later years, when needed.

Figure 26 reveals that many people of Fort Lauderdale are not served by any park or other recreation facility, when judged by the foregoing accepted standards. Further, none of the existing facilities are either of sufficient area, adequately equipped or staffed to render an effective service. Nowhere is there a fully equipped playfield, where baseball, track, basketball, softball, football and other sports can be enjoyed. Two football fields serve the entire area, one at Central High and one at Dillard. With the exception of a gymnasium at Central High, there is no other in the City, nor any community recreation centers wherein neighborhood groups can meet. New subdivisions are being recorded that allocate no part of their lands to parks and recreation. There is the Casino on the beach, the Golf Course in the country and Stranahan Park for tourists, all more or less specialized facilities. There are the picturesque Las Olas and Ponce de Leon Boulevards, river drives and decorative landscaped plazas and small parks, the color of which allures the tourist, but back among the people who live and toil here the year 'round and who are raising their families here, there is a woeful deficiency of parks and other recreation areas - the lungs of the community.

More than fifty per cent of the built up area south of New River, including Rio Vista and Riverside, is not served by any playgrounds (Figure 26). North of the river, Victoria Park and much of the area between Las Olas Boulevard and the river are without facilities. A large part of the northside, north of Tenth Street on both sides of the track, is not accessible to any playground except that at the North Side School. Only a small part of the negro area tributary to Dillard School is accessible to any kind of public recreation. Although the builtup sections of the beach are accessible to the specialized facilities of the Casino and the beach itself, there are no equipped public play areas for the youngsters in this eastern portion of the City, or on any of the islands between the mainland and beach.

Dissected in this manner, it is apparent, when judged by standards of need, there is a current deficiency in recreation facilities and their distribution so far as they relate to the youth needs of the City. The incidence of juvenile delinquency as reflected by Figure 27 is evidence of this inadequate service.

The division of the City into sections or neighborhoods by such barriers as heavily traveled streets, rivers and streams, railroads, commercial and industrial areas, influences the number and type of recreation facilities that should be established. Every neighborhood of 3,000 to 5,000 should have a neighborhood playground and neighborhood park of 5-10 acres, and no one should be obliged to rravel more than 1/4 to 1/2 mile to reach it. Three or more adjoining neighborhoods with an aggregate population of 20,000 people should have a fully equipped playfield with an area of 10-20 acres. Each playground should have a shelter building, and each playfield should be provided with a recreation center, equipped for multiple service. Flayfields and recreation centers should be within 1/2 to 1 mile of every home and should be arranged and equipped as prescribed by the standards of the National Recreation Association.

On the basis of 40,000 people (1948 estimate) Fort Lauderdale should now have a minimum of 8 playgrounds (40 acres), 4 playfields (43 acres), 4 recreation buildings, 6 baseball diamonds, 12 softball diamonds, 20 tennis courts. Instead, there are 5 playgrounds (25 acres), no playfields and no recreation buildings.



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Table IX shows the minimum number of facilities that will be required to meet the needs of different populations. These various facilities should be distributed throughout the City, as shown in Figures 28 and 29.

TABLE IX

NUMBER OF UNITS REQUIRED FOR DESIGNATED POPULATIONS

	50,000	70,000	80,000	100,000
Playgrounds Playfields Recreation Buildings Neighborhood Parks Baseball Diamonds Softball Diamonds Tennis Courts Golf Courses	10 5 25 10 10 10 10 10 10 10 10 10 10 10 10 10	14 7 3 7 11 23 35 1	16 8 14 8 14 20 140 1	20 10 5 10 16 33 50 2

The plans (Figures 28 and 29) propose the development of park - playground - playfield combination in several locations, the City Park, Hugh Taylor Birch Park and the Coast Guard tract particularly. These sites are of ample area and strategically located to especially favor such comprehensive projects. Each of these areas can be so designed as to incorporate the landscaped features of the neighborhood park, the elements essential to the children's playground, as well as the equipment and facilities of the larger playfield. Similar combination facilities are proposed for other sections, where, however, additional lands must be acquired to accommodate the various facilities. Where ultimately needed, sites for playgrounds are also proposed (Figure 28).

These proposed arrangements will provide Fort Lauderdale with an adequate supply of recreation sites that can be developed as the City grows.

In many of the existing developed or built-up areas it is possible for the property owners to establish intra-block play spaces for the use of the smaller, pre-school children (Figure 30). The establishment of such areas will prevent children from crossing streets or playing in street spaces.

All subdividers of land should be urged to allocate portions of their land for the recreational uses of children residing in such subdivisions. Some cities require as much as five per cent of the subdivided land to be dedicated to such public uses.

Recreation features appeal to and attract tourists, all of whom are potential residents, therefore, the facilities of Stranahan Park should be expanded. Tourist centers should be established in the City Park, Birch Park and on the Coast Guard tract, in each of which game pavilions, shuffleboard, roque and other popular game facilities should be provided. These developments will not only relieve the increasing pressure on Stranahan Park, but will lessen the traffic congestion around that central area. An assembly or meeting-place for tourists could also be provided in the City Park as a part of the Memorial Auditorium project.

Water, and its enjoyment, is one of the principal attractions of Fort Lauderdale, so, obviously, in preparing a program of future needs, water recreation should occupy a prominent place. A major yacht basin should be developed on the west side of the Coast Guard site, provided with slips, servicing facilities and a central yacht club. Such site should become the headquarters



of charter boats and thereby relieve the river of traffic from that source. North of Tenth Street, on the west side of the Birch Park, a second boat or yacht basin could also be established to meet the increasing demand for such facilities in the growing City. Commensurate with the development of water attractions should be the establishment of a Model Yacht Basin, preferably in conjunction with the Birch Park improvements, where youth and yachtsmen can match their skills in constructing and sailing the miniature craft.

The comprehensive plans proposed here are sufficiently flexible in nature to enable Fort Lauderdale to develop an orderly, well-proportioned program of recreation facilities commensurate with its population growth. The various facilities are arranged not only to satisfy the exacting demands of the transient, but also to provide facilities for the permanent population from year to year. It is a program coordinated with that of schools, land uses and street pattern.

SCHOOLS

Schools occupy a most important place in the pattern of the growing city. This location relative to the population to be served, the area of the school site and the adequacy of the school structure are factors that morit consideration in contemplating the future needs of the community.

Although the selection and acquisition of school sites and the erection of school structures is the responsibility of the Board of Public Instruction of Broward County, that Board can benefit by the studies of the City Planning Board, especially as they relate to population growth and trends, age groupings and traffic movements. The Planning Board, on the other hand, is interested in any plans contemplated by the Board of Public Instruction which involve the selection of school sites and the erection of school buildings. So, for the welfare of the community as a whole, there should always be close cooperation between these two Boards in the consideration of those matters relating to future structural and space requirements.

EXISTING SCHOOL PLANT

The school plant now serving the corporate area of Fort Lauderdale consists of five elementary/and one high school for white pupils and one elementary and one high school for negroes. Figure 31 shows the distribution of these various facilities throughout the City, and Table X presents information pertinent to each.

AREA - CIASSROOM	MS - CA	APACITY .	- EN	ROLLMENT	OF SCH	OOLS (1947	-1948)
NAME OF SCHOOL AND GRADES	DATE BUILT	DATE (ADDITI)	OF ONS	SITE AREA (ACRES)	NO. OF CLASS- ROOMS	CAPACITY*	ENROLL- MENTS
East Side 1-6 West Side 1-6 North Side 1-6 South Side 1-6 Central El. 1-6 Junior High 7-9	1938 1920 1927 1922 1916	1939, 19 1931, 19 1925, 19 1934	947 932 930	5.00 7.25 2.00 9.00** 13.00	10 8 14 9 15	330 264 462 297 495	357 333 650 326 470
Senior High 10-1	12 -				(38	1.330)	710

TABLE X



GEORCE W SIMONS JR
TABLE X (Cont'd.)

AREA - CLASSROO	MS - CA	APACITY - EI	NROLLMENT	OF SCHO	DOLS (1947	-1948)
NAME OF SCHOOL AND GRADES	DATE BUILT	DATE OF ADDITIONS	SITE AREA (ACRES)	NO. OF CLASS- ROOMS	CAPACITY*	ENROLL- MENTS
Dillard 1-6 Dillard 7-9 Dillard 10-12	1926	1947	5.8***	12 {18	396 (30)	990 306 145

*Based on Engelhardt-Maximum number in Elementary School Room 33 and in High Schools, 35.

**New site area.

****State Report shows Dillard School Site only 2.5 acres.

Being a comparatively young City, none of the school structures are very old. The rapid growth of the City, however, has intensified the difficulties of providing something approaching adequate facilities fast enough. Make-shift additions have been necessary at several schools within the past two years to meet the increasing enrollments.

On the basis of generally accepted standards, and of those defined in "Chapter 235, Florida School Laws, 1946," none of the school sites are of sufficient area. This deficiency from the past should be a guide to the authorities in the selection of new sites. Large areas are more essential today than in the past because, in their design, schools are spreading out in spacious patterns with one and two story structures predominant. The City Park area adjacent to the North Side School has virtually been appropriated by the school as a part of its site.

Confronted by the difficult problem of providing school facilities, the Board of Public Instruction has done a commendable job in locating and spacing schools to accommodate the tributary loads equitably. Obviously, as Table XI shows, the magnitude of this load is increasing annually, and any program of new school projects must be designed to meet it. Fortunately, steps have been taken already to provide an adequate structural facility.

The ultimate need for additional school structures will depend on the growth of the community; more particularly on the increasing numbers in the school-age groups. In anticipating growths, trends and needs over a generation of time, it must be realized that not all the structures indicated as ultimately desirable will be needed at one time. Their actual establishment will depend on the rate of growth in the respective areas to be served, and the type of school will depend likewise on the age group distribution in the community. The principal point to consider now in anticipating future needs is the immediate acquisition of sites. Sites may be available today at figures which seem high, but these same sites acquired later after development will cost more. School sites are never cheap; the main thing is to get them in advance of development.

Actual records of school attendance and resident pupil distribution over years of community growth are significant in reflecting trends. The ratio between total population and school attendance is also avaluable index. Table XI shows the school enrollment of all the schools from the school year 1941-1942 through the years 1947-1948, a period through and following the recent war years. Table XI-A, abstracted from the State Report, shows the average daily attendance figures for several years, also for highest months.

TABLE XI

SCHOOL ENROLLMENT - FORT LAUDERDALE SCHOOLS

NAME OF SCHOOL AND GRADES	1941 1942	1942 1943	1943 1944	1944 1945	1945 1946	1946 1947	1947 1948	PER CENT INCREASE 1942-1948
East Side 1-6 West Side 1-6 North Side 1-6 South Side 1-6 Central Elementary 1-6	214 151 248 217 189	221 191 269 218 192	213 163 272 227 211	217 168 341 200 224	235 197 371 219 297	286 294 524 267 399	357 333 650 326 470	67 120 160 50 150
TOTAL WHITE ELEMENTARY:	1019	1091	1086	1150	1319	1770	2136	109
Central High 7-9 Central High 10-12	649 468	630 <u>431</u>	627 1413	615 <u>472</u>	684 571	843 662	944 710	53 73
TOTAL WHITE HIGH SCHOOL	: 1117	1061	1040	1087	1255	1505	1654	52
TOTAL WHITE ENROLLMENT:	2136	2152	2126	2237	2574	3275	3790	78
Dillard (Colored) 1-6 Dillard 7-9 Dillard 10-12	710 164 66	652 146 57	648 135 36	720 207 75	821 267 123	892 284 132	990 306 145	53 125 300
TOTAL NEGRO ENROLLMENT:	940	855	819	1002	1211	1308	1441	68
Per Cent Total Enrollmen	nt:30	29	28	31	32	28.5	27.5	
TOTAL ENROLLMENT - WHITE AND NEGRO:	3076	3007	2945	3239	3785	4583	5231	70
Per Cent of Total White Enrollment in Grades: 1-6 7-12	48 52	50 50	51 49	52 48	51.5 48.5	54 46	56 44	
Per Cent of Total Negro Enrollment in Grades: 1-6 7-12	76 24	75 24	79 21	72 28	68 32	68 32	69 31	
Per Cent Total Enrollmen (White & Colored) in Gra 1-6 7-12	nt ades: 56 44	58 42	59 41	58 42	57 43	58 42	60 40	

TABLE XI-A

TRENDS IN AVERAGE DAILY MEMBERSHIP BY SCHOOLS

(FROM REPORT - BROWARD COUNTY SCHOOL SURVEY -BY STATE BOARD OF EDUCATION - 1948)

					A1 I	NALYSIS 1 1946-1947	POR 7	1947	7-1948
	1940 1941	1945 1946	1946 1947	1947 1948	FIRST MONTH	HIGHEST MONTH	LAST MONTH	FIRST MONTH	HIGHES: MONTH
WHITE SCHOOLS									
East Side 1-6 West Side 1-6 North Side 1-6 South Side 1-6 Central El 1-6 Central High 7-9 Central High 10-12	218 171 282 212 212 646 512	222 182 334 202 242 631 482	237 212 412 295 700 576	320 239 498 317 321 806 633	220 195 349 211 268 687 566	250 227 437 233 312 736 593	230 216 404 231 276 675 363	248 253 448 322 760 2877	295 241 502 314 351 812 639
TOTAL WHITE	2233	2295	2040	5154	2490	2100	2292	2011	3194
NEGRO SCHOOLS									
Dillard 1-6 Dillard 7-9 Dillard 10-12	640 126 84	724 201 73	798 250 119	902 276 132	763 244 111	809 247 121	790 245 118	873 271 124	913 277 138
TOTAL NEGRO	850	998	1167	1310	1118	1177	1153	1268	1328
TOTAL WHITE & NEGRO	0: 3103	3293	3815	4444	3614	3965	3748	4145	4482

These two tables impart considerable interesting and enlightening information. To reconcile the differences between the respective results of the two tables, it must be understood that Table XI relates to school enrollments and Table XI-A to average daily memberships; the latter is always less than the former by 10-15 per cent. Approximately 56 per cent of the total white school population, and 69 per cent of the negro school population, are enrolled in the elementary grades, 1-6; the remaining 44 and 31 per cents are enrolled in the white and negro high schools, respectively. During the war years, the white senior high school enrollment declined from 468 in 1941-1942 to 413 in 1943-1944, but thereafter increased annually. In the same period, the enrollment in Dillard Senior High School declined from 164 to 135. Elementary school enrollment has increased 109 per cent since 1941-1942; three of the schools, West Side, North Side and Central Elementary increasing 120, 160 and 150 per cent, respectively. Enrollment as a whole (white and negro) increased 70 per cent since 1941-1942. The increased enrollments in the negro high schools is especially noteworthy, 125 per cent increase in the Dillard Junior High School and 300 per cent in the Dillard Senior High School since 1941-1942. The ratio of negro enrollment to the total enrollment appears to be declining. In the year 1947-1948, it was 27.5 per cent, whereas in 1941-1942, it was 30 per cent, and in 1945-1946, as high as 32.0 per cent.

The general trends shown in Table XI are reflected in Table XI-A, however, in the latter attention is directed to the attendance during the "Highest Month," which shows a perceptible increase over the average for the year.

Table XI shows that the enrollment in the white elementary schools did not vary greatly in the respective schools between 1941 and 1944, but, beginning with the year 1944-1945, the march upward has been precipitous. On the basis of 33 pupils per elementary room, the increased elementary enrollment between 1944-1945, and through 1947-1948, was sufficient to fill 30 additional classrooms; School census studies prepared by the U. S. Bureau of the Census indicate that from 12 to 15 per cent of the gross population of Fort Lauderdale attends school, which ratio compares favorably with 13.5 per cent for St. Petersburg, 14.0 per cent for Miami and 15.5 per cent for Orlando. Assuming that 14.0 per cent of the gross population of Fort Lauderdale will continue to attend school, and, further, that about 26 per cent of that population will be negroes, requirements will have to be anticipated for the following school populations in the years indicated:

TOTAL POPULATION	SCHOOL POPULATION	WHITE	COLORED
50,000 60,000 70,000	7,000 8,400 9,800	5,180 6,200 7,250	1,820 2,200 2,550
80,000	11,200 14,000	8,300 10,350	2,900 3,650

The following relationship of school population to total population was considered a reasonable basis for developing standards:

SCHOOL

ENROLLMENT AS A PERCENT-AGE OF TOTAL POPULATION

Elementary	(Kindergarten	and	Grades	1-6,	inc.)	8.4%
Junior High	(Grades 7-9)					3.2%
Senior High	(Grades 10-1	2)				2.4%

On this basis, the school population will be distributed somewhat as follows in the respective years:

	H	IGHS	SCHO	OLS			
POPULATION	WI	HITE	NI	EGRO	ELEMEI	TARY	
CITY	JUNIOR	SENIOR	JUNIOR	SENIOR	WHITE	NEGRO	ENROLLMENT
50,000 60,000 70,000 80,000 100,000	1,300 1,525 1,815 2,070 2,600	980 1,200 1,380 1,580 1,970	330 465 540 610 765	180 230 255 290 365	2,900 3,460 4,050 4,650 5,800	1,260 1,520 1,760 2,000 2,500	7,000 8,400 9,800 11,200 14,000

The 1947-1948 school population was 5,231, an increase of 14 per cent over the year 1946-1947, and a 62 per cent increase over 1944-1945. Of the aggregate enrollment, 3,790 were white pupils and 1,441 negroes. 3,126 were enrolled in elementary schools and 2,105 in high schools, divided 2,136 white and 990 negroes in elementary and 1,654 white and 451 colored in high schools. This number of pupils reflects a 1947 population of 37,300. Comparing these actual data of past experience with the anticipated requirements of the future City, it will be noted from the foregoing tabulation that when the population of the City reaches 50,000, 33.5 per cent more pupils will have to be accommodated than in the year 1947-1948, and, as the population ascends to 80,000, 114 per cent. At that time, facilities for 2.15 times as many pupils will have to be provided. Whereas, in 1947-1948 there were approximately 120 rooms available, in 1965, when the population reaches 80,000, 330 rooms will be need. ed (200 elementary and 130 high school).

The following table by Dr. Engelhardt shows the number of pupils recommended per school:

		NUMBER OF PUPILS				
GRADES	AGES	MINIMUM	AVERAGE	MAXIMUM		
Kingergarten 1-6	5-11	20 400	600	800		
7-9 10-12	12-14 15-17	600 900	800 1,500	1,200 2,000		

On the basis of these accepted and proven standards, by 1980 the City of Fort Lauderdale will need at least 15 elementary schools at 600 each, or, preferably, 22 at 400 each; at least 3, preferably 4, junior high schools; and 1 new senior high school.

Reference to Table X shows how acute school space is currently. The 1948-1949 enrollment will far exceed all facilities now available. Even based on the conservative figures of Dr. Engelhardt, the seating capacity of every school was exceeded in 1947. The problem is one of the most serious confronting the people of Fort Lauderdale, and on how energetically it is solved, the growth and progress of the community will depend. People will not continue to settle indefinitely where school facilities are not available.

Figure 31 shows how the existing school structures are distributed to serve the developed areas of the City. Figure 32 shows the distribution of pupils attending the respective schools. A study of these two charts reveals that the Board of Public Instruction has divided the area equitably so as to minimize the distance pupils are obliged to travel from their place of origin to their school. Around each elementary school a half-mile circle has been drawn to incorporate the area which, theoretically, each school should be required to serve if completely built up. An examination of these two figures (31 and 32) will show areas that should have service now, and also areas wherein school structures will be required to serve the ultimate anticipated school population.

From the reference point of City growth and the gradual expansion of the central business district, the most serious and critical school structure problem revolves around the Central Elementary and High School plant. When this site was originally selected and constructed it was remote from the noises and confusion of modern traffic, but today it lies adjacent to and in the direct line of the northeasterly movement of the central business district. Whereas, once it was a most spacious, desirable site, with each year it now becomes less and less desirable as a school site. Visualizing the needs of the City of 80,000 to 100,000 or more, the site is no longer desirable because of the steady encroachment of commerce. The sconer the school can get out of this area, the better for a balanced growth of the City. The site, although large, does not meet the standard area requirements for high school plants, which should be located on tracts of at least twenty acres or more.

Under the 6-3-3 plan of education, Fort Lauderdale will ultimately need two junior high schools and a senior high school for whites. One of the junior high schools is urgently needed now. One junior high school plant should be located in the north part of the City and the second one in the south part, both on sites of 20 to 30 acres each. The site recommended for the north side structure is that land now used by the State Road Department and Broward County. This site is in the path of accelerating growth, ideally situated to serve a large tributary area. The second junior high school plant should be located in the southwest part of the City, away from the industrial development to the scutheast and the railroad commercial development to the immediate south. An area in which a site of 20 to 30 acres should be acquired is indicated on the Master Plan (Figure 20). Being sparsely settled, a suitable site should be available now for future utilization.

The central plant must be used until other facilities are made available. A new junior high school in the north part of the City would relieve the central plant of some of its load, but the void would be filled by elementary pupils. To relieve the Central and East Side Elementary Schools, an additional elementary school should be located north-northeast of the existing East Side School.

COMPREHENSIVE DEVELOPMENT PLAN FORT LAUDERDALE FLORIDA

1947



FIGURE 32

A site of 20 to 30 acres for a senior high school presents no small problem, due, primarily, to inflated land values. It should be capable of accommodating a structure sufficiently large to accommodate 1,300-2,000 students. After an examination of available and adaptable sites of 20 to 30 acres in various parts of the City, a portion of the City Park area is respectfully recommended. This large park area (82 acres), provided with an auditorium, tourist recreation facilities, band shell and open air theatre, could be transformed into a Civic Cultural Center, in which a modern senior high school could truly become an outstanding feature. That part of the Park proposed for an athletic stadium could be included as a part of the 20 to 30 acre site needed for the school structure. The Cultural Center could easily become the Civic Center around which the life and spirit of the City would revolve. Obviously, the acquisition and utilization of this site for school purposes must be the subject of negotiation between the Board of Public Instruction and the City, but, regardless, each Board should evaluate the matter from the standpoint of general welfare, and not expediency.

A school located in this Fark area will not restrict too severely the other uses contemplated for this area. Allocating 30 acres to the school would still leave some 50 acres for other uses. Then, too, the Taylor Birch Park, not too far away, will supply many facilities for recreation better than they can be established in the City Park.

To date no schools have been located in the beach and island areas. As those areas develop and become more densely populated north and south of Las Olas Boulevard, it may be highly desirable to establish at least two minimum-sized elementary schools in them, one to serve the southern half, and one the northern. In all probability these beach and island areas will not produce proportionately as many school-age children as the mainland areas, but, notwithstanding, some facilities to serve them should be included in the master plan of general development.

A new site has already been acquired for a new South Side School, which will serve the southern area. North of Tenth Street, another school will be needed to relieve the present North Side plant. This should be located north and west of the present site.

The buildings now located on the central site need not be sacrificed - at least, not at present. They can be converted readily to serve other community purposes, such as tourist club center, adult education and vocational training. A part of the site could be considered advantageously for a new and adequate Federal building. A large portion of the athletic field should be developed into a public "off-street" parking facility, as recommended earlier. The fringes of the area could be planted and landscaped to improve appearances.

The location already selected for the new Dillard High School (Figure 33), is sufficiently spacious for development as a new educational and recreation center for negroes. The present Dillard plant, with its recreational facilities, can then be devoted solely to the needs of the elementary grades.

Figure 33 suggests relative areas in which additional school sites should be acquired. These areas do not point to specific properties, but rather to general locations in which specific and desirable sites can be acquired. The actual sites should be centrally located within developing neighborhoods to avoid main traveled highways. They should also be selected near proposed neighborhood recreation sites. In selecting any proposed school site, the Board of Public Instruction should be governed by the following criteria: accessibility, adequacy with respect to needed services and size, arrangement, orientation and possibilities for expansion. By devoting some consideration to some of these matters now, and acquiring sites of adequate size in advance of development, much money can be saved and many future headaches/be avoided.



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FIRE PROTECTION FACILITIES

Fire stations are public structures that should be located strategically throughout the corporate area, accessible to tributary properties as speedily as possible. Not all such structures are required to be equipped and staffed alike. Central stations, located within the central fire district, must be equipped with a greater variety of equipment and be more heavily-manned than the residential or precinct station, which may only need a pumper. But, notwithstanding, the type of equipment and personnel, location of structure and radius of effectiveness are important. The National Board of Fire Underwriters and the Southeastern Underwriters Association are authorities as to equipment and other features.

Figure 34 shows the present location of fire stations and fire alarm boxes, also locations of proposed stations. It is understood that the central fire station will move to the new City Hall site when completed, which will enable it to render a more effective and efficient service to the high value central district.

Fire stations should be so located in residential areas that they can serve properties within a radius of $1\frac{1}{2}$ to 2 miles. In the central high value district, the effective radius should not exceed 3/4 mile.

Because of the river with its bridges, and the railroad with its grade crossings, new fire stations should be anticipated to eliminate the hazards incident to these barriers. Figure 20 also shows the suggested location of future fire stations to be provided as the City grows. These stations are located so that they can be interconnected for service, and also so as to minimize hazards. A station on the beach is needed now.

TRANSIT

Mass transportation in Fort Lauderdale is entirely by motor bus. The bus terminal, located near the intersection of First Avenue and First Street Southeast, serves as the foci for all of the bus lines radiating throughout the City. The operating schedules to and from the central terminal are arranged so that all buses complete their runs at approximately the same time, which makes the terminal the principal transfer point. This concentration of buses within the central business district periodically throughout the day and evening is the source of considerable congestion as they approach and depart from the terminal. Although this arrangement may not be too critical now, it will become more increasingly so as the frequency of trips and number of lines are multiplied, and the volume of traffic on the streets/intensified

Figure 35 shows the routes currently traversed by the several lines, also those portions of the corporate area lying more than one-quarter mile from a bus line. All bus lines leaving the present terminal use heavily-traveled major streets through the central business district. Two lines (1 and 2) use Las Olas Boulevard, 7, 4 and 8 travel Andrews Avenue south and 3 and 6 travel it north. Second Street west of Andrews Avenue is used by lines 3 and 9.

The left-hand turns of buses into and from the streams of traffic on Andrews Avenue at Third Street and Las Olas Boulevard retard traffic flow at intervals along this busy thoroughfare, especially during rush hours. The intersection of Third Street and Andrews Avenue is particularly confusing.



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GEORCE W SIMONS JR

It would be helpful later to rework the various bus schedules so as to maintain a steady flow of buses into and from the terminal, and thereby eliminate the surges of movement characteristic of the present system. If the inbound buses of Routes 1 and 2 would turn north on Fourth Avenue and thence left into Second Street Southeast, a left-hand turn at Third Avenue will ultimately become a major commercial street on which traffic flows should not be retarded by left-hand turns. Similarly, if Route 5 could be extended south along Sixth Avenue to Second Street Southeast, the left-hand turn at Broward Boulevard could be eliminated. Broward Boulevard will become an increasingly important "through" street along which left-hand turns should either be eliminated or minimized. It is further suggested that Route 3, inbound, be routed south along Fourth Avenue Northwest to Broward Boulevard and thence east along Broward Boulevard to the terminal. This would shift the left-hand turn from Broward and Andrews to Broward and Fourth Avenue Northwest without increasing the length of haul to the terminal. The inbound trip of Route 9 should continue north on Fifth Avenue Northwest to Broward Boulevard, and thence east to Second Avenue to the terminal, thereby eliminating all left-hand turns in the central district except at Second Avenue, where the line enters the terminal. The elimination of these various left-hand turns, or their shift to less important spots, would materially expedite traffic flow on major streets.

The concept of a central loading and transfer station is good, providing patrons are not obliged to walk too far. The central facility removes buses from the moving streams of traffic during loading movements. It would, however, be still more effective if no curbside loading were permitted in the central district within 1,000 to 1,200 feet of the central station, because curbside loading in congested areas rotards all traffic flow. Such a plan would require bus patrons within the 1,000 to 1,200 foot radius to board buses at the central station or at the first scheduled stop.

The principal criticism of the present terminal is its restricted area. It can accommodate the currently operating buses during the loading periods, but when more lines are added, it will become congested and, possibly, hazardous. To overcome this objection, a new site in the direction of commercial development should be anticipated, one sufficiently spacious to accommodate a greater number of buses and allow more freedom of passenger movement. Some cities have provided similar terminals equipped with small shops for the last minute use of patrons.

As the City grows, existing routes must be extended or rearranged, or new routes added, some of which may not even penetrate the central district. With the completion of a roadway to the beach in the southern part of the City, an opportunity will be presented to establish a loop line serving the beach area from north to south, utilizing Tenth Street on the north, and Fifteenth or Seventeenth Street on the south. Other lines now existant can be expanded to penetrate the outlying areas under development.

TRANSPORTATION

Historically, transportation has contributed immeasurably to the growth and development of Fort Lauderdale. With the extension of the Flagler System into Miami, Fort Lauderdale began to take form as a City. Later, the extension of the Seaboard Railroad, from central Florida and the north into southeast Florida, introduced a new competitive element, giving Fort Lauderdale access to the tributary regions of two great trunk line systems. Since 1925, the State highway system has been extended and improved gradually until Fort Lauderdale is now accessible by highway to all parts of Florida and the nation. The projected super highway, from Miami to Jacksonville and northward, will improve still further the highway facilities. Port Everglades, created in 1926, established Fort Lauderdale as one of the principal deep water ports of the world. Although the City has two airports available to it, one a municipal port on the north and the other a navy port on the south, its importance as a major airport is subordinate currently to the international airports of Miami. The master highway plan of the City, previously presented, was designed in such a way as to coordinate the respective transportation facilities.

The Port Everglades development at the south limits of the City establishes an area that should be absorbed gradually by industrial and distribution facilities. There are large tracts of undeveloped land in this section, accessible to both trunk railroads via trackage facilities of the Port Authority. It is here that joint freight and interchange facilities should ultimately be provided, serviceable to Fort Lauderdale, Port Everglades, Dania and Hollywood. Already extensive petroleum storage and distribution facilities have been established here.

The principal railroad problem affecting the future character and growth of Fort Lauderdale revolves around the rightof-way and terminal facilities of the Florida East Coast Railway. This railroad was projected through this region when no one could foresee the subsequent tremendous development and growth that followed quickly in the wake of the railroad; a right-of-way farther to the west might have been projected.

Over the years, the right-of-way of the Florida East Coast Railway has become a definite barrier, dividing and determining the functional development on its east and west sides. As pointed out elsewhere, development east of the railroad has proceeded more rapidly than that west, and unless the railroad rightof-way is spanned by overpasses, as recommended, the inequalities of the past will continue in the future. The ideal plan would provide, of course, for the elimination of the barrier by moving the trackage westward to a point where the facilities of the two railroad systems could be unified, but such an undertaking is remote because of the many conflicting factors and interests involved. In the absence of an early realization of such a plan, the alternative of overpasses is proposed.

The passenger terminal erected when the Florida East Coast Railway was initially established still is used daily. Although located centrally with respect to the commercial development of the City, the station is wholly inappropriate and inadequate to meet the present needs of the City. Few cities of 40,000 in America have a more inadequate facility. Through the years, railreading has advanced greatly, and, whereas trains of a few cars' length were once the vogue, today trains of great length are common. Because of the narrow bridge over the New River, and the unique plan of double tracking employed, engines southbound stop on the north side of the river with their string of fifteen to eighteen cars blocking grade crossings for several blocks. With a minimum of six passenger trains per day in each direction, and a maximum of ten, the resulting delays at grade crossings due to the location of the present terminal are exceedingly costly and confusing to the motoring public. None of the grade crossings are protected with gates. Conditions currently are bad enough, but will deteriorate rapidly when twice as many cars circulate through the streets of the City, and two to three times as many people live in Fort Lauderdale. Obviously, to relocate the passenger terminal will be a much needed improvement in the greater Fort Lauderdale of the future.

A passenger terminal should be located to render the best possible service to the public using it, and at the same time, permit of economical, safe railroad operation. It is no longer necessary or desirable to locate such terminals in the centers or at the hearts of cities. Automobile transportation from the respective parts of the City over direct and well-patrolled major highways makes it possible to establish torminals at sites that are convenient and satisfactory to both railroad and patron. Terminals should, however, be located where the greatest number of people have access to them without the probabilities of delay due to traffic congestion.

Studies of railroad traffic movements through Fort Lauderdale, in relation to growth and development, suggest a new passenger station site in the vicinity of Third Avenue Northeast and Ninth Street Northeast. This location is on a stretch of straight track for starting and stopping. Currently, trains stopping in this location would block Tenth Street until the overpass recommended herein has been completed. An area sufficiently spacious could be prepared in this locality on which an adequate, creditable station could be erected. The site is readily accessible to Andrews, Third and Sixth Avenues and to Tenth Street, and thence to the downtown and the beach sections. From this site traffic could be dispersed without causing congestion in any part of the City. It is also relatively close to the newly established City Hall site on Andrews Avenue. The site is also accessible to the entire west side via Fourth and Seventh Avenues without encountering too many delays resulting from frequent bridge openings. Then, finally, this locality is in line with the active trend of development in the City.

The Seaboard station is located in the west part of the City. It is commodious and adequate to meet the needs of this railroad for many years.

In addition to the facilities of the railroads and Port, truck and bus transportation is also important. Many truck lines operate into Fort Lauderdale serving the various businesses. There are no central truck loading and distribution stations because most of the deliveries are made directly to the enterprise served. This activity, however, omphasizes the necessity of providing off-street loading and unloading areas in the future, such as were provided by the new Burdine development.

The Greyhound Bus Station for passengers is currently located at the corner of First Avenue and First Street Southeast, adjacent to the local bus terminal. This station is small and inadequate to properly serve the increasing bus traffic anticipated. An enlarged facility with more spacious arrangements should ultimately be provided elsewhere, preferably north of Broward Boulevard. At least a half-block should be allocated to a bus terminal and its appurtenances to accommodate the volume of passenger traffic using buses. It would not be amiss to establish a commodious bus terminal in the same area in which it is proposed to establish a new Florida East Coast Railway station. A transportation center created in this section would be removed from the congestion and confusion of the central business district, and yet easily accessible.

None of the major air lines stop at Fort Lauderdale because of its proximity to the large Miami terminals. The time will come, however, when an airport in the vicinity of Fort Lauderdale will serve to relieve the congestion at Miami, consequently, some thought should be given to the continued improvement and use of the municipal airport north of the City. The Navy Airport, south of the City, would be a commendable acquisition because of its close proximity to populated areas and the excellence of its facilities. When Fort Lauderdale attains a population two or three times its present number, there will be a demand for one or two airports, one for private planes and one for long distance commercial and cargo use. Provisions for these two fields should be anticipated now in order to fill the need when the demand arises.

SANITATION AND HEALTH

WATER SUPPLY - SEWERAGE AND SEWAGE DISPOSAL - DRAINAGE

The water supply of Fort Lauderdale has been derived from eleven wells, ten of which are scattered throughout a considerable area in the Golf Club section, west of the City. Water from these wells is pumped to the filtration plant, located on the West Dixie Highway about four miles southwest of the central business district. One well, located near the corner of West Broward Boulevard and Southwest Fourteenth Avenue, is pumped directly into the distribution system. These eleven wells are being augmented currently by seven additional twelve inch wells. Ten of the present wells are of twelve inch diameter, and one of ten inch, and their depths vary from 110 to 160 feet. Each of the wells is pumped at a maximum of not more than 500 gallons per minute.

According to studies conducted by the United States Geological Survey, "the supply is adequate, the quality of water after softening is good, and the water table situation is satisfactory because of the distances of the wells from the bay and from unregulated canals."

Water from ten wells is pumped through an aerater where the flow is by gravity, through ten (onê million gallons per day each) rapid sand filters into a 2.75 million gallons clear well located at the main pumping station. A 135,000 gallon elevated tank for washing filters is connected so that it may be drained into the clear well reservoir in case of emergency. The maximum treating capacity of the plant is 14 million gallons per day.

There are three elevated storage tanks: one of 500,000 gallons capacity located at Fifteenth Avenue and Tenth Street, one of 76,000 gallons on East Broward Boulevard and Victoria Park Road and one of 500,000 gallons capacity at Southwest Twenty-First Street and Fifth Avenue Southwest.

Figure 36 shows areas of Fort Lauderdale that are accessible to and served by water services, also the locations of the three elevated storage tanks.

A thirty (30) inch supply main extends from the plant along Broward Boulevard to the elevated storage tanks.

Since the installation of the present wells, treatment and pumping plants in 1925, the whole system has been in continual process of extension and improvement to meet the ever-increasing demands made on it.

Table XII shows the total annual pumpage, average daily pumpage for the year and the maximum daily pumpage for each year, 1940 to May. 1948.

	TOTAL ANNUAL	DAILY PER CAPITA	AVERAGE		PER CENT MAXIMUM DAY IS OF AVER-
YEAR	PUMPAGE	(GALLONS)	DAILY	MAXIMUM DAILY	AGE DAY
1940 1941 1942 1943 1944 1945 1945 1946 1947 1948	685,319,700 811,176,800 372,894,100 1,099,674,400 1,374,569,100 1,391,824,100 1,530,313,200 1,399,642,000 598,912,000	104 고4-6	1,870,000 2,230,000 2,330,000 3,000,000 3,740,000 3,810,000 4,100,000 3,820,000 4,950,000	4,133,000 5-7 4,780,000 5-23 4,450,000 8-11 5,510,000 6-17 5,978,000 6-9 5,306,000 3-24 6,615,000 4-24 6,336,000 5-27 7,488,000 3-19	2.20 2.15 1.37 1.34 1.59 1.40 1.61 1.66 1.56

*January-April, inclusive



From the above table it will be noted that the annual pumpage of water doubled from 1940 to 1948, and based on the normal recorded populations of 1940 and 1945, the per capita daily pumpage increased from 104 to 146. Obviously, the months of greatest pumpage were those generally from October to May, inclusive, which were also the months of the greatest seasonal population and the lowest incidence of rainfall. Although the figures do not reflect the various uses of water, much of the annual pumpage is used for the watering of lawns and shrubs.

The maximum daily pumpage usually occurs in months of low rainfall, during the first half of the year. Since 1940, it has varied from 140 per cent of the average daily pumpage to 220 per cent, with an average of 176 per cent. The maximum daily pumpage for 1948, to May 1, was slightly more than one-half the maximum treating capacity of the present plant. It is also nearly twice the maximum daily pumpage of 1940.

Eighteen wells with a maximum capacity of 500 gallons per minute will be able to produce 5.4 million gallons per 10 hours, or 8.1 million gallons per 15-hour period, which will easily meet the current requirements of the average and maximum day. But, if the growth of Fort Lauderdale pursues the course herein predicted (Figure 6), additional facilities will be needed prior to 1955-1960.

On the basis of an average per capita pumpage of 150 gallons and a maximum day of 175 per cent of the average, the following approximate volumes of water should be anticipated to satisfy the requirements of the specified populations:

POPULATION	AVERAGE DAILY PUMPAGE	MAXIMUM DAILY PUMPAGE
50,000	7,500,000	13,000,000
60,000	9,000,000	15,700,000
70,000	10,500,000	13,400,000
80,000	12,000,000	21,000,000

These estimates are; in all probability, somewhat in excess of the actual requirements, but, notwithstanding, they reflect the trend and point to the time additional facilities will be needed. In other words, between 1965 and 1970, the capacities of the source, treatment and pumping facilities must be doubled.

SEVERAGE AND SEWAGE DISPOSAL

In 1926-1927, Fort Lauderdale prepared a master sewerage plan applicable to the corporate area, which is still used as a guide to sewage extensions. The master plan not only shows the routes of mains and laterals, but their sizes, and the location of ejector and pumping stations. After the boom, and during the depression of the '30s, little or no sewerage extension work was done. Since the start of the second period of intensive growth, the City's inability to extend sewer lines as rapidly as needed has resulted in the installation of many individual septic tanks. Figure 37 shows what a small portion of the City is now served by sewerage, a situation which is critical.

The Commission should adopt a health protection policy of extending sewer lines as rapidly as possible to eliminate septic tanks. Such sewer extensions could be financed by proceeds from revenue bonds, payable from sewer rentals based on water consumption, a plan now being followed in Miami and Daytona Beach, Florida. This plan is recommended for immediate consideration.



Plans were prepared in 1926-1927 for an elaborate sewage treatment plant, which was constructed subsequently, but never operated as planned. Instead, much of the plant was stripped of its mechanical equipment. Currently, the primary treatment portion of the plan, only, is operating. The activated sludge portion of the plant is being by-passed. This plant, reconditioned as originally intended, would still render an effective service. It is located on Northwest Sixth Street (Figure 37).

Currently, much partially treated and untreated sewage is flowing into the waterways surrounding Fort Lauderdale. If the practice continues, the waters of the area will become increasingly fouled and polluted. Such conditions are not indicative of good sanitary practices. Not only should the plant afford primary and secondary treatment, but its capacity must be kept apace of the growth of the community.

DRAINAGE AND FEST CONTROL

The welfare and comfort of the citizenry of Fort Lauderdale will improve once a planned program of mosquito and sandfly control is inaugurated. The pleasure of the beach area is frequently disturbed by the sand-fly activity. The City, in cooperation with Broward County, should begin the treatment of the marshes and sloughs in the northeast part of the City, which are the principal breeding areas. Effective systems of pest control have now been established, which applied here will greatly improve the liveability of the whole area.

The rising waters of 1947 pointed out that the problem of drainage in the City is not solely a local problem. The exceptionally heavy rains and high tides resulted in a condition which is not apt to be repeated except under the same unusual conditions. There are, however, several areas within the City limits that would benefit from additional drainage. The most important area is that in the central business district near First Avenue and Broward Boulevard, near the Post Office, and the fill on the western end of the Himmarshee Canal. There is also a small section near Tenth Street and Fourteenth Avenue Northeast which requires attention.

Any large scale drainage program at this time might detract from the vastly more important other public works proposals contained in the comprehensive plan. Areas requiring special treatment may be added to the general program from time to time. Drainage will always be a problem because of the topography and the vast areas of the Everglades, which must pour their excess waters over the east coastal rim to reach the ocean.

SUBDIVISION CONTROL AND DESIGN

The physical pattern of the City is a mosaic of land subdivisions (Figure 3) of varying sizes, many of which were laid out and developed in advance of corporate expansion. The initial town site subdivision, with its street widths and lot dimensions, established a central plan or pattern that influenced all subsequent land subdivision patterns. As the original town expanded, and activity moved farther from the center, subdivisions clinging to the basic pattern were developed, especially for dwelling purposes. The result has been the repetition of the monotonous gridiron characteristic of so many American cities. The land owner, in contemplating the subdivision of his land, was interested primarily in the speculative aspects of the venture, in the number of lots each acre of land would produce and be sold at an optimum profit. The function of the individual land parcel in the creation of a wholesome, well-balanced structure as a whole was of no particular concern. Individualism was predominant. Each land subdivision became a separate, independent parcel of land, cut up and marketed without regard to the functions of the adjoining areas or the welfare of the community as a whole.

Land parcels aggregating considerable area, subdivided solely for residential purposes without regard for open spaces for public use, such as play spaces, parks, schools and recreation areas, force upon the community the necessity of acquiring such necessary public areas after the lots have been improved for private purposes, thus increasing the cost far above the figure which would have/obtained if the facility had been incorporated in the original subdivision designs. Likewise, off-street parking and car storage spaces are lacking, and either the whole area is open to commercial improvement, or it is rigidly excluded. Too narrow lots promote unnecessary and excessive density of land use. As a result of this unguided, hit or miss subdivision activity, American cities are currently confronted with many large scale and high-cost projects to remedy street patterns of arbitrary uneven widths, severe jogs, dead ends and grade crossings, which resulted from the wasteful and dangerous earlier practices and which are incompatible with the demands of a new era of fastmoving traffic.

Land subdivision and resubdivision is still essential to the growth and development of the City. To prevent the mistakes of the past and promote a more wholesome, orderly development, minimum standards of land subdivision are desirable. Too often a "subdivision" is an open field, with streets and lots designated by wooden stakes with, perhaps, one main street roughly graded. The land, topographically, is unsuited to residential uses and, geographically, too remote from water and sewerage utilities. The more progressive, civic-minded developers are willing to spend large sums of money to provide paving, curbs and gutters, street plantings, lights and utilities, realizing that such expenditures contribute to the quality and attractiveness of the community as a whole. But too few developers are willing to assume these responsibilities; they get by with bare necessities, anticipating that the City will provide the essential services and utilities at public expense. Such uncontrolled activities have often resulted in the creation of many illadvised subdivisions that ultimately find their way to the delinquent tax roll. A general pattern of land uses (zoning) supplemented by a minimum set of land subdivision rules or guides will prevent much of the spotty, indiscriminate development characteristic of American cities.

Authorities have quite generally agreed on certain fundamental principles which should govern subdivision practices. Primarily, the subdivision should be considered an integral part of the whole, and be correlated to the neighborhood of which it is a part. If a large subdivision, it should be considered and developed as a complete neighborhood, with its alloument of space to public and semi-public uses and for commercial development. No longer should a subdivision located within the corporate area, or contiguous thereto, be considered as an entity independent of the welfare of the nieghborhood or region of which it is an integral part. Specifically, subdivision designs:

- 1. Should be correlated to the official street pattern of the City.
- Should have ample areas reserved for public and semipublic uses.

PRINCIPLES OF SUBDIVISION DESIGN GEORGE W. SIMONS JR. - PLANNING CONSULTANT



GOOD DESIGN FOR A LARGE SUBDIVISION

A COMPACT SHOPPING CENTER WITH PARKING SPACE SHOULD BE PLANNED AS PART OF THE SUBDIVISION. A LARGE SUBDIVISION SHOULD INCLUDE SITES FOR SUCH COMMUNITY FACILITIES AS PARKS & PLAYGROUNDS, SCHOOLS & CHURCHES.



UNDESIRABLE

DESIRABLE

PROTECT RESIDENTIAL LOTS FROM MAJOR STREET TRAFFIC BY PARALLEL LOCAL SERVICE ROAD & PLANTING STRIP.

- 3. Should have streets and lots of accepted dimensions.
- 4. Street curvatures should follow accepted standards.
- 5. Block lengths and widths should be defined.
- 6. In large subdivisions, commercial centers and community buildings should be provided.

Adherence to a few minimum regulations to be administered by the Planning Board will go far to assure the people that a wholesome pattern of physical development will ultimately result, one in which the integrity of character and value will be preserved. The following figures illustrate the differences between good and bad practices in land subdivision.

CIVIC ART AND COMMUNITY APPEARANCES

"The primary purpose of the City is to provide adequate living and working accommodations for its population." Cities are for human beings, and to be liveable, wholesome and productive of the best, they should have a well-rounded and balanced growth, be healthful and, by such development, achieve attractiveness, order and beauty.

Civic Art has to do with anything that contributes to or enhances the liveability of the City, its general attractiveness, appeal and beauty. It encompasses those qualities of cleanliness, noatness, order, efficiency and dignity that stir men's souls and arouse in them a new sense of civic responsibility and consciousness.

As one travels over the country through hundreds of average cities, the impressions made by some are stamped indelibly on one's memory. The beauty and spaciousness of Washington are thrilling; the magnificence and scope of Chicago's lake shore drive and parks captivates one; the quiet beauty and natural development of the Minneapolis park system are restful and pleasing; the stately beauty and harmonious arrangement of San Francisco's Civic Center are enthralling; the cleanliness and newness of Tulsa are refreshing; and the charm and screnity of old New Orleans and Charleston are appealing. Outstanding cities - yes, many of them; they all possess certain qualities that remove them from the class of the ordinary. They are places of distinction. In commenting on an individual, we frequently refer to his "personality." A City has "personality"; a quality that impresses itself deeply on the minds and memories of man to such a degree that it is remembered and talked about, whereas hundreds of others are forgotten. Every City can be an average City just another place, but that intangible something called "personality" contributes much to the life and welfare of the City just as it does to the lives of individuals.

Too many people measure the greatness of their City by its commercial and industrial prestige. Fine buildings, smoking factories and busy stores are desirable assets of any city. They inspire progress and activity, but smoking factories do not always make a City liveable and an object of pride. Obsolete rundown buildings do not inspire confidence. To be liveable and inspiring, cities should be efficient and orderly in their pattern of growth and development; they should have adequate and decent housing facilities, adequate and well-equipped parks and recreation facilities, an adequate and efficient circulatory system and easy accessibility to public utilities. Every person has an innate desire for attractiveness, order and beauty. The executive will discard his old furniture to install something now that adds beauty and distinction to his office. He practices the same rule as the industrialist. Even industry seeks to streamline and beautify the product to make it more appealing to the consumer. But, strangely, the executive and industrialist seldom demand that the same principles be applied to the City wherein they live. Many are indifferent and insensible to those things that have happened "across the tracks," indifferent toward the needs of those finer qualities that contribute to a better, more inspiring community life.

To achieve greatness and distinction and "personality," the iitizens of the City should think a little in terms other than the material. They must recognize the usefulness and value of those things that contribute something more than merely "bread and butter." They must become interested in the community as a whole; they must become interested in appearances and the conditions of the environment. They must create a new, stimulating "civic consciousness," that intangible something to "lift" their feeling of pride and loyalty to new heights, above the average.

Fort Lauderdale is a relatively young, new City. It has not yet been spoiled. Its location on the sea, its many island developments, its winding streams and waterways impart to Fort Lauderdale an attractiveness and charm that is unique. The tropical vegetation, trees and landscaping contribute greatly to its desirability as a place to live. In the growth that lies ahead, the beauty and appeal of the present should be continued. An Art Jury created by the City would be helpful to maintain the harmony and consistency of architectural development. Nothing should be tolerated that clashes with or disturbs the general beauty of the scene. It is difficult to build, but easy to destroy. Enabling legislation would be required.

In addition to the creation of an Art Jury, there are other things the City can do to improve its attractiveness and appearance, and contribute to its dignity and character.

- 1. Entrances to the City. A front door usually admits one to the living room of the home; it is a spot of happy anticipation. The entrances to the City are analogous to the front door of the home. After riding through the country, one often gets a shock at the front door. Roadside stands, juke joints and shacks make a bad impression. They mar the beauty of the scene. The County and the City, working together with the various civic organizations, should strive to keep the gateways clean and presentable. They should be attractive, not disgraceful. Hot dog stands, disreputable shacks and other roadside enterprises should be discouraged. The roadsides should be planted with flowering shrubs, and those structures erected should be attractive in design and serve a useful purpose.
- 2. Property owners and tenants should be urged and encouraged to plant and <u>cultivate lawns and flowering shrubs</u>. Neighborhood contests should be initiated to stimulate a lively interest. A little activity in this direction would transform many unattractive spots into beauty places.
- 3. <u>Billboards</u> should not be permitted to mar the landscape or scenery. No billboard should be so located that it becomes a hazard to traffic by diverting the attention of the driver. Billboards are often means of harboring filth accumulations. They are hardly economic essentials today. Entrances to the City should not be cluttered up with dilapidated billboards. In Massachusetts, the Supreme Court has ruled that billboards may be regulated on the ground of safety.

- 4. The <u>overhanging sidewalk sign</u> is a common sight. Frequently, morchants vie with each other to see who can get the best and biggest visual advantage. Some signs are hung high, some low; some even project into the highway areas. Filling and service stations not infrequently erect signs in the corner plot of intersections, areas that should be free from obstruction. Every overhanging sign occupies public property. No businesses have a vested interest in that land between the street lines. That is public property for the convenience and safe circulation of the public. To control overhanging sidewalk or street signs, and other obstructions in the street area, the City should impose a substantial fee or tax. The imposition of such a tax, supplemented by regulations controlling the kind and size, would eliminate many unsightly and often grotesque obstructions, and thereby greatly improve the appearance and the safety in high winds of all highways.
- 5. The extension of business, ribbon-like, along many streets depreciates the value of much property that can never be absorbed for commercial purposes, and not all of it can be. The super markets have discovered that critical intersections are valuable, especially if they can provide sufficient off-street parking space. Neighborhood business areas should be encouraged. The Chamber of Commerce and the Real Estate Board would be ideal agencies to promote the establishment of critically-located intersection business centers where the tributary public can be served.
- 6. Enough progress has already been made throughout the nation to demonstrate the value of good housing, in the building of good citizens and good cities. The Police Department and Juvenile Courts can relate plenty of the evils and costs to the community of bad, sordid housing. Most of our cities have slum and blighted areas; they also have too many old, obsolete, oversized homes head-od stright for blight. The infection, once started, grows and spreads with insidious rapidity, destroying the values and taxpaying capacity. The public housing projects now in operation prove conclusively that people appreciate decent surroundings.
- 7. General clean-ups, renovating, painting, trimming, will do much to improve the appearance of the City. The exercise of cleanliness and neatness at home will be reflected in the character of the neighborhood, and from the neighborhood to the City as a whole. Every day should be clean-up-paint-up day.
- 8. <u>Parks and recreation</u> areas are the lungs of the City. Such open spaces should be provided in every neighborhood, as previously recommended, and each/be attractively kept.

Cities need not be ugly and unsightly. They need not be colorless, drab or ordinary. The civic "forces" of the City, as represented by the Chamber of Commerce, the civic clubs, garden clubs, neighborhood associations and Parent Teachers, directed through channels of coordinated thinking and action, are all that are necessary to remake a City. Such "forces," thinking and acting in selfless ways for the welfare of the whole, can soon impart to a City a "personality." To marshal the "forces," to put them to work for the good of all, is the job the progressive citizenry of Fort Lauderdale should tackle. It is an unselfish service requiring "greatness."

Fort Lauderdale is on the threshhold of a great period of growth and improvement. That growth and improvement should be inspired by the achievements of the past, a heritage that deserves even greater things. Balancing the altruistic with the useful and material, Fort Lauderdale will emerge as the unique beauty spot of the lower East Coast.

ACTIVATION OF THE PLAN

Most cities have grown without the benefit of an over-all comprehensive plan. The builders of an earlier day did not foresee the impact of modern technology, sociology and economics. People lived close together; they walked to and from their work, traveled by horse and buggy, street car or bicycle. Streets were built for such modes of transportation. Technology has changed the picture, and today cities are confronted with many complex problems affecting their very existence. Cities are taking stock, diagnosing their ills and preparing orderly inventories of their needs/ programs of future projects. Cities are preparing comprehensive plans of development based on facts and trends.

Plans are guides to orderly action. Just as the plans of the architect and engineer define patterns for the building of structures and utilities, so does the comprehensive City Plan lay down a pattern of growth and development for the urban structure so that desirable goals may be achieved in an orderly fashion.

The comprehensive City Plan is a correlation of a great many specialized plans relating to the various phases of urban development. Of necessity, such a plan is formulated on broad, general lines. The comprehensive plan is developed for and around people, their way of living, moving about, working and playing. It is not a rigid pattern, but one subject to modification and change as conditions change.

Planning studies reveal the need for many improvements which in the aggregate require vast sums of money. All the improvements proposed are desirable, but, fortunately, all are not needed at one time; they can be spread over a period of years, according to their priority of necessity and in accord with a reasonable ability to finance. Too often people see a list of recommended projects with their estimated cost in the aggregate. Without further study they throw up their hands in despair. They fail to see that the planning studies have evaluated and correlated the long range needs of the community and assigned an order of necessity to the many projects proposed, some for early realization, others for realization years hence.

Broad, comprehensive plans can remain static and inert or become dynamic, living instruments. Which course they take depends primarily on the people of the community for whom they were made. Through the concerted efforts of the various specialized action groups in the City, including semi-public and semi-official groups, as well as the various departments of the City government, the various projects proposed will be achieved. Acting as a stabilizer directing the action of the civic forces, the Plan is designed to keep the whole community in balance while progress is made toward specific goals.

There seems to be no reliable stereotyped course of action to insure the final consummation, in orderly fashion, of those projects recommended or proposed in the Plan. Changing conditions and demands emphasize the necessity of utilizing various devices for activating and keeping alive the objectives of the Plan, feature by feature. In Fort Lauderdale, the City Planning Board and the City Commission are the two principal official groups directly concerned with the physical development and requirements of the City; they are interested in finding ways to activate the Plan. To assist them, however, are the people comprising the City - people who are also interested in building a better and improved place in which to live, work and play. Through their various organizations, Chambers of Commerce, Civic Clubs, Parent Teachers Associations and kindred groups, the people can express themselves and mobilize their energies and enthusiasms for the general welfare and betterment of their City. But, before these forces can be marshalled and their interests stimulated, they must know what it is all about. They must be informed as to the purposes and objectives of the comprehensive Plan and how the realization of its many features will benefit them. All this suggests a process of education and public information in one or several ways.

The people generally should first understand the functions of the Planning Board as defined in the City Charter. They are responsible specifically for the technical preparation and studies of plans and the zoning ordinance, and the constant review of those many factors basic to the Plan. Planning Boards are primarily advisory, having no authority to enforce or execute their plans. They can recommend to the City Commission, but they cannot compel a recognition of their work. They cannot even prevent the adoption of proposals in absolute opposition to the general plan they recommend, or its principles. Although the Planning Board can and does promote the recognition and adoption of its recommendations, they can go only so far. The real responsibility rests with the people who comprise the City and who are able, better than anyone else, to promote and implement the Plan.

The people who must depend upon the Planning Board to protect their interests in the comprehensive, orderly development of the City are not always aware of the nature of the Planning Board's activities, their proposals and ideas to effectuate the Plan, and the forces opposing action on the many details confronting the Board to maintain the integrity of the Plan. Too often, too few people, even in high places, have little or no knowledge of the Plan and its meaning. Experience in many communities of all sizes has proven that citizen participation in plan activation is an effective vehicle to supplement the work of the Planning Board. Citizen groups representative of the people can stimulate citizen interest and foster citizen participation in the planning process. Such citizen groups are also helpful to the City Commission in emphasizing the need of public improvements proposed in the Plan, especially in explaining the proposals to the people. In other words, active citizen activity can become an important liaison between the Planning Board and the people. The effectiveness of the people, however, will depend on how thoroughly they understand the purposes and aims of the Plan.

Informing the people as to the contents, aims and value of the City Plan can be accomplished in several different ways. One important aid would be the publication of the Plan so that it could be made readily available to the public. With the various written proposals, charts, diagrams and pictures in printed form for public review and study, the Plan would become something tangible in the minds of the people. If it is impossible to publish the entire plan as submitted, then an abstract reflecting the high lights would be most desirable and helpful.

A portable exhibit illustrating the principal features of the Plan, and what its gradual consummation would mean, should be prepared and displayed at various meetings throughout the community. Such an exhibit, consisting of maps, diagrams, pictures and colorful captions, would attract the attention of many people and familiarize them with the many elements included in the Plan. This exhibit could be moved from club to club and school to school.

Newspaper articles, radio talks, addresses to civic clubs and study groups and/in the public schools would be helpful in publicizing the various provisions of the Plan. Many civicminded citizens could participate in such commendable service, fully conscious that they are contributing something to the welfare and betterment of their home City. Articles in the local newspapers might appear as a series, each dealing with a section of the report. Members of the Planning Board, the Mayor, City Commissioners, City Manager and other public spirited citizens could act as emissaries, explaining and promoting discussion. Since children now in school will be adults when much of the Plan is in process of realization, the opportunity to inform and interest them now should not be missed. Essay and art contests in schools are means of arousing the interest of not only the youngsters, but the parents in the homes from which the children come.

The radio is especially helpful in keeping the Plan alive. Forum discussions, participated in by leading citizens, will bring the Plan forcibly to the notice of every listener, and kindle desires to accomplish great objectives. The Planning Board can act as the central agency, guiding such educational programs.

During the progress of the various publicity programs, many people will become familiar with the provisions of the Plan for the first time. Their interest will begin to stimulate action.

A group of specialized citizen committees should be organized to study ways and means of achieving the proposals set forth in the Plan, one to consider street needs, another recreational facilities, still others for such subjects as parks, utilities, transportation, etc. Each committee should consist of men and women constituting a broad cross-section of the community, each one especially interested in the subject assigned. Close cooperation between the various committees, the Planning Board and the City Commission should characterize their activity.

A citizen committee with an intelligent interest in the future growth and development of the City, and a desire to render a worthwhile service, can formulate plans to create a still greater planning organization that will ultimately penetrate every phase of community life and activity. Membership in the citizens' planning group should be available to existing civic groups, business and industrial concerns, institutions and individuals. Anyone interested in his City should be eligible to participate. The broader and more diversified the membership, the more intense the interest. Spearheading the citizens' planning organization should be an executive or steering committee of alert, representative citizens. This committee would not assume or encroach upon any rights and duties of the Planning Board, but, instead, would act as an agency to assist the Board. The Planning Board will be occupied continually with its routine and detail, whereas the citizens' group will be more concerned with the broader aspects of the problem.

Through the citizens' organization and its various sub-committees, the people can be informed. They can then devise and initiate ideas for intelligent, progressive action, which will ultimately result in a realization of the Plan's objectives.

SUMMARY

Throughout this report there are found recommendations and suggestions to guide the balanced development of the community, and integrate each into an attractive whole. This Plan is not designed for immediate fruition, but, rather, to establish a standard of reference for the next three or four decades which will assure that each step of the eventual program will be correlated with that which has gone before and that which will be established later. It is not a design for spending. On the contrary, its purpose is to produce the maximum of citizen health, convenience, morals, safety and general welfare from each tax dollar dedicated for public improvements. As it is not intended that all of these progressive recommendations be undertaken smultaneously, it is necessary to establish priorities, based upon urgency of need and the local ability to finance them. To assure the realization of the goals set forth in this report, it is recommended that long-range programming and capital outlay budgeting be adopted. This will prevent any feature of this Plan from being overlooked during the long period with which it is concerned. It will make certain that the program will be balanced equitably among its various component parts, and not concentrated on certain popular phases of it.

To establish these priorities and adopt long-range programming is purely a local function. But a point of departure for further consideration is established by the following groupings of the recommendations, based upon those projects and the apparent community need. There is no significance in the particular groupings, nor any intended in the listings or the position within each group. Local reaction to the expressed needs and desirability of paying, therefore, must determine the final priorities.

GROUP I.

Adopt subdivision regulations.

Adopt long-range programming and capital outlay budgeting.

Extend Tenth Street westerly to City limits.

Construct overpasses at Florida East Coast Railroad on Broward Boulovard and Tenth Street.

Establish inner circumferential highway, Seventh Avenue, Northwest and Southwest, Ninth Street Southwest and Southeast, Federal Highway and Broward Boulevard.

Construct highway to beach area in Southeast Quadrant, either Fifteenth or Seventeenth Street.

Widen and improve Third Avenue Northeast from Sixth Street Northeast southward.

After new Florida East Coast Railroad passenger terminal under construction, close Third Avenue Northeast grade crossing.

Move charter boat berths down-river and regulate river traffic to minimize bridge openings.

Establish by ordinance the following streets as arterial highways or through streets:

Andrews Avenue Third Avenue Seventh Avenue Atlantic Boulevard Tenth Street Ninth Street Southwest Twenty-Fourth Street Las Olas Boulevard Victoria Park Road Sixth Avenue Fourteenth Avenue Proward Boulevard Sixth Street Fourteenth Street Twelfth Street Southwest

Channelize all central business district streets with eight# foot parking lanes and twelve-foot moving lanes.

Acquire off-street parking facilities within and adjacent to the central business district.

Extend sewer lines.

Establish secondary treatment of sewage.

Erect parking meters on remaining unmotered curbside parking spaces in the central business district.

Maintain International Park in natural state, but improve access.

Acquire Navy Airport.

Increase capacity of sewage tratement plant as sewerage system is extended.

Establish and maintain mosquito and sand-fly eradication program.

Construct additional drains where recommended.

GROUP II.

Construct overpasses at Florida East Coast Railway on Twelfth and Twenty-Fourth Streets south.

Widen and improve streets as required under adopted Master Street Plan.

Establish intermodiate circumferential highway:

Sixth Street Northeast and Northwest Seventh Avenue Northwest and Southwest Twelfth Street Southwest and Southeast Federal Highway

Establish outer circumferential highway:

Tenth Street Northwest and Northeast Atlantic Boulevard Eighteenth Avenue Northwest and Southwest Twelfth Street Southwest and Southeast Either Fifteenth or Seventeenth Street, whichever is selected

Construct either high level bridge or tunnel across New River at Federal Highway.

Construct bridge over New River at Third Avenue.

Improve following streets:

Tenth Street Broward Boulevard Las Olas Boulevard Sixth Street Sixth Avenue Fourteenth Avenue Fourteenth Street Atlantic Boulevard Victoria Fark Road

Construct cloverleaf intersection at Lao Olas Boulevard and Atlantic Boulevard.

Widen roadway on Third Avenue south of Tenth Street to forty (40) feet.

Replace Las Olas Boulevard bridge over Intracoastal Waterway.

Develop Birch Park area with off-street parking area, fire station, yacht basin, model yacht basin, playfield, playground, picnic sites, game shelters, community buildings, bridle paths and gardens.

Acquire additional parks and recreational sites within recommended areas.

Develop park-playground-playfield combination at City Park and Coast Guard Park.

- Develop tourist centers at Birch Park, City Park, Coast Guard Park, including game pavilions, shuffleboard, roque, etc.
- Develop major yacht basin at Coast Guard Park and establish charter boat headquarters there.
- Acquire high school sites of at least thirty acres, one north and one south of New River.
- Convert use of present high school site to cultural center and off-street parking site.

Acquire new elementary school sites within recommended areas.

Erect additional fire stations (3).

Enlarge present local bus terminal and relocate, if necessary.

Relocate interurban bus terminal north of Broward Boulevard.

Double sources, treatment and pumping facilities of water system.

GROUP III.

- Complete widening and improvement of Master Street Plan components.
- Develop and extend Sixth Street Northeast to Atlantic Boulevard.
- Improve and widen Victoria Park Road to forty (40) feet from Broward Boulevard to Tenth Street.
- Widen Tenth Street roadway to sixty-four (64) feet east of railroad and to forty (40) feet west thereof.
- Widen Sixth Avenue roadway to sixty-four (64) feet south of Tenth Street.
- Widen Las Olas Boulevard roadway to sixty-four (64) feet west of Intracoastal Waterway and two thirty (30) foot roadways east thereof.
- Widen Atlantic Boulevard roadway to sixty-four (64) feet.
- Widen Broward Boulevard roadway to sixty-four (64) feet east of railroad overpass and to forty (40) feet west thereof.
- Widen Sixth and Fourteenth Avenues and Fourteenth Street roadways to forty (40) feet, also Fourth, Seventh, Eleventh and Eighteenth Avenues, and Seventh, Twelfth and Twenty-Fourth Streets Southwest.

Acquire two elementary school sites in beach-island area.

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