

CENTRAL CITY COLUMBIA S.C. MASTER PLAN

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A REPORT AND PLAN
PREPARED FOR THE
CENTRAL CITY
DEVELOPMENT COMMITTEE
OF COLUMBIA, S.C.

CENTRAL CITY COLUMBIA S.C. MASTER PLAN

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CENTRAL CITY COLUMBIA S.C.

MASTER PLAN

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A. INTRODUCTION

1. Background

1. Columbia was founded as the State Capitol in 1786 by an Act of the Legislature. Among other things, this Act provided guidelines for Columbia's initial growth, and thus it became one of the first planned cities in the United States.

2. With the passing of time, however, Columbia broke through its original boundaries and spread, unplanned, into the countryside. As a result, various land uses mixed in an incompatible manner, and the basic urban fiber of the city began to be altered.

3. Many people became alarmed by this course, and on the initiative of the local civic League, a new plan for Columbia was prepared in 1905.

4. Since then, and particularly over the last 30 years, the Columbia metropolitan area has experienced further growth of an exceedingly dynamic nature. In fact, it became the fastest growing area in South Carolina and from 1940 to 1960 registered an increase in population of 83.2 percent against the State's population increase of only 24.2 percent of the same period. Since 1960, the metropolitan area has grown by another 28.4 percent.

5. As in other cities, day-to-day problems were met by expedient solutions necessitated by the pressing need to give organization and direction to this growth. Such an approach, however, could not satisfy a community which had developed a strong regard for planning as an instrument for guiding growth to the future. Thus, a new planning effort by the City Planning Commission of Columbia resulted in the 1961 Comprehensive Plan for the Columbia Planning Area. Among the many recommendations of this Plan was an emphasis given to the need for revitalization of the Central City Area, the heart of the City of Columbia.

6. And, as with many other core areas, Central City is in a period of change, with potential expansion vying for official attention and core city problems such as blight and competition with suburban centers. Whether this change will be properly harnessed depends on Columbia's ability to plan for the future in such a way as to provide solutions which will be satisfactory from all points of view: economic, social, political, technical and cultural and aesthetic.

7. The community's concern to acquire control over the application of such an approach for the Central City was again manifested in January 1968, when the Central City Development Committee was formed by the Greater Columbia Chamber of Commerce with the participation of leaders from all sectors of the community. In January 1969 the Committee engaged Doxiadis Associates, Inc., Wilbur Smith & Associates and Lyles, Bissett, Carlisle & Wolff to create a Plan for the Central City Area, as consultants for the preparation of a plan to guide the orderly development of the Central City.

2. Scope of the Study

8. Substantive progress in the physical and economic development of the Central City cannot and will not happen by chance. It must occur by choice and by planning. To plan is to form the approach for the attainment of objectives. Though there may be questions concerning details of a Plan and the mechanics of its implementation, there can be no doubt as to the need of having a plan to guide the area's development and renewal. Completely independent and uncoordinated action by the business community or the City or County governments will not solve the problems inherent in the Central City. Recognition of the need for planning and for the establishment of goals is the first big step toward progress.

9. The scope of the study as defined by the Central City Development Committee and the Consultants, was twofold and included:

- a. The preparation of a Master Plan corresponding to the anticipated and desirable growth of the Central City up to the year 2000; taking into consideration the long-range development of the metropolitan area.
- b. The conception and presentation of major development projects within the framework of the Master Plan and in consideration of their implementation potential.

10. In order to fulfill this general scope the study provided for the following main steps:
- a. Survey of past and present, demographic, economic, social, and physical phenomena of the metropolitan area and of the Central City in particular. The findings are presented in Chapter B: Inventory of Existing Conditions, page 8.
 - b. Definition and analysis of the weaknesses and the potential of the Central City and determination of the feasible and desirable goals and objectives for its development. This is presented in Chapter C: Analysis - Goals and Objectives, page 69.
 - c. Identification of the forces which are expected to influence future development of the Central City, analysis of future growth trends, and forecasts of future floor space requirements. This is presented in Chapter D: Future Growth and Requirements, page 84.
 - d. Translation of future space requirements into planning quantities and synthesis of these quantities in functions measured to accommodate the demands which could be imposed by the future. Also measurement of future transportation needs and conception of a transportation plan characterized by accessibility, adequate parking, and separation of vehicular and pedestrian traffic to the extent possible. This synthesis of functions and the transportation plan are presented in Chapter E: The Master Plan, page 120.
 - e. Development of projects which are essential to implementation of the Plan. These projects are described and related to the overall concept in Chapter F: The Development Projects, page 188.
 - f. Review of various administrative and legislative tools available for carrying out the Plan are presented in Chapter G: Implementation, page 205.
 - g. The Study concludes with the Study Team's recommendations in Chapter H, Conclusions and Recommendations, page 223.


3. Definition of Terms

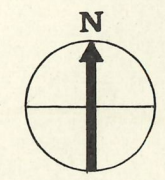
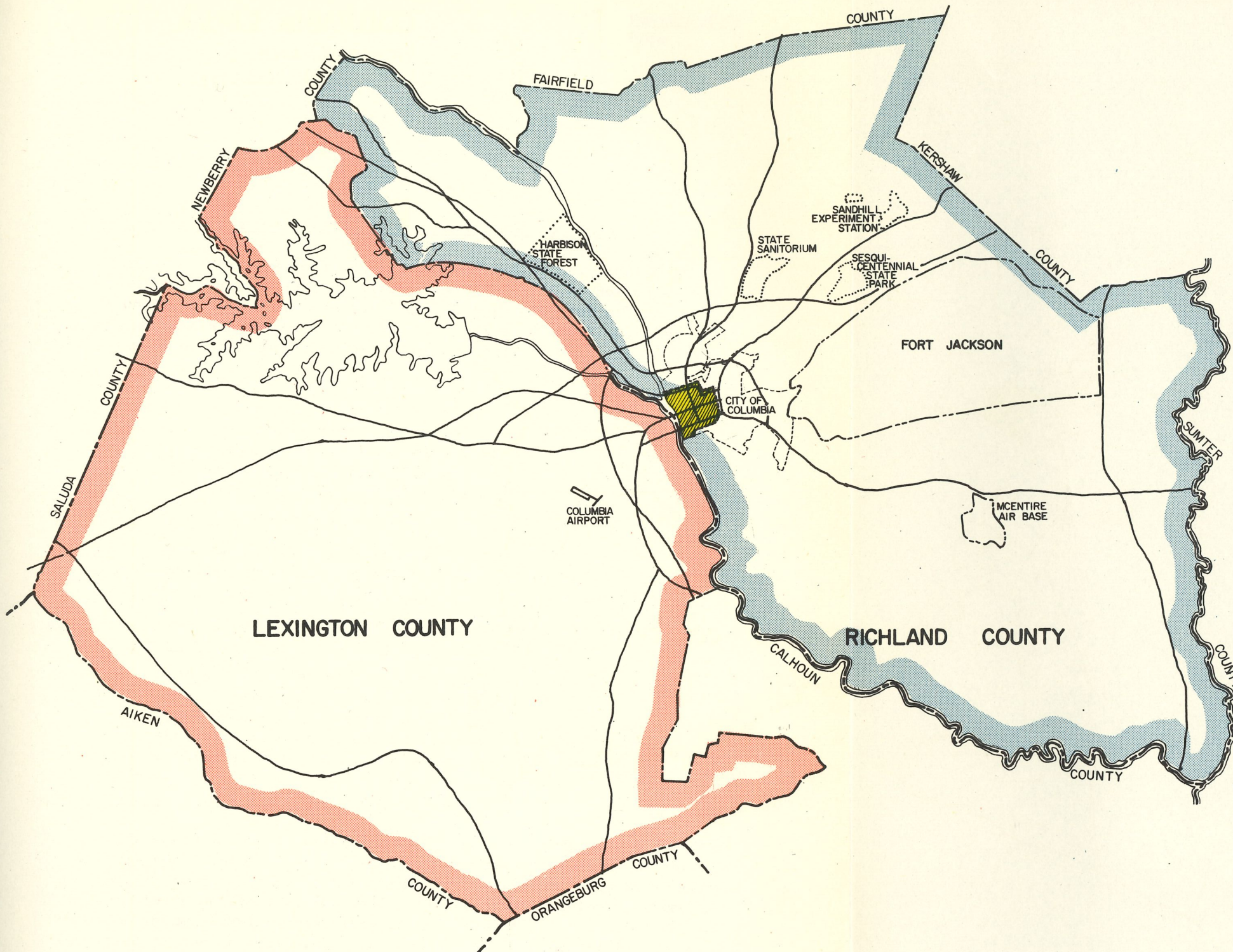
11. For consistency and clarity, terms used in this report are defined as follows:

- a. Study Area - A section of the City of Columbia which, as used in this report, is coextensive with the area called Central City and which is generally bounded by the Congaree River on the west, Elmwood Avenue and Calhoun Street on the north, the Southern Railway on the east and south. The original southern boundary, Blossom Street, was extended in favor of the Southern Railway since the latter constitutes of a more definitive boundary for the area.
- b. Columbia Standard Metropolitan Statistical Area (SMSA) an area consisting of Richland and Lexington Counties.
- c. Columbia Metropolitan Area - An area which, as used in this report, is somewhat smaller than the SMSA, consisting of the developed portions surrounding the City of Columbia. The term "urban area" also indicates this developed area.
- d. Central Business District (CBD) - The area generally bounded by Park Street on the west, Elmwood Avenue on the north, Sumter Street on the east and College Street on the south.
- e. Traffic Zone - A city block or group of city blocks as designated under the Columbia Area Transportation Study (COATS). The Study Area incorporates thirty seven traffic zones numbered 1 through 26, 31, through 35, 37 through 39, 41, 46, and 47.

12. The map opposite shows the Columbia SMSA and locates the study area.

COLUMBIA S.M.S.A.
RICHLAND AND LEXINGTON COUNTIES

 STUDY AREA



4. Organization for the Study

13. Work for the present study was carried out by personnel of the three consulting firms under the direction of Messrs. C.A. Doxiadis and A.N. Simeon for Doxiadis Associates, Inc., Wilbur Smith for Wilbur Smith & Associates, and William G. Lyles, Sr., for Lyles, Bissett, Carlisle and Wolff. The Study Team consisted of the following:

- a. From Doxiadis Associates, Inc.,
 - A. Andonyadis, Architect/Planner
 - L. D. Cook, Architect/Planner
 - H.R. Levin, Urban Affairs Specialist
 - Lia Margulies, Architect/Planner
 - V.D. Zarboulas, Civil Engineer/Planner
- b. From Wilbur Smith Associates:
 - Lynn Campbell, Traffic Engineer
 - John Crosthwaite, Economist
 - E.L. Walker, Traffic Engineer
- c. From Lyles, Bissett, Carlisle and Wolff:
 - Thomas Ballentine, Planner
 - Dennis Daye, Planner
 - James Edwards, Architect
 - James Henderson, Research Specialist
 - Ken Fujishiro, Research Specialist
 - William G. Roberts, Jr., Planner

5. Acknowledgements

14. The present report concluding the year-long study effort for the Central City constitutes the final analyses and recommendations of the Study Team. In so concluding this effort, the Study Team finds it more appropriate to recognize that the action of the Greater Columbia Chamber of Commerce in undertaking this study is a crucial first step in the revitalization of the Central City. The consultants appreciate the courteous cooperation of City, State and other officials of the Columbia Metropolitan Area. During the course of this study, it was possible to establish a close coordination with the City of Columbia Planning Commission and the Central Midlands Regional Planning Council.

15. Most particularly, the consultants' appreciation is extended to the Chairman of the Central City Development Committee, Page Schaeffer, and to David Baker, Chairman of the Steering Committee, as well as to all members of the Central City Development Committee and to the Director of the Planning Commission, Mr. Sidney F. Thomas, Jr., whose liaison with the Study Team was in the best professional spirit.

B. INVENTORY OF EXISTING CONDITIONS

1. Demographic and Economic Characteristics

16. Population growth and economic and technological advances are forces which cause continuous readjustment in relationships between structural elements of a human settlement. An orderly evolution of the settlement must, therefore, take into consideration the dynamic potential of existing conditions and relate them to expected forces and trends, from the largest to the smallest community scale. To do this, it is necessary to investigate the growth patterns of the area, especially those recorded in the recent past, from 1950 to 1969.

a. Demographic and economic trends in the Columbia SMSA

i. Population

17. During the decade of the fifties, the population of Columbia's SMSA increased by nearly 74,000 persons, from 186,800 in 1950 to 260,800 in 1960. Over 47,000 persons were added through natural increase and approximately 27,000 persons as a result of net in-migration. The considerable increase over this period in military personnel at Fort Jackson was the prime contributor to the migration component of population growth. Between 1950 and 1960, the military increased nearly ninefold, by 17,623 persons, accounting for 65 percent of total net in-migration and 24 percent of the total population gain.

18. Since 1960, it is estimated that the population has increased by a further 74,000 persons, to 335,000 in 1969. The importance of the military contribution to this population gain has declined, with only an estimated 5,138 military personnel being added over the period. The overwhelming increase was in the civilian sector which experienced an increase of 69,000 persons. This increase was keyed to the availability of job opportunities.

19. The civilian and military population growth from 1950 to 1969 are tabulated below.

TABLE 1

CIVILIAN AND MILITARY POPULATION GROWTH PATTERNS

Columbia SMSA: 1950 to 1969

	Population	Change		Average Annual Rate (Percent) (1)
		Number	Percent	
1950 Civilian	184,605			
Military	2,239			
TOTAL	186,844			
1960 Civilian	240,966	56,361	30.5	2.7
Military	19,862	17,623	787.1	24.3
TOTAL	260,828	73,984	39.6	3.4
1969 Civilian	310,000	69,034	28.6	2.9
Military	25,000	5,138	25.9	2.7
TOTAL	335,000	74,172	28.4	2.8

(1) Compound interest rate based on terminal years.

Source: 1950 and 1960, U.S. Census of Population.
1969 Study Team estimate.

20. Columbia's white population is increasing faster than the non-white population in both absolute and relative terms. In 1950, whites were 67.9 percent of the population; in 1960, they had increased to 71.0 percent. There were nearly 60,000 non-whites in the SMSA in 1950, by 1960 there were approximately 74,000.

ii. Employment

21. The employment distribution by principal industrial category shown in Table 2 below demonstrates that the economy of the Columbia SMSA is markedly dependent upon government activities. Moreover, this dependence is shown to be increasing. In 1960, civilian government employment accounted for 25.1 percent of total employment, while by 1969, employment in the government category had increased to 28.1 percent of total employment.

TABLE 2

CIVILIAN EMPLOYMENT BY PRINCIPAL INDUSTRIAL DIVISION⁽¹⁾
Columbia SMSA: 1960, 1964 and 1969

Industry Group	1960		1964		1969 ⁽²⁾	
	Number	Percent	Number	Percent	Number	Percent
Contract Construction	4,600	6.5	5,400	6.7	7,200	7.2
Manufacturing	12,600	17.8	16,100	20.1	18,900	18.8
Transportation, Communications and Public Utilities	5,000	7.1	5,000	6.2	6,400	6.4
Wholesale and Retail Trade	15,800	22.4	17,200	21.5	20,800	20.7
Finance, Insurance and Real Estate	5,000	7.1	5,800	7.2	5,800	5.8
Services	9,900	14.0	10,000	12.5	13,100	13.0
Government	17,700	25.1	20,600	25.8	28,300	28.1
TOTAL	70,600	100.0	80,100	100.0	100,500	100.0

(1) Does not include military, agricultural, domestic, self-employed and unpaid family workers.

(2) Data for January.

Source: South Carolina Employment Security Commission, Monthly Labor Review, various editions.

22. A high involvement in trade activities is also manifest. In 1969, there were 10,800 workers, over 20 percent of total employment, in the wholesale and retail sector. Noticeable also is the sustained growth of manufacturing in the Columbia SMSA. In 1960, manufacturing employment stood at 12,600 workers and represented 17.8 percent of total employment. By 1969, manufacturing employment had grown to 18,900 workers and accounted for nearly 19 percent of total civilian employment. Table 3 below gives details of manufacturing employment in the Columbia SMSA by principal activity for 1969.

TABLE 3

MANUFACTURING EMPLOYMENT
Columbia SMSA: 1969(1)

Manufacturing Category	Number of Workers	Percent of Total
Durable Goods	7,800	41.3
Lumber and wood products	600	3.2
Stone, clay and glass products	1,100	5.8
Fabricated metal products	1,800	9.5
Other durable ⁽²⁾	4,300	22.8
Non-Durable Goods	11,100	58.7
Food and kindred products	1,800	9.5
Apparel and other related products	2,300	12.2
Printing and publishing	1,000	5.3
Other non-durable ⁽³⁾	6,000	31.7
TOTAL	18,900	100.0

(1) Figures for January.

(2) Includes furniture and fixtures, primary metal industries, non-electrical machinery, electrical machinery, transportation equipment, professional, scientific and controlling instruments and miscellaneous manufacturing industries.

(3) Includes tobacco manufacture, textile mill products, paper and allied products, chemicals and allied products, petroleum refining and related industries, rubber and miscellaneous plastic products.

Source: South Carolina Employment Security Commission.

23. In common with certain other southern cities, Columbia has benefited from a recent pattern in industrial location - namely, a movement of firms from the Northeast and Mid-west to the South. This movement is no longer primarily motivated by intentions of optimizing low-skill, and therefore cheap, labor pools. Greater mobility through improved transportation, the declining importance of natural raw materials, technological advances in production and energy transmission - all of these and a greater inter-area equalization in the skills and price of labor have contributed to an improvement in the quality of enterprises moving South.

24. This increase in quality is particularly noticeable in the case of Columbia. The traditional reliance upon cotton milling and other primary product processing has diminished. While these activities continue in importance, the manufacturing base has been broadened since 1950 through the establishment of such firms as General Electric, Allied Chemical, Carolina Eastman, Rockwell Manufacturing and only recently announced, Hewitt-Robins, a division of Litton Industries.

25. The Fort Jackson Army training base is also an important component in the Columbia economic base. Situated within the Columbia city limits, five miles East of the center of the city, the Fort is one of the Army's largest training centers, with a 1969 complement of approximately 30,000 military personnel and over 3,000 civilian workers.

26. Also contributing to the economic dynamism of the city is the University of South Carolina. Enrollment at this institution is currently in excess of 13,000 students.

iii. Income structure

27. Income is the most comprehensive and flexible measure of economic activity readily available on a geographic basis and provides an excellent yardstick for charting an area's growth. It acts as a broad gauge of economic activity and of consumer purchasing power.

28. Table 4 below contrasts growth trends in personal income in 1966 constant dollars in Columbia with the neighboring SMSA's of Charleston and Greenville, with the State of South Carolina, the Southeast Region, and with the United States over the period 1950 to 1966. The average annual rate of growth in personal income in the Columbia SMSA was 7.0 percent for the period 1959 to 1966; over the last four-year period 1962 to 1966 the rate increased to 9.0 percent. This rate exceeded the growth performance of the other cities depicted and also the rate of expansion experienced by the State, the Southeast Region and the Nation as a whole.

TABLE 4

TOTAL PERSONAL INCOME IN COLUMBIA, SELECTED AREAS
AND THE UNITED STATES
(in millions of Constant 1966 dollars)

	Total Income				Average Annual Rate of Growth (Percent)	
	1950	1959	1962	1966	1959-1966	1962-1966
United States	321,300	429,200	273,900	580,483	4.4	5.2
Southeast Region	49,120	67,710	75,950	97,817	5.4	6.5
South Carolina	2,679	3,511	4,039	5,333	6.2	7.2
Greenville SMSA	348	481	564	739	6.7	7.9
Charleston SMSA	287	399	433	601	6.0	7.9
Columbia SMSA	295	478	535	768	7.0	9.0

Source: Derived from Office of Business Economics, United States Department of Commerce, Survey of Current Business, August 1968, p. 33 ff.

29. As Table 5 on page 14 demonstrates, however, the Southeast Region, and in particular South Carolina (and to a lesser extent the Columbia SMSA) lag behind the Nation in personal income on a per capita basis. In 1950, per capita income for the United States as a whole stood at \$2,115 and in the Columbia SMSA at \$1,578. The per capita level in Columbia was 75 percent of that of the Nation. By 1966, income per capita in Columbia stood at \$2,565 compared with \$2,963 for the Nation. The income disparity had closed markedly Columbia being 86.5 percent of the national level. Thus, the high rate of growth recorded by Columbia relative to the national average rate may, in large part, be categorized as "catch up" growth.

TABLE 5
PER CAPITA INCOME IN COLUMBIA, SELECTED AREAS
AND THE UNITED STATES
(in Constant 1966 Dollars)

	Per Capita Income				Average Annual Rate of Growth (Percent)	
	1950	1959	1962	1966	1959-1966	1962-1966
United States	2,115	2,423	2,548	2,963	2.9	3.8
Southeast Region	1,451	1,777	1,882	2,294	3.7	5.1
South Carolina	1,268	1,496	1,648	2,060	4.7	5.7
Greenville SMSA	1,663	1,902	2,137	2,778	5.6	6.8
Charleston SMSA	1,461	1,556	1,656	1,941	3.2	4.0
Columbia SMSA	1,578	1,836	1,971	2,565	4.9	6.8

Source: Office of Business Economics, United States Department of Commerce, Survey of Current Business, August 1968.

iv. Retail trade

30. The level of retail sales is inextricably related to the level of disposal income. In the case of Columbia, per capita incomes rose (in real terms) from approximately \$1,550 in 1958 to \$1,930 in 1963. The average annual rate of increase was 4.5 percent. Over the same period, total retail sales (in 1958 constant dollars) rose from \$179 million to \$273 million - an average annual rate of increase of 8.8 percent. Of this growth rate, 3.5 percent may be attributed to population increase and the remaining 5.3 percent to enlarged per capita expenditures.

31. In per capita terms, retail sales in constant dollars rose from \$717 in 1958 to \$941 in 1967. In 1963, the year of the last official census of business, retail sales per capita in Columbia were approximately 80 percent of the national average.

32. Table 6 on the opposite page shows the growth of retail sales in Columbia, in the neighboring Standard Metropolitan Statistical Areas of Greenville and Charleston, and for the State of South Carolina. Noticeable is the apparent trend in polarization of retail sales toward the State's major metropolitan areas. Migration toward the major urban centers and increased personal mobility combined with higher incomes are the prime factors fostering this pattern.

TABLE 6

RETAIL SALES IN SELECTED SMSA'S: 1958-1967
(In Constant 1958 Dollars)

	1958		1963		1967		Average Annual Change (1) 1958-1963 (percent)
	Amount (\$ Million)	Percent of Total	Amount (\$ Million)	Percent of Total	Amount (\$ Million)	Percent of Total	
Greenville	140	8.0	293	13.8	-(4)	-(4)	16.0
Charleston	120	6.9	231	10.9	271	10.9	14.0
<u>COLUMBIA</u>							
Primary Trade Area (2)	179	10.2	273	12.9	357	14.3	8.8
Secondary Trade Area (3)	217	12.4	257	12.1	289	11.6	3.5
Balance of State	1,091	62.5	1,066	50.3	1,573 (4)	-	0.5
South Carolina	1,747	100.0	2,120	100.0	2,490	100.0	4.0

(1) Compound interest rate based on terminal years, 1958 and 1963 were census years, 1967 is estimated.

(2) Coextensive with the Columbia SMSA - Richland and Lexington Counties.

(3) Coextensive with Aiken, Calhoun, Fairfield, Keishaw, Newberry, Orangeburg, Saluda and Sumter Counties.

(4) Sales figures for Greenville in 1967 show an apparently unjustifiable decline - accordingly they have been deleted and treated in aggregation under the "balance of state" category.

SOURCE: 1958-1963, Bureau of the Census, Census of Business, Retail Sales, 1963.
1967, Sales Management Magazine, 1968

v. Service receipts

33. In 1963; service receipts in the Columbia SMSA, excluding receipts from hotels and motels amounted to \$38.3 million. This was equivalent to \$134 per capita of population. By contrast, 1958 sales in the service sector were equivalent in real terms to only \$71 per capita. Contributing factor to this high rate of increase was a national trend towards increased expenditures on services, brought about by increased incomes.

34. Table 7 below shows the nature of the growth in services in the Columbia SMSA for the period 1958 to 1963 by principal activity category. In absolute terms, the greatest increase was experienced in the personal services, miscellaneous businesses, and auto repair sectors.

TABLE 7

SELECTED SERVICES, NUMBER OF ESTABLISHMENTS AND RECEIPTS
Columbia SMSA: 1958-1963

Activity Category	Number of Establishments	Receipts (\$1,000)	Number of Establishments	Receipts (\$1,000)
Hotels and Motels	64	2,760	71	4,484
Personal Services	373	60,031	574	13,991
Miscellaneous Business Service	74	2,313	145	7,779
Auto Repair and Garages	146	3,619	191	8,397
Miscellaneous Repair Services	133	1,380	164	3,879
Motion Pictures	13	1,289	19	1,643
Amusement and Recreation Services	15	1,558	87	2,597
TOTAL	854	18,950	1,251	42,770

Source: United States Department of Commerce, Census of Business, 1963.

35. It should be noted that the level of service activity evident in 1963 in Columbia was well below the national average. For the nation in 1963, service receipts less receipts from hotels and motels was equivalent to \$208 per capita and the rate of increase in real terms, 1958 to 1963, was 3.5 percent per annum⁽¹⁾. The markedly lower level of service receipts in Columbia is influenced, presently at least, by generally lower income levels and by the greater than normal availability of cheap labor. This latter permits a degree of substitution of personal services - particularly domestic labor - for organized commercial service enterprises.

(1) Hotels and motels have been deleted from this appraisal since this sub-sector is accorded separate analytical treatment elsewhere in this evaluation.

b. Demographic and Economic Trends in the Central City

i. Population

36. For nearly a decade the Central City population has remained virtually constant, fluctuating between 17,800 persons in 1960, declining to 16,500 in 1965 and rising to an estimated 17,950 persons in 1969. Table 8 below demonstrates that there has been a greater variation on a census tract basis. Some tracts, particularly 16 and 18, shed population while the population in tracts 19 and 20 increased. Broadly, the declines may be attributed to urban renewal projects displacing residential units and in particular the takings for the University of South Carolina Coliseum. The increases were mainly due to expansion in the dormitory population at the University of South Carolina.

37. Also shown in Table 8 is the population distribution by color. Continuant with its central location, the Central City exhibits a typically high nonwhite population concentration. In 1960 nonwhites made up approximately 48 percent of the Central City population. It is probable that this population has increased somewhat since 1960.

TABLE 8

CENTRAL CITY POPULATION PATTERNS: 1960 - 1969

Census Tract	Population			1960	
	1960	1965	1969	White	Non-White
14	3,893	3,128	3,800	1,951	1,942
15	1,695	1,517	1,450	1,510	185
16	4,472	3,381	3,050	1,016	3,456
17 (1)	-	-	-	-	-
18	3,013	1,892	1,450	790	2,223
19	2,095	3,121	4,450	2,083	12
20	2,666	2,505	3,750	1,969	697
TOTAL	17,834	16,544	17,950	9,319	8,518

(1) Census Tract 17 is coextensive with the South Carolina Penitentiary. The prison had a population of 1,638 persons in 1960.

Source: 1960 Bureau of the Census 1965 Richland and Lexington Counties Joint Planning Commission (based on household count). 1969 Study Team estimate.

ii. Employment

38. The concentration of government and business activities distinguishes the Central City as a major center of employment. In 1965, the Central City accounted for approximately 32 percent of total civilian employment in the Columbia SMSA. In 1969, this proportion was established at about 28.0 percent. In 1965, approximately 5,260 residents in the Central City were employed of which 2,844 or 54 percent worked in the area.

39. Table 9 below gives employment in the Central City for 1965 and 1969 by principal industrial activity. It should be emphasized that the 1969 values were derived using more intensive data collection techniques than the 1965 series which were based on a sample survey.

TABLE 9

CENTRAL CITY CIVILIAN EMPLOYMENT
BY PRINCIPAL INDUSTRIAL CATEGORY

Industry Category	1965 Number of Workers	1969 Number of Workers
Construction	842	1,092
Manufacturing	1,991	2,442
Transportation	2,353	2,338
Trade		
Wholesale Trade (1)	4,771	1,993
Retail Trade	5,546	5,543
Finance, Insurance and Real Estate	-	5,413
Services	-	7,899
Personal Services (2)	1,952	-
Professional and Related Services	4,673	-
Government (3)	4,506	5,451
TOTAL	26,634	32,171

(1) Includes finance, insurance and real estate.

(2) Includes domestics.

(3) Excludes school teachers who are included under professional and related services.

Source: 1965, Derived from Wilbur Smith Associates, Columbia Area Transportation Study, September 1966.

1969, Richland and Lexington Counties Joint Planning Commission and the Study Team.

iii. Income Structure

40. The Study Area exhibits typical characteristics of city center population - a high proportion of residents with low income.

41. The 1959 median family income in the Central City ranged from a low of \$2,052 in Census Tract 18 to a high of \$4,021 in Census Tract 20. In contrast, the median family income for the Columbia SMSA in 1959 was \$4,540. The student population is to a large extent excluded from these values.

42. In 1969 it is estimated that, while the Columbia SMSA median family income has risen to \$7,700, the income disparity in Study Area tracts has increased. This may be seen from consideration of the "relative median income" (RMI) presented in Table 10 below for the various census tracts.

TABLE 10

CENTRAL CITY TRENDS IN MEDIAN FAMILY INCOME:
1959-1969

Census Tract	1959		1969	
	Relative Median Income (1)	Median Income	Relative Median Income (1)	Median Income
14	0.55	\$2,479	0.55	\$4,200
15	0.84	3,806	0.67	5,200
16	0.52	2,350	0.40	3,100
17	----	----	----	----
18	0.45	2,052	0.33	2,900
19	----	----	----	----
20	0.89	4,021	0.71	3,100

(1) The median family income for the tract relative to the median family income for the total Columbia SMSA.

Source: 1959 - Bureau of the Census.
1969 - Study Team Estimate.

iv. Retail Trade in the Central City

43. Retail trade functions are of high importance among the variety of activities in the Study Area. Table 11 below shows data on Central Business District and Central City retail sales in Columbia from 1951 to 1968. Expressed in constant dollars, total sales in the Central Business District declined from \$74.9 million in 1951 to \$67.1 million in 1965. Expectedly, shoppers' goods sales showed the greatest resilience in the face of suburban competition; sales in this category actually increased slightly over the period. Sales data for the Central City were not available previous to 1965 when it is estimated that they amounted to \$112.7 million and again in 1969 when they stood at \$128.0 million.

44. Between 1951 and 1965 the Columbia Central Business District market share of retail sales in the SMSA declined from 30.6 percent to 17.8 percent. It is estimated that sales in the Central City amounted to 30.0 percent of total SMSA sales in 1965 and in 1968 to 28.3 percent.

TABLE 11

COLUMBIA CBD AND CENTRAL CITY RETAIL SALES:
1951-1968⁽¹⁾

	Thousands of Constant 1969 Dollars			
	1951	1957	1965	1968
Shoppers Goods	44,465	35,672	45,528	n.a.
Convenience Goods ⁽²⁾	12,164	6,212	9,554	n.a.
Miscellaneous ⁽³⁾	18,259	12,459	12,025	n.a.
Total CBD	74,888	54,343	67,087	n.a.
Total Study Area	n.a.	n.a.	112,700	128,000

n.a. - not available

(1) Includes car sales

(2) Food, drug, hardware, jewelery, florists, etc.

(3) Eating and drinking places, new-used cars, office equipment, building materials, service stations.

Source: 1951 and 1957, Columbia City Planning Commission, In Step With Tomorrow, 1962.

1965, Drawn from COATS using data originally computed by Richard and Lexington Counties Joint Planning Commission.

1969, Richland and Lexington Joint Planning Commission, data developed from Dun and Bradstreet and field interviews.

45. While several of the above indices reveal that Columbia falls below national Central Business Districts averages - particularly those for retail trade and income structure - data points to the likelihood that Columbia will catch up with these national averages, probably prior to 1985. In addition to recent, diversified industrial growth, the soon-to-be completed interstate highway system should encourage more industrial and retail growth in Columbia. Finally, there appears to be good reason for believing that Statewide population growth trends will in turn increase the role of this already important segment of Columbia's economy.

2. Physical Characteristics

a. Development Patterns in Columbia SMSA

i. Land Use





46. The Congaree and Saluda Rivers, which split the Columbia SMSA from north to south in three major land areas, are also the delineators of political divisions and strong determinants of land use and circulation patterns. As indicated on the Generalized Land Use Map, opposite, Columbia's considerable growth since 1960 has produced major residential and commercial development throughout the area. Residential areas have developed east of Central City, along Beltline Boulevard, Forest Drive and Trenholm Road. The major public use is Fort Jackson Military Reservation, which was of a considerable distance from Central City 20 years ago, but which now abuts several high-income residential areas. The Reservation has stimulated residential development to move to the northeast along U.S.I. and to the southeast along S.C. Highway 76.

47. As may be expected, retail and service facilities are now dispersed throughout these new residential areas and along most of the major arterials. At present there are also 18 shopping centers, only four of which are of major significance within the Metropolitan Area. These are:

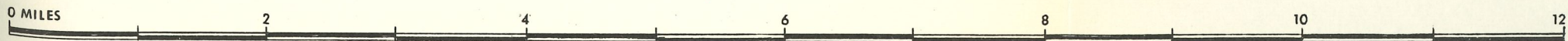
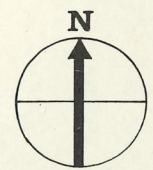
- a. Richland Mall, on the east.
- b. The new Dutch Brooks Square Center, on the northwest, and
- c. The Five Points shopping area, immediately adjacent to the Study Area on its southeast boundary.
- d. Forest Acres-Trenholm Plaza centers, near Fort Jackson on the east.

METROPOLITAN AREA

GENERALIZED EXISTING LAND USE

-  PUBLIC
-  COMMERCIAL
-  RESIDENTIAL
-  INDUSTRIAL

 STUDY AREA BOUNDARY



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48. In addition to the rapid growth east of Central City, extensive development is taking place west of the Congaree River. Several major manufacturing firms have located in the western portion of the metropolitan area near Lake Murray and new employment opportunities are stimulating development of single-family houses and some apartments.

49. Significant industrial areas are located south of Central City, along Bluff Road just south of the University of South Carolina Stadium. These uses protrude into the Study Area along the railroad corridor on its western side. Additional industrial development is occurring in the Cayce-West Columbia area and in the vicinity of the Columbia Metropolitan Airport.

ii. Transportation

Road System








50. As the Road System Map opposite clearly shows interstate and other major routes provide good access to all portions of the state.

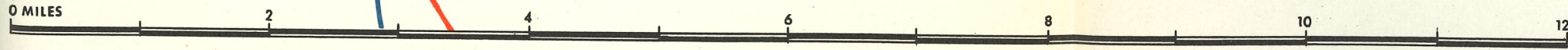
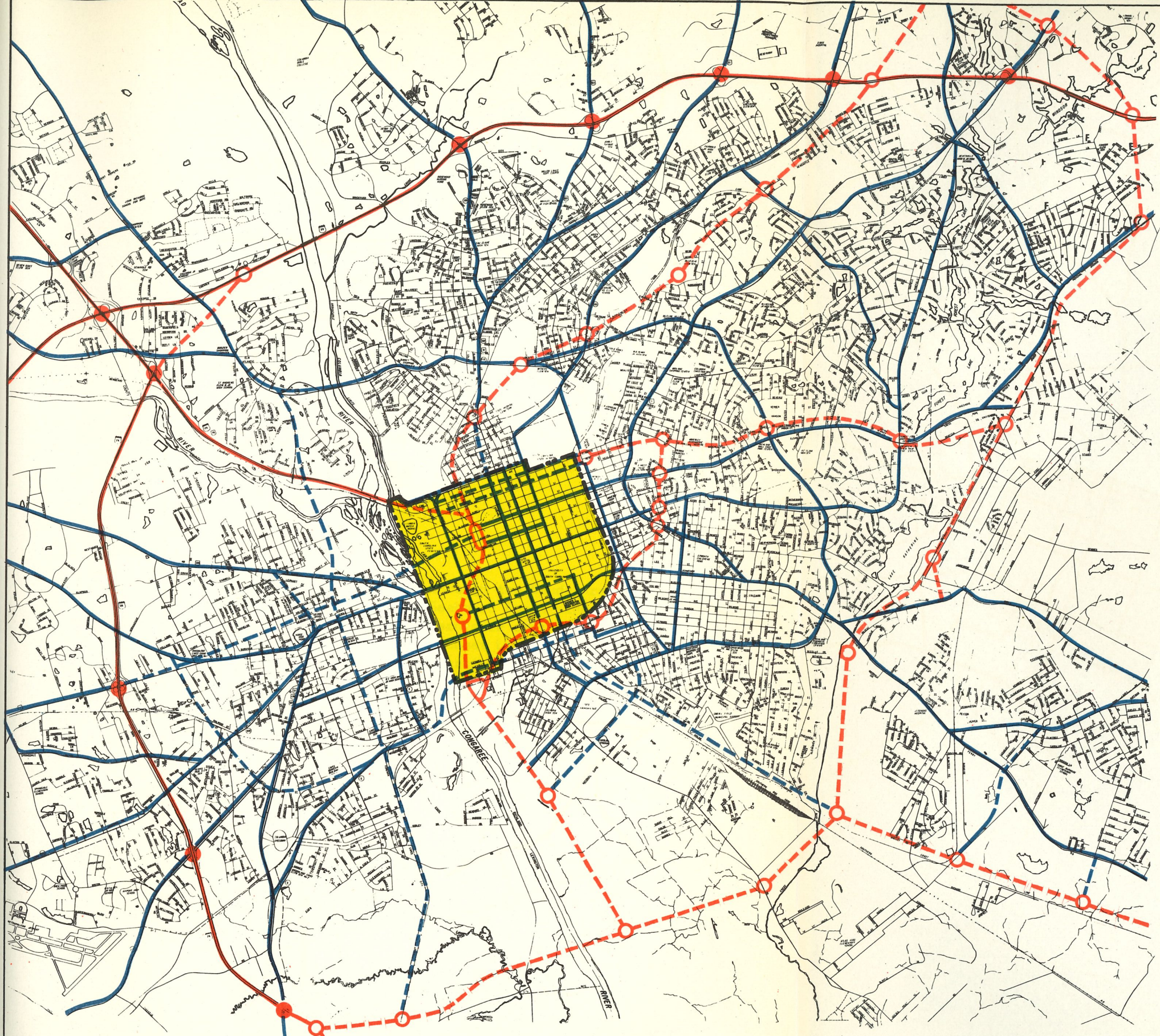
51. The outer freeway system which is now 50 percent complete, runs from the northeast around to the southwest of the Study Area approximately four miles from its center. The completion of the system will require a new branch beginning on the northwest and continuing southwestward along the outer boundary of Fort Jackson, and looping around to connect with the system at a point to the southwest. The Highway Department proposal also calls for construction of an inner loop, and four connectors between the inner and outer loop systems. Corridors for the Northwest and North-south branches of the system through the Study Area have already been approved in the two required public hearings. Corridor alignments were recommended principally by the COATS study, though subsequent studies have somewhat altered these alignments.

52. Additions and improvements to the existing arterial system consist mainly of connections to the proposed freeway system. The major arterial improvement affecting the Study Area is the Hampton Street crossing on the west side of the Study Area. Also significant is the proposed extension of Assembly Street to the north to tie to the proposed Northwest Freeway.

METROPOLITAN AREA

EXISTING ROAD SYSTEM

-  EXISTING FREEWAY
-  PROPOSED FREEWAY
-  EXISTING EXPRESSWAY OR ARTERIAL
-  PROPOSED EXPRESSWAY OR ARTERIAL
-  EXISTING INTERCHANGE
-  PROPOSED INTERCHANGE
-  STUDY AREA



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Railroad System

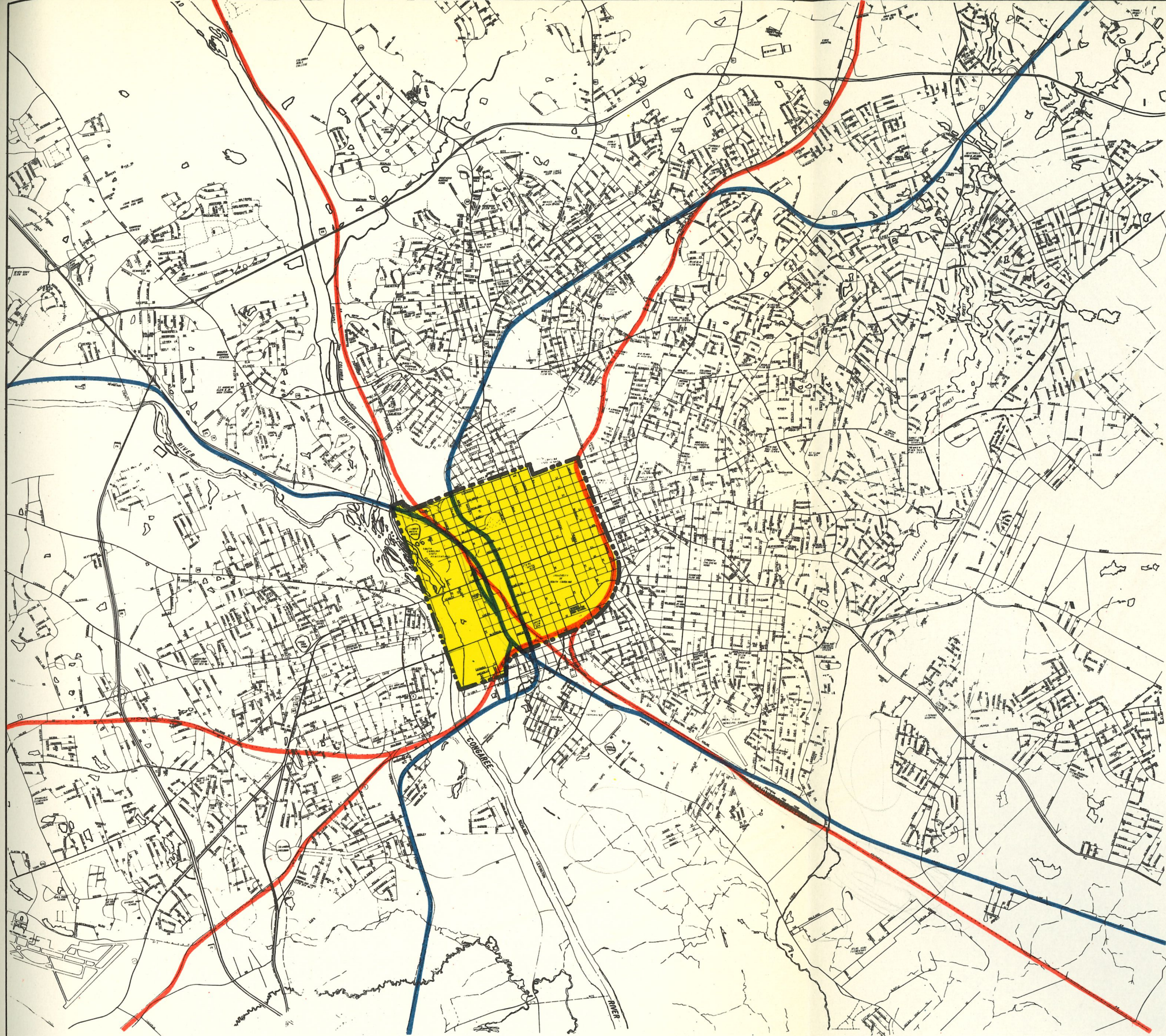
53. Two major railroad lines running through the Study Area tie Columbia to other metropolitan areas. The Seaboard Coast Line has two parallel main lines running through the western side of the Study Area. It should be noted that the present Seaboard Coast Line running the entire length of the southeastern United States is particularly adaptable to high-speed rail transportation, which by the year 2000 might have a major effect on Columbia as well as on all other cities within the region. The adaptability of the Seaboard Coast Line to future high-speed requirements is based upon the following:

- a. Grading is relatively uniform, with the absence of major inclines and declines.
- b. Sharp bends are lacking.
- c. The bed of the rail line is uniformly in good condition or could be easily improved.

54. The Southern Railroad also traverses the Study Area, in two locations, through the west side and along the eastern boundary to the Study Area.

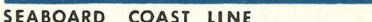


55. It is quite possible that by the year 2000 the present role of railroads will be somewhat altered. Most notably, it is foreseen that there will be an increase in passenger service if high-speed rail transportation, now in its infancy in the United States, continues to advance. The role of railroads in the transportation of materials and goods may also be expected to change. The influence of new trucking systems has already made its mark on the railroad industry; further experimentation in packaging and containerizing of goods will also have its influence.

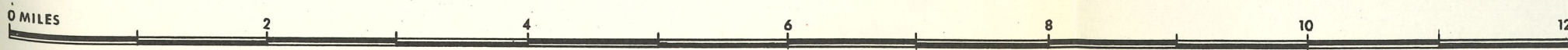
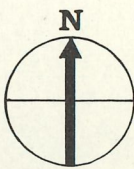
56. In light of the above, it is conceivable that present railroad rights-of-way, originally based on ease of grade as well as on relationships between the railroads and their users, will have significant new relationships to consider. Should user needs change as presumed above, realigned rights-of-way will be necessary to accommodate high speed travel. This matter is discussed in a later Chapter of this report. The Columbia SMSA Railroad System is shown on the map opposite.



METROPOLITAN AREA

EXISTING RAILROAD MAINLINES

-  SEABOARD COAST LINE
-  SOUTHERN RAILROAD
-  STUDY AREA

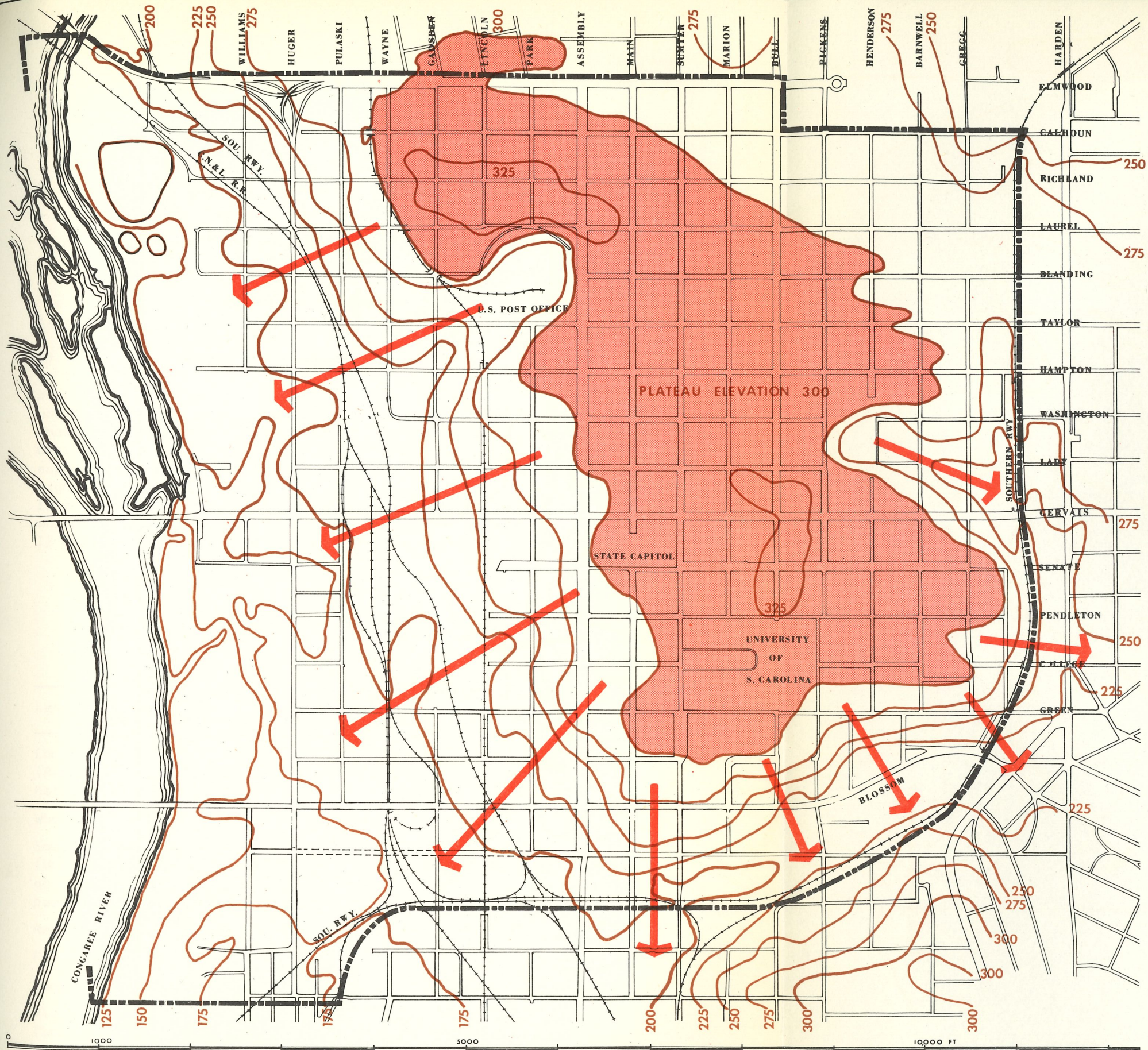



b. Development Patterns in the Study Area


57. The heart of Columbia, its downtown, lies on a relatively flat plateau. Within the Study Area there exist only two areas of higher elevation, the historic district surrounding the Governor's Mansion on the north, and an area of changing land use on the southeast, near the Capitol. South and west of the Governor's Mansion and the surrounding historic district, a sharp change in topography occurs. While this fact limits the possibility of contiguous development of the area, it also benefits historic development by reducing the occurrence of contiguous, incompatible land uses.

58. As shown on the topographic map opposite there is a sharp topographical drop beginning at the intersection of Washington and Henderson Streets and continuing along the southeastern boundary of the Study Area, just below the University area. For the most part, this area is occupied by residential uses. To the west of the Study Area, elevations drop off toward the river in a more gentle fashion, thus allowing continuity of development between Downtown and the vast area of the riverfront. To the northwest of the plateau, changes in grade are very slight, permitting an easy topographic continuity for development. However, the State Hospital complex across the northeast boundary of the Study Area effectively limits further development in this area.

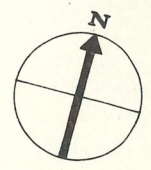
TOPOGRAPHY



 PLATEAU OF CITY

 DOWNWARD SLOPE

CONTOURS ARE SHOWN AT 25' INTERVALS



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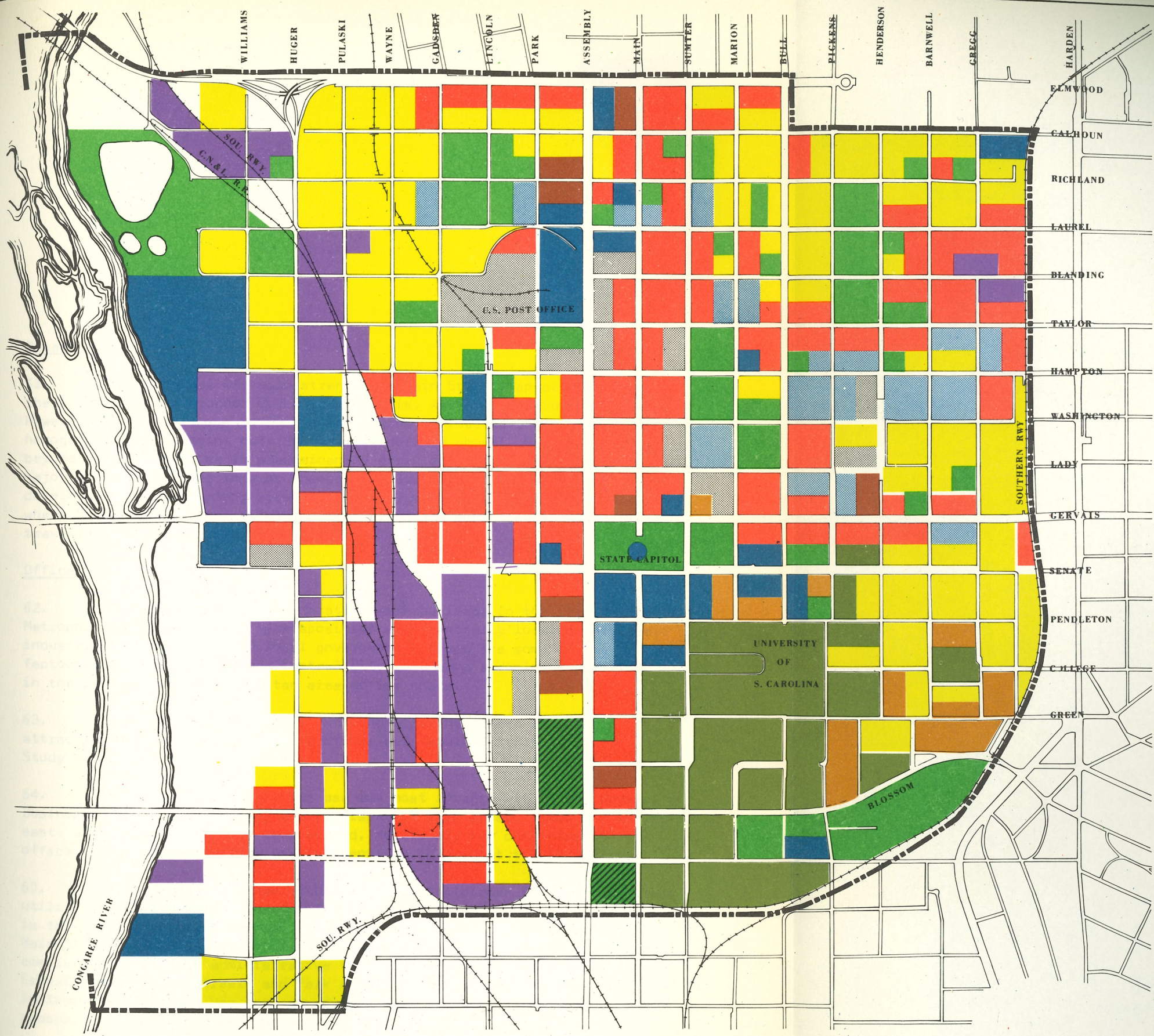
i. Existing land use

59. The determination of how the space is used and distributed is the best way to determine the character of downtown. Factors responsible for the predominance or lack of predominance of certain uses must be seriously considered, since planning for the future what may be appropriate for other cities may not necessarily be desirable for Columbia. As shown in Table 12 below, within the estimated 1980 acres comprising the Study Area, vacant land and right-of-way account for approximately 48 percent of the total land area. Commercial and office use dominates the remainder land while considerable area is taken by residential development. Table 12 below provides a breakdown of land use acreage distribution.

TABLE 12
LAND USE DISTRIBUTION
STUDY AREA: 1969

Land Use Areas	Number of Acres	Percentage of Total
Commercial (Retail, general, services, hotels, office-private)	239	12.0%
Wholesale/Industrial	167	8.4%
Social/Cultural (Universities, schools, gov. offices, hospitals, parks, schools, historic)	308	15.5%
Residential	282	14.2%
Parking	36	1.8%
Vacant	345	17.3%
Rights-of-Way (Local streets, Railroads)	603	30.8%
Total	1,980	100 %

60. The distribution of land use provides an abstract description of the character of the Study Area in a quantitative way. To fill out the picture one must also know the physical expression of the space use as it is demonstrated by the determination of predominant land use. The map on the opposite page shows the predominant land use pattern based on that use, which occupies one half or more of the floor area within the block. A description of the main uses is presented following.



EXISTING PREDOMINANT LAND USE

- GOVERNMENT
- PRIVATE OFFICE
- RETAIL AND SERVICE
- HOTEL AND MOTEL
- LOW AND MEDIUM DENSITY RESIDENTIAL
- HIGH DENSITY RESIDENTIAL
- UNIVERSITY OF S.C.
- COLISEUM AND TRANSPORTATION CENTER
- OTHER SEMI-PUBLIC, PUBLIC AND OPEN SPACE
- INDUSTRIAL
- PARKING
- VACANT

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Retail Use

61. Retailing has its main strength on Main Street, specifically in the 12 city blocks bounded by Laurel, Gervais, Assembly and Sumter Streets. However, this retail use concentration begins to lose strength as a homogeneous use district outside the area defined above. Retail use beyond these boundaries is predominantly strip development along the major arteries leading into or through the Study Area. This type of development is found along streets such as Gervais, Taylor and Assembly, where businesses requiring low overhead sites and good access to customers travelling by automobile.

Office Use

62. The need for easy communication with business in the rest of the Metropolitan Area, physical juxtaposition with centrally located services, industry and with State and local government - these are some of the factors which have caused the Central City to assume a dominant position in the provision of metropolitan area office space.

63. Although in recent years outlying areas have made inroads in attracting office development, the office use remains strong in Study Area.

64. At present private office use are most intense within the Central Business District, where they are interspersed with retail uses. To the east, along Hampton Street, is a second, relatively new concentration of office. Less intense office use is dispersed throughout the Study Area.

65. Government office use situated at various places in the Study Area, utilize relatively large amounts of land. The largest government office use is the State government complex, south of Gervais Street on the axis of Main Street. The long-range plan developed in 1968 for the State government complex proposes that administrative functions be concentrated between Gervais and College Streets and Park and Bull Streets. As the plan is implemented, the land use pattern south and west of Capital Square will probably be changing from commercial to office use.

66. Other government office use is the City Hall, the County Courthouse, the U.S. Courthouse, the city waterworks, parks and law enforcement centers, the foremost of which is the State Penitentiary, occupying five city blocks along the River.

Service Use

67. All types of service use are found intermixed with retail use. The prominent concentration of service use is located east of Assembly Street and north of Gervais Street. This area contains, in addition to personal, business and repair services, many law offices attracted here because of access to city, county, state and federal government offices, and medical offices whose location has been influenced by adjacent hospitals.

Wholesale and Industrial Uses

68. Wholesale and industrial activities are concentrated predominantly in a large section of the Study Area west of Assembly Street. Here in an area of changing land uses divided by railroad tracks, wholesale and industrial uses are mixed with slum housing, retail, service and social and cultural activities. Rail transportation and convenient north-south vehicular movement on Huger Street, with connections to interstates 20 and 26, provide access to this section of the Study Area. The route of the proposed North-South Freeway and a Congaree River bridge proposed to cross the River near the South Carolina Department of Corrections will provide excellent vehicular access to the area. There is a major installation of the South Carolina Electric and Gas Company located generally between Hampton and Gervais Streets west of Huger Street.

69. There is also a concentration of wholesale and industrial uses in the northeastern portion of the Study Area, north of Taylor and east of Henderson Streets. Rail service is available in this area from the Southern Railway, whose tracks form the eastern boundary of the Study Area.

Public, Semi Public Uses

70. Social and cultural uses are predominant primarily because of the presence of the main campus of the University of South Carolina and the various sections of the Study Area designated as historic areas. The majority of University property is located in the southeastern portion of the Study Area, south of Pendleton Street and east of Main Street. If present trends continue, most of the land east of Pickens Street will eventually become part of the University.

71. The new Coliseum of the University of South Carolina is located off Assembly Street, west of the main campus. Numerous other institutions are located throughout the Study Area, with the heaviest concentrations north-east of the State Capitol and surrounding the University. The predominant institution within this area is the church, but there also exist schools and school offices, hospitals and clinics, libraries and auditoriums, and the Art Museum.

Residential Use

72 Residential use is scattered throughout the Study Area and consists of housing units ranging from single-family units and duplexes to multi-family facilities. Three high rise apartment buildings are located in the southern part of the Study Area near the State government complex.

73. In certain areas, residential use is mixed with incompatible uses such as wholesale and industrial. This mixing results to a very undesirable residential environment. However, in three areas, in the northeastern, northwestern and southeastern portions of the Study Area, the residential use is mostly well defined although in a state of transition.

74. In the northwestern area which is generally bounded by Elmwood Avenue and Huger, Taylor and Assembly Streets, the residences are mostly dilapidated or deteriorating and are being replaced by various retail, service and industrial uses. In the northeastern area, generally bounded by Calhoun, Gregg, Bull and Taylor Streets, single-family residences have been undergoing conversion to boarding houses and small office buildings. In addition, several retail and service facilities have been constructed.

75. Changes in the southeastern area, south of Gervais Street, and east of the campus of the University of South Carolina have been influenced primarily by the University's growth - both through the expansion of the campus and the conversion of single-family units to apartment houses for college students. This area maintains its residential quality.

76. Scattered but widespread slum residential use is also found in the wholesale and industrial areas west of Assembly Street and south of Taylor Street. The railroad and highway corridors which traverse the area have an undesirable influence and this area is in transition, with new non-residential uses absorbing some of the slums.

77. Deteriorating and dilapidated residential conditions are also found east of Henderson Street, south of Hampton Street to Gervais Street in the ravine which lies between Taylor and Gervais Streets. In past years, some residential sites have been redeveloped for use as doctors' offices because this area is near Columbia and Baptist Hospitals.

Open Space

78. There are three major open space areas within the Study Area. A beautiful monumental park surrounds the State Capitol building. There are good recreational facilities located within Maxcy Gregg Park. Finally, there is an open space area surrounding the city reservoir in the northwest corner of the Study Area. This area deserves expansion and proposals are detailed in following chapters of this report.

Parking Use

79. Columbia is centrally located and is easily accessible by highway from most parts of South Carolina. An extensive network of streets laid out in conformity with the original grid pattern, routes incoming and outgoing traffic into, around and through the Study Area. The importance of the automobile is emphasized by the amount of land being devoted to its use in the Study Area. More land is used to provide rights-of-way and off-street parking areas to serve the automobile-oriented populace than is found in the combined acreage devoted to retail, office and service uses. Off-street parking areas which have been identified and measured are concentrated in and immediately adjacent to the Central Business District. Major parking facilities are the municipal parking garage on Assembly Street between Taylor and Blanding Streets, lots operated by retail stores for their customers and employees and independent commercial parking facilities.

Vacant Land

80. In addition to the developed and occupied areas, there are a substantial number of acres of unused land in the Study Area. Seventeen percent of the land in the Study Area is either undeveloped or holds vacant structures. A portion of the vacant land, in the Seaboard Park area, is owned by the City of Columbia; the rest is owned by private individual or businesses.

81. Table opposite presents the gross floor area distribution, by major land use, category in the Study Area. It will be noted that the four prime components, in rank of order, are residential, wholesale-storage-industry, University of South Carolina and retail.

TABLE 13

STUDY AREA GROSS FLOOR AREA DISTRIBUTION : 1969

Type of Use	Floor Area (in Square Feet)	Percentage of Total
Retail	1,875,000	11.8%
Services	1,088,800	6.9%
Private Office	1,351,000	8.6%
Government Office	1,100,000	6.9%
Wholesale-Storage Industry	2,787,000	17.4%
Hotel-Motel	472,200	3.0%
University of S.C.	2,480,000	15.6%
Public, Semi-public	640,000	4.0%
Residential	<u>4,100,000</u>	<u>25.8%</u>
	15,894,600	100 % 76%
Parking: off street	5,050,000	24%
curb	<u>1,070,000</u>	5.0%
		100%
TOTAL	22,014,000	5.0%

ii TransportationVehicular Circulation

82. The automobile is the dominant mode of travel within the Columbia urban area. It is anticipated that the auto will maintain a high level of importance in transportation for the next few decades until the year 2000. This importance can be measured by the auto's high degree of availability for personal travel. According to the Columbia Area Transportation Study, the 1965 ratio of persons per automobile was 2.82 with 69,314 private vehicles in an area of approximately 180 square miles. This results in an average of 1.12 automobiles for each urban area household.

83. Studies conducted during the 1965 survey have determined that the average number of person trips per household was 8.63 with only 0.23 of these trips occurring by transit. Trips by auto drivers accounted for 5.35 trips per household. Today, the Central City is one of the largest trip generators in the urban area. The above survey revealed that the core area of Central City generates 16.6 per cent of all internal trips, amounting to a total of 66,141 vehicular trips.

84. The existing street system and natural barriers such as the Congaree River lead to increased vehicular volumes in the Study Area. Traffic having ultimate destinations beyond this area are routed through on the area's continuous streets. These trips increase street congestion and add to delays experienced by persons traveling to Central City. In view of the area-wide reliance on automobiles for travel, efficient operating arterials linking residential areas with the Central City are considered important to maintain the competitive position and vitality of the Central City, within the metropolitan framework.

Vehicular Flow and Volumes

85. Principal routes of travel to the Study Area include arterials such as Assembly, Gervais, Blossom, Main and Taylor Streets and Elmwood Avenue. While other streets within the network provide capacity for vehicular access, the above major arterials are considered to be primary routes of travel for access. Traffic volumes were recorded along the Central City street system. These volumes vary from locations where the two-way traffic is less than 5,000 vehicles to locations where traffic exceeds 30,000 vehicles per day. Streets carrying the highest average daily traffic volumes are Blossom Street and Gervais Street in the east-west direction, the Study Area's continuous streets, and Assembly Street in the north-south direction.

86. Table 14 below shows the magnitude of vehicular usage of the street system in terms of vehicular crossings of the Study Area boundary.

TABLE 14
STUDY AREA BOUNDARY CROSSINGS: 1969

<u>ARTERIAL</u>	<u>FLOW</u>	<u>VOLUMES</u>		<u>PER CENT BY DIRECTION</u>	
		<u>Inbound</u>	<u>Outbound</u>	<u>Inbound</u>	<u>Outbound</u>
Gervais Street	East	12,500	17,800	41	59
	West	16,000	14,500	52	48
Blossom Street	East	8,000	8,300	49	51
	West	17,000	16,000	52	48
Assembly Street	North	6,700	8,000	46	54
	South	7,400	6,600	53	47
Huger Street	North	10,800	9,300	54	46
	South	6,100	6,000	50	50
Sumter Street	North	4,800	4,900	50	50
	South	3,100	2,800	53	47
Elmwood Avenue	West	10,800	9,200	54	46
Main Street	North	5,700	4,100	58	42
Taylor Street	East	6,800	7,900	46	54
Green Street	East	4,100	5,300	44	56
Hampton Street	East	4,500	4,900	48	52
Laurel Street	East	6,500	4,700	58	42
Blanding Street	East	2,700	3,500	44	56
Galhoun Street	East	3,300	3,700	47	53
Bull Street	North	6,000	6,300	49	51
Park Street	South	2,100	2,600	45	55
Pickens Street	South	2,700	2,600	51	49
TOTAL		147,700	149,100		

NOTE: The direction indicates the location of the count in relation to the Study Area.

87. The traffic count conducted revealed that the highest volume occurred on Blossom Street west of the Study Area where 33,200 vehicles were recorded on an average weekday. This volume was distributed relatively evenly between inbound and outbound flows with 52 per cent of the volume "in" and 48 per cent "out".

88. With regard to direction of approach to the Study Area, Table 14 reveals that of the 147,700 inbound vehicles the distribution was as follows: 32.8 per cent westbound, 29.7 per cent eastbound, 23.0 percent southbound and 14.5 per cent northbound. The outbound traffic, approximately 149,100 vehicles, disperses in the following directions: 37.6 per cent eastbound, 26.7 per cent westbound, 21.9 per cent northbound and 13.8 southbound. A summary of traffic flows in the major axes, east-west and north-south, indicates that 63 per cent is oriented east-west and 37 per cent north-south in relation to Study Area boundary crossings.

Traffic Variations

89. Traffic volumes do not remain constant throughout the day. The peak traffic flow period normally occurs in the late afternoon hours. To determine variations in traffic flow and the mutual relationships of each hour throughout the day, hourly variation data were obtained. This information was taken from the count station on US 1 at the Congaree River Bridge, west of the Study Area. The information recorded is summarized in Table 15 opposite.

90. The variations obtained indicate that the peak traffic volumes occur between 5 and 6 P.M. when 8.4 per cent of the average daily traffic volume is recorded. During the three hour period from 3 to 6 P.M., 22.6 per cent of the daily volume occurs. In the twelve hour period from 7 A.M. to 7 P.M. approximately 75 per cent of the daily flow occurs.

TABLE 15
VARIATIONS IN AVERAGE DAILY TRAFFIC FLOW
Gervais Street, US 1 at Congaree River Bridge, 1969

<u>TIME OF DAY</u>	<u>PER CENT OF TRAFFIC</u>
12 - 1 A.M.	1.2
1 - 2	0.6
2 - 3	0.5
3 - 4	0.4
4 - 5	0.4
5 - 6	0.7
6 - 7	3.1
7 - 8	6.6
8 - 9	6.6
9 - 10	5.2
10 - 11	5.2
11 - 12	5.5
12 - 1 P.M.	6.2
1 - 2	5.8
2 - 3	6.0
3 - 4	6.5
4 - 5	7.7
5 - 6	8.4
6 - 7	6.0
7 - 8	4.9
8 - 9	4.0
9 - 10	3.2
10 - 11	2.7
11 - 12	2.6
<hr/>	
TOTAL	100.0

Source: South Carolina Highway Department.

Traffic Control

91. Together with convenient access, the efficient operation of the internal street system is a necessity. The street system, which comprises a basic grid system, provides only two east-west routes which are continuous through the area, Blossom and Gervais Streets with Huger, Assembly, Sumter and Pickens Streets being continuous north-south routes. Even with a somewhat limited number of continuous routes, access and circulatory streets enable satisfactory traffic service to automobile and bus traffic.

92. Traffic controls in the form of traffic signals, signs, and pavement markings have been installed on the street system to regulate and assist traffic flow. Traffic signals, the primary method of control, have been installed throughout the area at inter-sections of arterials and collectors to assign vehicular right of way. These signals consist primarily of the pretimed variety which under normal operation will assign a predetermined amount of green time to each of the crossing streets. Traffic actuated controllers are capable of varying the amount of green time according to the traffic demand recorded on intersecting streets.

93. The interconnection of traffic signals into systems enables the coordination of signals into progressive systems. There are five interconnect systems within the Study Area, each operating with one control dial. This system is limited in flexibility and does not respond to variations in traffic flow.

94. Within the primary interconnect system, an independent system has been installed along Main Street between Gervais Street and Blanding Street. Six locations have separate pedestrian phases included within the signal cycle which enable pedestrians to move at these intersections without interference from vehicular flows. When an independent system such as that on Main Street is installed within systems, the flexibility and in most cases the progressive flow along arterials crossing the two systems is impaired.

Transit

95. Transit volumes on the Columbia street system are composed primarily of buses operating on the South Carolina Electric and Gas Company system. These buses serve major locations of the urban area with principal routes crossing the Central City. Intercity bus service is also a part of the Study Area's transportation system and terminals for the two major bus carriers are located and function independently within the Central City. This service connects Columbia directly to cities in the State, the South-east and through transfer locations to the entire Nation.

iii. Parking

96. The end of a vehicular trip requires a parking space for the vehicle, in an off-street facility or at a convenient curb space. Motorists with Central City destinations are motivated to make this trip by various reasons - work, shopping, business, entertainment or other purposes. The selection of a parking location is significantly influenced by the trip purposes of the motorists. For example, motorists entering the Central City for work will normally select a parking space in an off-street facility provided free or with a nominal charge. Motorists coming into the area for shopping, business, entertainment, etc., will normally seek a more convenient parking space and will assume a higher parking charge for this convenient space.

Parking Space Inventory

97. The comprehensive parking inventory conducted in conjunction with the field surveys indicate that a total of 20,073 spaces are provided in off-street facilities and along the curbs. Of this total, approximately 70 per cent, 14,444 spaces, are located in off-street facilities, and the remaining 5,629 spaces at curbs.

98. Of the existing 5,629 curb spaces, 2,614 are controlled by parking meters and the remaining 3,015 are unmetered spaces. The metered spaces represent approximately 46 per cent of available curb spaces. Curb space which is unavailable for parking is designated for special uses such as loading zones, bus stops, reserved spaces and no parking zones such as curb returns, fire hydrants, cross-walks and other fire zones.

99. For visitors to the area, there are 38 commercial off-street parking facilities comprised of 35 lots and 3 garages. These facilities have a total capacity of 3,317 spaces, approximately 23 per cent of the total off-street parking supply. The average capacity of these commercial facilities is 87 spaces.

100. Private lots and garages are provided throughout the area, normally serving a particular user or group of users. Such facilities represent approximately 77 per cent of the total off-street supply with a total capacity of 11,127 spaces. There are a total of 301 private off-street facilities comprised of 299 lots and two garages. The average capacity of the private facilities is 37 spaces.

101. The distribution of parking spaces is recorded in Table 16 below.

TABLE 16
STUDY AREA PARKING INVENTORY - 1969

TYPE OF FACILITY	NUMBER OF SPACES	PER CENT OF TYPE	PER CENT OF TOTAL
Curb			
Metered	2,614	46.0	13.0
Unmetered	<u>3,015</u>	<u>54.0</u>	<u>15.0</u>
Subtotal	5,629	100.0	28.0
Off-Street			
Public	3,317	23.0	15.0
Private	<u>11,127</u>	<u>77.0</u>	<u>57.0</u>
Subtotal	14,444	100.0	72.0
TOTAL	20,073	100.0	

Parking Characteristics

102. Parking characteristics are normally influenced by the motorist's purpose in coming to the Central City. These characteristics include walking distance, duration of stay and type space selected. The availability of parking spaces also influences parking characteristics.

103. The parking characteristic which most influences other characteristics is the purpose which generates the trip into the Study Area. Motorists enter the area for work, shopping, personal business and for other reasons such as entertainment and social. A breakdown of trip purposes indicates that of all parkers, 26 per cent enter for the purpose of shopping, 39 per cent enter to conduct business, 22 per cent are workers and 13 per cent have other reasons for entering.

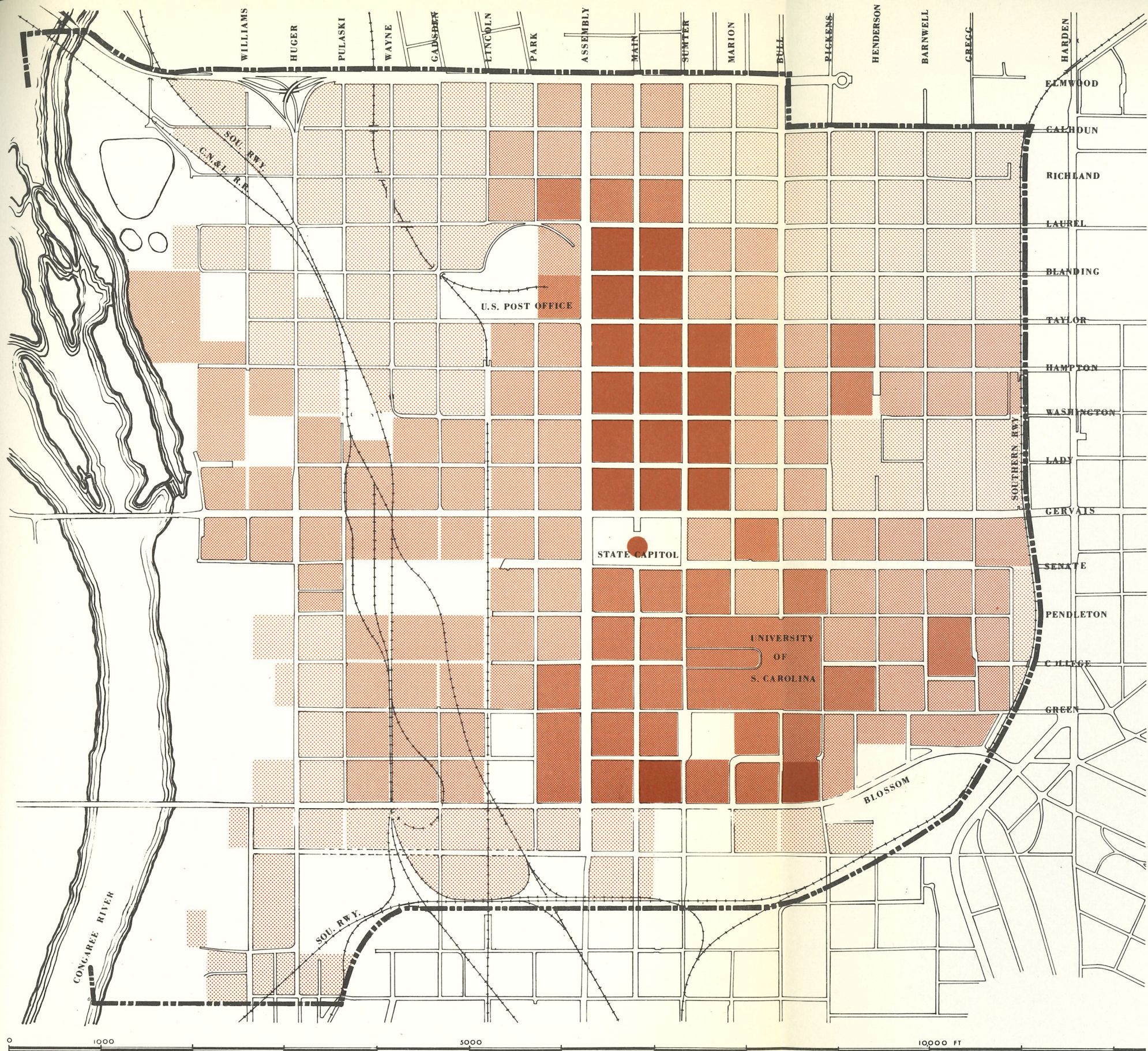
104. The duration of parking normally varies with the different trip purposes which generate the parker's trip. Those who enter the area for the purpose of work will have a longer parking duration than those entering for shopping or for business. All other trip purposes normally have longer parking durations than the shopping or business parker but substantially shorter than the worker parker. The average duration for all parkers was determined to be about 2 hours. Parking duration is slightly higher than in other urban areas throughout the nation of comparable size. This is explained by the inclusion of the University of South Carolina where parking durations are for relatively long periods.

105. As with duration of parking, the purpose which generates the parker's trip influences the walking distance which will be acceptable to the parker. Those entering the area for work or other purposes requiring long parking durations will accept a longer walking distance than the shopper or business parker who expects to be in the Study Area for only a short period. The average walking distance for all parkers within the Study Area was determined to be approximately one city block. This distance is somewhat shorter than that in other urban areas with comparable populations. It can be explained by the number of conveniently located curb and off-street parking facilities within the Study Area.

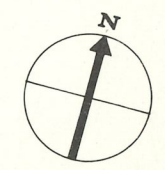
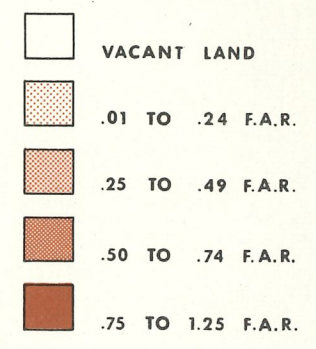
c. Intensity of Development in the Study Area

106. The map opposite indicates the distribution of use intensity taken on a City block basis. The intensity is expressed in Floor Area Ratios, defined as the ratio between total floor area of a building and its lot area. For example, a floor area ratio (F.A.R.) of 0.5 would be equivalent to the case in which a one story building covers half its lot. Similarly, the .5 F.A.R. could occur with a two story building on 25 percent of its lot, or with a four story structure on 12.5 per cent of its lot. Thus, F.A.R. is an abstract representation of development in terms of total floor area and lot coverage. The most intensive concentrations of development would have the higher composite floor area ratios, and would be nearly synonymous with concentrations of high use buildings as in the Central Business District and within the University area.

107. The greatest concentration of built-up areas is located along the north-south axes of Main and Sumter Streets. Moving away from these axes, either to the east or to the west, the massing of buildings diminishes proportionately with distance from the axes. The only exception to this rule occurs as a moderate concentration of buildings along Gervais Street. At present, the existing average composite F.A.R. is less than .30, indicating the overall low density of the Study Area. At its highest intensity within the Study Area, in the Central Business District, the F.A.R. is less than .80.



EXISTING COMPOSITE USE INTENSITY



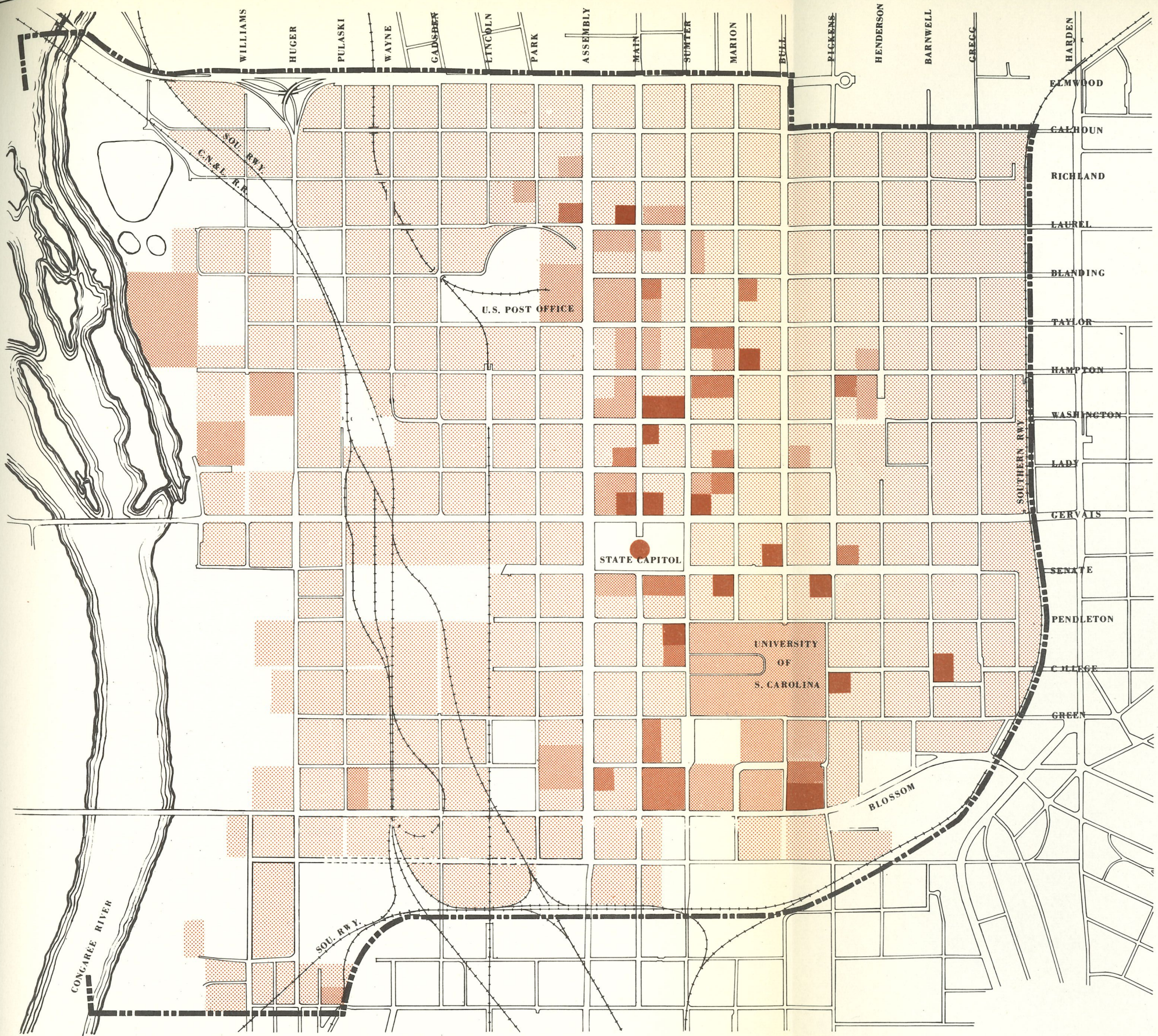
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d. Heights of Buildings

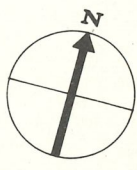
108. Buildings of major height, that is, buildings between 5 and 19 stories, are limited in number and are clustered in two general areas: the Central Business District and the area surrounding the University of South Carolina. More than 90 percent of buildings within the Study Area have between one and four stories and most of it consist of two stories.

109. The pattern of heights of buildings in the Central City is shown on the map opposite which indicates heights on a quarter of a block basis.



EXISTING BUILDING HEIGHTS

- VACANT LAND
- 1 AND 2 STORIES
- 3 AND 4 STORIES
- 5 TO 9 STORIES
- 10 TO 19 STORIES



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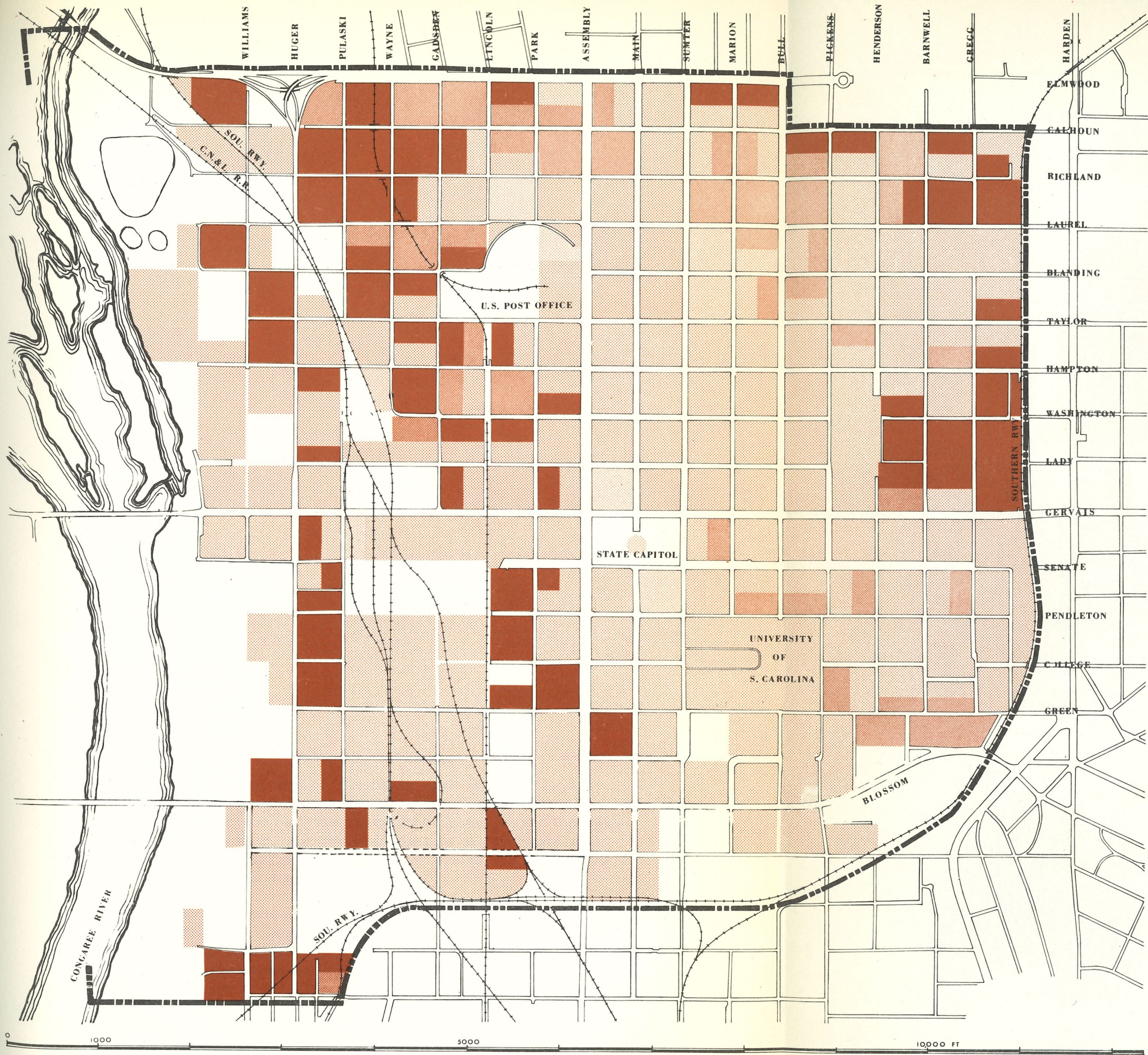
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e. Condition of structures

110. Overall, the condition of structures within the Study Area is relatively good. Sound structures predominate throughout the Central Business District, in the University area and on the Gervais Street axis. Buildings falling within the classification of "deteriorating" or "dilapidated" consist almost exclusively of residential structures.

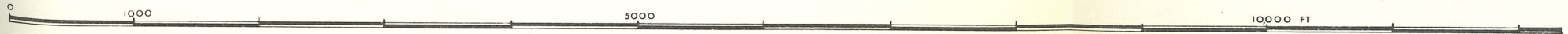
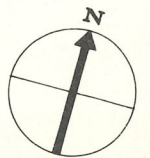
111. The location of poorer quality residential structures can be readily identified. Most notable are the areas along the railroad corridor on the west, and surrounding the fringe of the two historic districts on the north. A third section exists in the low area between Hampton and Gervais Streets, from Pickens Street to the Southern Railroad tracks. The latter portion is topographically separated from the remainder of the Study Area.

112. The existing condition of structures in the Central City is shown on the map opposite. Condition of structures is represented by the predominant condition of half city block.



EXISTING CONDITION OF STRUCTURES

- VACANT LAND
- SOUND
- DETERIORATING
- DILAPIDATED



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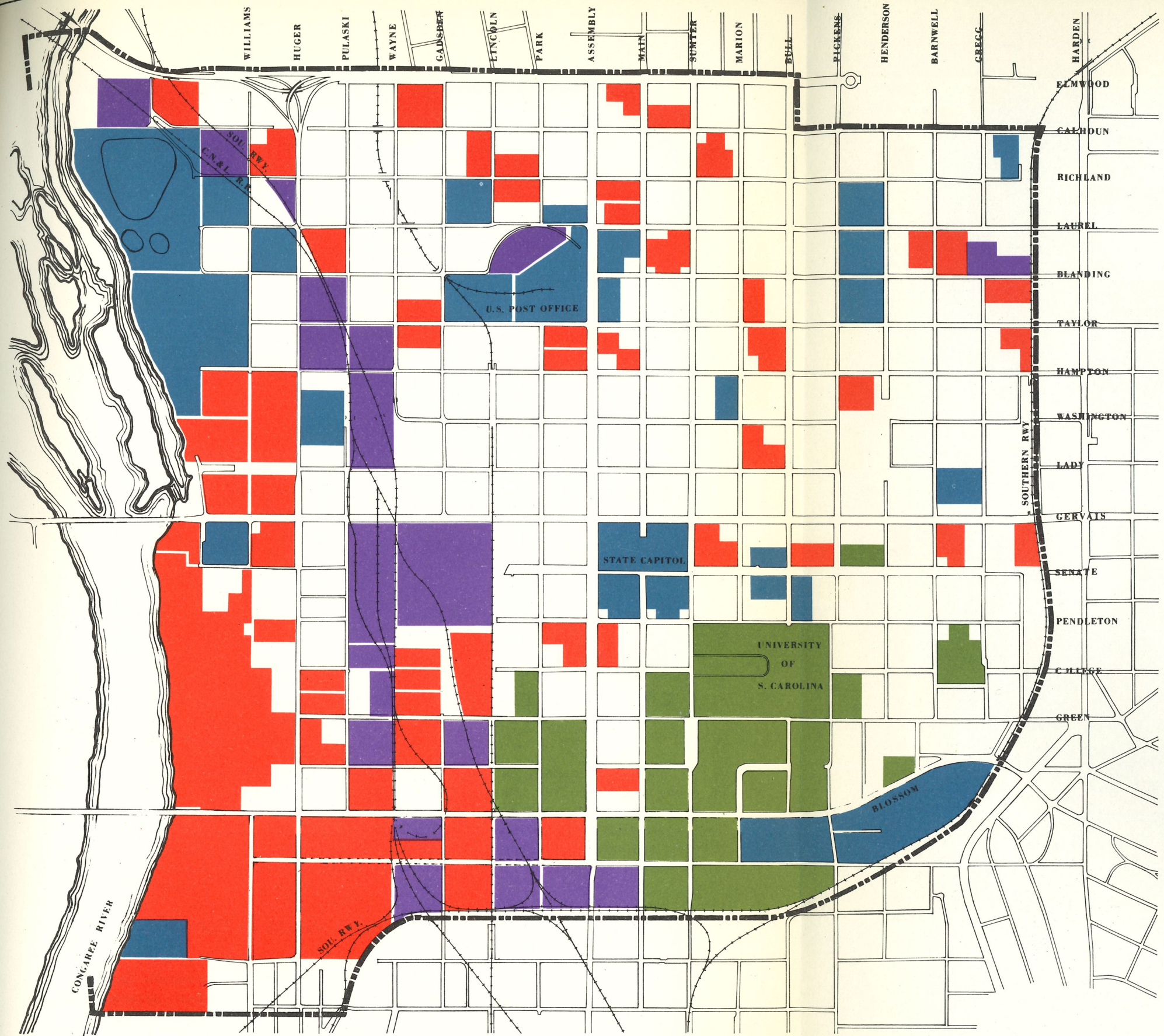
f. Land Ownership

113. More than 50 per cent of the Study Area is under private ownership. The large single, private owner is the Guignard partnership, holding title to much of the riverfront area. Along the railroad corridor, the Southern and Seaboard Coast Line Railroads are predominant. Most of this railroad land is leased for industrial, warehousing and wholesaling uses.

114. As Columbia is the seat of the State government, it follows that the largest governmental landowner within the Study Area is the State of South Carolina. The remaining government-owned land is shared between the City and County governments. The University of South Carolina owns almost all of the land which it occupies. The Federal Government owns or leases land occupied by the Post Office, the Federal Courthouse, the Veterans Administration and several other parcels.

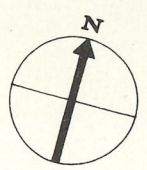
115. At present, the Federal, State, County and City governments lease additional space from private enterprise. The University of South Carolina also rents a small portion of the space which it now uses.

116. The map opposite indicates single ownership of single parcels of more than one-half block. The shown as private ownership is only partially represented on the map because most land is parcelled in smaller than one-half block areas.



MAJOR LAND OWNERSHIP

- OWNER**
- GOVERNMENT
 - UNIVERSITY OF SOUTH CAROLINA
 - RAILROADS
 - PRIVATE OWNERS OF HALF BLOCK OR MORE



C. ANALYSIS, GOALS AND OBJECTIVES

1. Analysis

117. The investigation of the demographic and socioeconomic characteristics, the examination of major functions and definition of the predominant use, and the identification of main elements of the structure of the Study Area have provided the basis for an analysis for determination of weaknesses and potential which will have an impact upon the future of the Central City. These weaknesses and potential are investigated below.

a. Weaknesses of central city

118. The inventory of phenomena shaping the social, economic and physical structure of the Study Area has revealed prominent weaknesses and adverse conditions which tend to devitalize the role of the Central City. As a vital part of the growing metropolitan area, the Columbia Central City is subjected to increasingly severe pressures. Under the impact of slum conditions within the area and on its fringes, parking lots and vacant lots disrupting its structural continuity -- the future cannot be bright without corrective action. Following is an examination of the present status of the Central City in terms of related problems.

i. Decline in the competitive position

119. A major problem of the Study Area is the decline of sales from retail and service functions. Although it is true that it continues to be the core of the rapidly growing metropolitan area and thus absolute business volumes increased during the growth period, its percentage participation has declined.

ii. Physical deterioration of the selling plant

120. A very real problem is the physical deterioration which is intimately associated with environmental problems. Sections of the Study Area can be considered substandard or nonconforming, and blight is now encroaching upon the CBD's high value and volume area. If nothing else, poorly maintained and obsolete buildings can result in either declining assessments or increased vacancies. Both could lead to declining taxes from Study Area property and could affect the entire community's tax base. Considering that the Study Area contributes 32 percent of the City's taxes and 17.5 percent of those of urban Richland County, a decrease in tax base could result in an increase of tax rates in the rest of the community.

iii. Underutilization of land

121. The economic and competitive position of the Study Area is indirectly eroded by underutilization of land and suboptimization of its development potential. Approximately 23 percent of the Study Area and 9 percent of the CBD is vacant. Moreover, 43 percent of the Study Area is non-taxable, (e.g. the University of South Carolina, historical areas, etc.) and there is a trend toward placing more land in uses which will remove it from the tax rolls.

iv. Lack of social and cultural strength

122. The Study Area has very few of the functions needed to fulfill its most important role: the cultural center of the Metropolitan Area. It is badly lacking in major cultural events which provide the image and permanent incentive for attracting people after shopping and office hours. The cultural nucleus provided by the University of South Carolina has not been exploited as part of a general unified concept of social and intellectual exchange.

v. Lack of a viable residential base

123. The Study Area is like many American central areas in that it has a considerable number of substandard dwellings and concentrations of minority groups. While the Study Area does contain some good housing, the supply is inadequate, both quantitatively and qualitatively. Even though Central City contains several high-rise apartment buildings, it fails to attract people in the medium - to high-income levels who wish to live downtown. It appears that land cost and land assemblage problems have discouraged quality residential development in Central City.

vi. Lack of coordinated planning

124. Planning efforts of State and local government and the University of South Carolina have -- in past years -- suffered because of poor coordination. However, this fact is changing as evidenced by recent action by various agencies who are now participating in the preparation of the Central City Development Plan. It is essential for each government agency and the University to prepare master plans related to total development of the Central City.

b. Assets of Central City

125. The Study Area will flourish in accordance with its assets which must be strengthened to take full advantage of the growing economy. Strengths of the Study Area result from assets such as an efficient concentration of business, good accessibility, availability of vacant land, potential for creating a distinct identity, a relatively strong competitive position, potential for historical recognition, a progressive leadership and a sound framework for development activities. These assets are presented below.

i. Efficient concentration of business

126. The Study Area and the Central Business District in particular constitute an efficient and unique concentration of business activity within the Metropolitan Area. The blocks defined as Central Business District contain most of the retailing and general business activities which draw people to the Central City. This concentration provides one of the essential ingredients for molding a new and successful downtown.

ii. Good access

127. The Central City is favorably located with respect to transportation axes. A good network of roads lead to and from the Study Area and bring large concentrations of population within short driving distances. More than 50 percent of the metropolitan population in 1965 lived within a four-mile radius of the State Capitol or within ten minutes' driving distance. About 90 percent of the population lived within a seven-mile radius, fifteen minutes' driving time. New improvements in the road system, the completion of the North-South, Northeastern, Valley and East-West Freeways will further enhance the accessibility of the Central City.

iii. A weakening but still strong competitive position

128. It is difficult, if not impossible, to measure the effect a new shopping center or district would have upon the Central Business District. However, experience indicates that the consumer would continue to shop downtown. Surveys of consumer habits indicate that there are many reasons -- historical and sociological -- which make downtown a pole of attraction. The more important of the consumer satisfaction factors in going downtown are:

- a. Greater variety of styles and sizes and in range of prices and quality.
- b. Best place to meet friends for shopping together and opportunity to conduct other business.
- c. New bargain sales and better delivery service.
- d. More convenient to public transportation.
- e. Better places to eat.
- f. Better places for an outing away from home.

129. Though its competitive position has gradually eroded, because of the combined effect of other assets, the Central City is in a better position than many other CBD's to capitalize on the above consumer satisfaction factors for maintaining and increasing its competitive position.

iv. Available land for development

130. The underutilized area west of Assembly Street as well as other sections of the Central City in poor condition constitute large areas of low investment relative to their important location. Since there is a considerable amount of vacant land in the Central City, a land bank exists which provides many opportunities for development.

v. Potential for attaining a distinct identity

131. Despite the weaknesses evident in the main features which contribute to the making of the visual image of Central City, it possesses many possibilities for creating a character of distinction. The State Capitol, the University of South Carolina, the historic buildings and areas and the riverfront all provide potent ingredients which could contribute to the synthesis of a new and distinct character for the Study Area.

vi. Potential as a cultural center

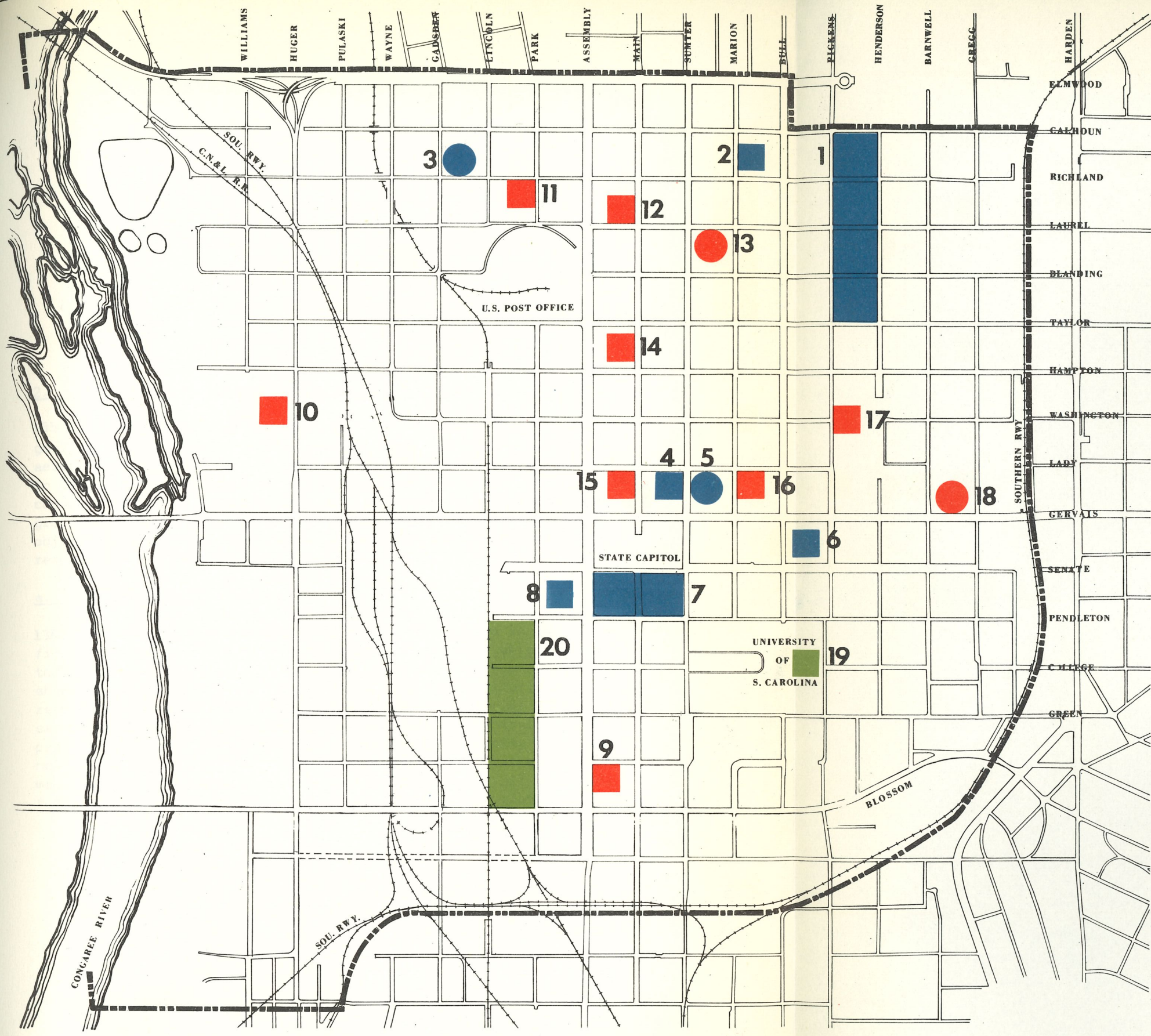
132. The Central City is dotted with areas and buildings of historic interest. The City has a heritage which offers great potential for developing Columbia as a cultural center. A value less readily measured in most cases is the cultural-social advantage which an institution such as the University of South Carolina may bring to the Central City and the Columbia Metropolitan Area. Apart from the stimulation of intellectual pursuits of its faculty, the University can contribute through a variety of programs offered to students and to the public in the form of lectures, seminars, concerts, art exhibits and theatrical productions. Such activities could encourage the growth of other cultural-social facilities in the Study Area.

vii. Sound framework for development

133. Stabilization of the area's present position will support and encourage new development. The state Government complex will give a strong impetus to renewing adjacent areas. The development activities of the University of South Carolina will also generate activity in Central City. The decision of the Belk Department Store and the new Davison's Department Store to jointly construct a parking facility and other current and committed development activities provide a pledge for the future of the Central City. The Congaree River, though presently ignored, affords many opportunities associated with waterfront use. The map opposite shows development planned or under construction which forms a solid foundation for future activities.

viii. Progressive civic leaders

134. The mere fact of initiating the present study underlies the willingness of civic leadership to commit themselves in improvement efforts in the Central City. The attitudes of this leadership group toward innovation and growth, their interest in investing energy and capital and their appreciation for community progress promise an active and realistic program for the Central City.



NEW DEVELOPMENTS

(PLANNED OR UNDER CONSTRUCTION)

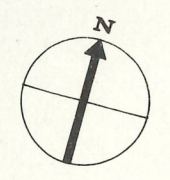
DEVELOPER

- **GOVERNMENT**
- 1 TRICENTENNIAL RESTORATION
- 2 HIGH RISE HOUSING FOR ELDERLY
- 3 GOVERNOR'S MANSION COMPLEX
- 4 CITY PARKING GARAGE
- 5 TEMPORARY POST OFFICE
- 6 ART MUSEUM
- 7 STATE GOVERNMENT COMPLEX
- 8 CIVIC CENTER

- **PRIVATE**
- 9 SHERATON HOTEL EXPANSION
- 10 FACILITIES FOR S.C.E. & G.CO.
- 11 SOUTH LIFE INSURANCE OFFICE
- 12 C. & S. BANK OFFICE
- 13 OFFICE BUILDING
- 14 DEPARTMENT STORE
- 15 S.C.N. OFFICE BUILDING
- 16 OFFICE BUILDING FOR S.C.E. & G.CO.
- 17 OFFICE BUILDING
- 18 GENERAL TIRE CO. DISPLAY ROOM

- **UNIVERSITY**
- 19 MAIN LIBRARY
- 20 COLISEUM PARKING FACILITIES

- MINOR DEVELOPMENT
- MAJOR DEVELOPMENT



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2. Goals and Objectives

135. On the basis of the weaknesses and assets of the Central City, goals and objectives for socio-economic change, functional make up, aesthetic appearance, and implementation are recommended for consideration to the Central City Development Committee and the community. In this connection, the formulation of realistic goals will create a common ground for community agreement and cooperation. Goals and related objectives which the community will adopt can give direction to those responsible for the planning process.

a. Goals for Central City

136. The need for the existence of a central place is as old as man's first permanent settlement. This need has never been as acute as it is today, when metropolitan areas are disorganized into commercial corridors, shopping centers and subdivisions, forming an urban structure only partially responsive to man's utilitarian requirements. Accordingly, to remain satisfied with the present status and to leave the Central City to its present course can only result in creating a void exactly where there is need for a higher level of organization and service at the top of the metropolitan functional hierarchy in consideration of all these the four main goals for the Central City may be generally stated as follows:

Goal 1 To prevent further economic decline and to strengthen the socio-economic position of the Central City within the metropolitan framework.

Goal 2 To strengthen the functional make up of the Central City in response to the challenge of the future in commercial, governmental, residential, cultural and recreational activity as well as the movement of people and goods.

Goal 3 To prevent further deterioration of the structural condition of the Central City and to enhance its aesthetic aspects by creating an attractive environment conducive to human needs.

Goal 4 To create the frame for long-term commitment for the Central City's future and the mechanism for carrying it out.

137. The previous goals can serve only as guidelines for the formulation of objectives which will provide direction for developing the Central City Plan. Such objectives, besides providing an expression of the goals, should also reflect the interaction of strengths and weaknesses of the Central City and be also based on the following fundamental assumptions:

- a. The plan for Columbia Central City must be physically and economically feasible.
- b. The plan must be responsive to the dimensions of time. It must not only serve the needs of the present and the foreseeable future but must be capable of being adapted to presently unforeseen changes in population, economy, social and technological factors.
- c. The plan must reflect the aspirations of the community and of its leaders.

b. Recommended Objectives for the Central City

i. Socio-economic Objectives

138. Although the Central Business District is small as previously stated, it contains the largest concentration of trade and business establishments in the Metropolitan Area. Furthermore, it is generally agreed that it is in the best interest of the community that Central City should continue to grow in order to fulfill its role as the hub of the Midlands area. To transform the Study Area into the strongest center in the hierarchy of centers within the metropolitan structure and to encourage maximum exchange of goods and services, the trend for decentralization must be reversed and future efforts should be directed toward encouraging the retention and establishment of functions belonging in the CBD.

139. To increase opportunities for socio-economic growth, the following objectives are recommended:

- Objective 1 Upgrading of existing employment sources through provision for development of main company offices, stores and services such as financial and institutional headquarters.
- Objective 2 Provision for an increase in functions traditional to the role of the Central City such as governmental, cultural, retail, office and service functions.
- Objective 3 Concentration of government administration to achieve maximum efficiency of service and to attract new ancillary uses.
- Objective 4 Maximization of the potential of the University of South Carolina as a socio-economic factor.
- Objective 5 Utilization of the central location of CBD through provision for full range of high order activities and services by which the Study Area can compete effectively with other commercial areas.
- Objective 6 Provision for the development of high density quality housing close to the Central Business District.
- Objective 7 Upgrading of property values through rehabilitation and thus improvement of the tax base.
- Objective 8 Maximization in the use of the area's setting to allow the expansion of transient facilities.
- Objective 9 Development of a framework for new ancillary waterfront oriented facilities.

ii. Functional Objectives

140. The achievement of socio-economic goals will not suffice for maximizing the effectiveness and efficiency of the Central City. Economic growth and strength must be achieved through a proper arrangement of functions and the convenient movement of people and goods. Such a goal should be expressed through objectives which may be classified as land use objectives and communication objectives.

Land Use Objectives

141. Land use objectives should aim at achieving the most productive use of the land by establishing homogeneity of functions in the Study Area through a clear concept of land use and functional hierarchy. On the basis of the final type and magnitude of functions to remain or to be attracted to the Central City, the area should be organized into functional components properly linked to an integral whole. This restructuring of functions could be achieved by adopting the following objectives:

- Objective 1 Blending of retail services, cultural and social facilities along with residential development so that human activities act closely together within a defined space and in such a manner that they benefit from each other.
- Objective 2 Location and orientation of activity centers as to promote convenient movement of pedestrian and goods with a minimum of conflict with vehicular traffic.
- Objective 3 Functional linkage of the University of South Carolina with the Central Business District.
- Objective 4 Create functional linkage of the historical areas.
- Objective 5 Replacement of non-core uses with new civic and commercial functions.

Communication Objectives

142. In the past, the ease of reaching downtown was a fundamental reason for its importance. Improved accessibility must therefore be a prime requirement. Moreover, consideration should be given to conditions encountered within the Study Area immediately prior to and upon termination of a trip, whatever its purpose should be. To achieve the goal of improved movement of people and goods, the following objectives should be established:

- Objective 1 Improvement of movement to and from the Study Area by clarifying major approaches on the basis of future land use organization and poles of attraction.
- Objective 2 Modernization of local circulation patterns so as to avoid conflicts between movement of people and vehicles.
- Objective 3 Unification and improvement of the mass transportation system to encourage and achieve maximum use to and from the Study Area.
- Objective 4 Provision for conveniently located off-street parking for future transportation needs.
- Objective 5 Provision for freight handling areas for future loading and unloading needs.
- Objective 6 Definition of a pedestrian circulation system providing for safety, convenience and satisfaction.
- Objective 7 Provision for adequate terminal facilities to accommodate both people and goods.

iii. Environmental Objectives

143. People are attracted to beautiful surroundings. Dullness and monotony are not conducive to public interest in an area. Similarly, people do not enjoy being forced to shop in a confused atmosphere. Because of its noble past and the distinctive natural beauty of the area, the Central City should strive for dignity and quiet loveliness, which has universal appeal. Success in achieving a pleasant and health environment will be very important in determining the area's appeal as a place in which to shop, work or do business. Accordingly, the following objectives should be established:

- Objective 1 Elimination of sign chaos and confusion, and clearance of structures and places that are a liability in appearance or which otherwise inhibit the realization of some desirable objective.
- Objective 2 Creation of a new image with a particular identity of its own. Such image must emphasize the Columbia Central City's most desirable features and resources.
- Objective 3 Development of an overall form and massing conducive to visual satisfaction. No part should eclipse another part and each element should convey a sense of balance and unity.
- Objective 4 Utilization of the riverfront for recreational use.
- Objective 5 Introduction of elements conducive to visual richness and excitement. Variety should extend to the urban scene as elements as well as to spatial relationships.
- Objective 6 Creation of pedestrian areas (plazas, esplanades, walkways) connected with a system of open space throughout the Study Area.

iv. Implementation Objectives

144. The Central City cannot be revitalized with piecemeal action or facelifting stunts. It needs a sustained effort and substantial investment by both the private and public sectors. There will be certain things such as retail and office development which can best be accomplished by private enterprise. Certain other improvements such as street and certain utility improvements will require sizeable public expenditures. Impementation would probably take the form of both long-range and short-range projects.

145. Accordingly, the implementation process should adhere to the following basic objectives:

- | | |
|--------------------|--|
| <u>Objective 1</u> | Commitment to a long-term coordinated effort by private business interests and local government. |
| <u>Objective 2</u> | Initiation of a sizeable financial investment of private funds plus additional expenditures of public revenue. |
| <u>Objective 3</u> | Full use of all resources and State and Federal programs. |
| <u>Objective 4</u> | Realistic phasing of the plan. |
| <u>Objective 5</u> | Creation of a mechanism for implementation. |

D. FUTURE GROWTH AND REQUIREMENTS1. Demographic and Economic Forecastsa. Columbia SMSA and Central City Future Growth Patterns - 1985 and 2000

146. Recent growth trends cited extensively in Chapter B, provide the backdrop against which forecasts of future demographic and economic activity can be made. Notwithstanding such trends, the SMSA's future growth will be dependent upon certain key national decisions (especially those which might affect Fort Jackson) and upon the strength of Columbia's will to control its future growth.

147. Employment is the parameter which best reflects economic opportunity in an area. Moreover, employment levels (or, more definitively, job opportunities) are the key non-demographic causative factors affecting small area population levels. Accordingly, the study team developed employment estimates based on an analysis of the Columbia SMSA's regional strengths or advantages.

148. Compared with the growth performance of the nation, Columbia has and will continue to generate relatively more goods and services than are generated in the economy as a whole. This regional advantage was quantified and expressed through the medium of employment change. Subsequently, through the use of anticipated labor force participation rates, the derived employment projections were used as a base to obtain a focus on the probable size and character of the future Columbia population. Because of the sequence in the above methodology the employment forecast will precede that of population in the present report.

i. Employment GrowthColumbia SMSA

149. On the assumption that the economic prosperity of Columbia predicated that the region will maintain and increase its participation in the growth of the nation, an evaluation of the future prospects for expansion at the national level was undertaken. To obtain the national share of future Columbia SMSA employment growth, projections made by the Department of Labor were examined and modified in the light of current economic thinking and policies. Finally, to obtain employment by principal industry group to 1985 and total employment to the year 2000, the selected national employment growth rate estimates were factored by the respective regional advantage values determined from the employment shift analysis. The derived employment levels were subsequently tested for reasonableness and consistency with industrial mix forecasts prepared by the National Planning Association. Table 17 opposite details the employment estimates for 1985 by industry group. The table represents a fusion of the moderately restrained but desirable growth prospects anticipated for the nation, with the more optimistic prospects expected for Columbia. No attempt has been made to extrapolate employment estimates on an individual industry basis to the year 2000 since it is felt that over such a protracted time frame different relationships and interdependencies will come into being.

TABLE 17
COLUMBIA SMSA, ESTIMATES OF FUTURE
 EMPLOYMENT BY PRINCIPAL INDUSTRIAL
 CATEGORY, 1969 - 1985 (1)

INDUSTRY GROUP	1969		1985	
	Number of Workers	Per Cent of Total Civilian	Number of Workers	Per Cent of Total Civilian
Agriculture	1,600	1.4	1,000	0.5
Mining	-	-	-	-
Contract Construction	7,200	6.2	12,000	6.6
Manufacturing	18,900	16.3	33,800	18.6
Transport and Communications	6,400	5.5	9,900	5.5
Wholesale and retail trade	20,800	18.0	28,500	15.7
Finance, insurance and real estate	5,800	5.0	9,600	5.3
Services	13,100	11.3	19,500	10.8
Civilian Government	28,300	24.5	42,000	23.2
Self employed and domestics	13,700	11.8	25,000	13.8
TOTAL CIVILIAN	115,800	100.0	181,300	100.0
MILITARY	25,000		20,500	
TOTAL EMPLOYMENT	140,800		201,800	

- (1) A detailed description of the approaches taken in deriving this table is given in the report Central City Planning Project, Phase II, Analysis.

150. On the basis of an overall growth rate of 2.8 percent per year in civilian employment, future employment in the SMSA is expected to rise from 115,800 in 1969 to 181,000 by 1985 and to 272,000 by 2000. A slight decline is anticipated over the period in military employment -- from 25,000 to 20,500 -- the level obtaining in 1964.

Central City

151. Accepting the fact that government is the prime function and barometer of growth in Columbia and, more specifically, Central City, an analysis was made of growth patterns in this employment grouping.

152. Between 1957 and 1969, government employment in the Central City increased from 3,987 to 5,451 workers. This was equivalent to an annual average increase of 2.6 per cent. Over the same period, the population of the State of South Carolina increased by an estimated 1.4 per cent per annum. Moreover, the Bureau of the Census is anticipating that this rate of increase in the State's population will be maintained reaching a level of 3,365,000 by 1985. If this rate of 1.4 per cent per annum were maintained over the planning period, there would be 3,900,000 persons in South Carolina by 2000. It is interesting to consider this increase in population in terms of the consequent increase in administrative responsibility as embodied in expanded demand for government functions in Columbia.

153. In 1957, there were an estimated 571 persons per civilian government employee in Columbia. By 1969 this proportion had declined to approximately 495 persons per employee. If this declining rate representing the expanded administrative responsibility of government agencies were to continue into the future, by the year 2000 there would be 300 persons per government worker, giving a total government work-force in Central City of approximately 13,000.

154. Allowing that technological advances would enable more efficient labor utilization, a value of 350 persons per employee is suggested, giving a government work force of 11,500 - more than double present levels. This would be equivalent to an average annual rate of increase, 1969 to 2000, of 2.4 per cent per annum.

155. Through the concept that by "backward" and "forward" linkages government is the prime determinant of the level of economic activity within Central City, this rate of increase of 2.4 percent per annum may be rationally applied to total Central City employment. On this basis, total employment in the Study Area - currently at 32,200 - may be expected to reach 47,000 by 1985 and 67,000 by 2000.

156. An alternative focus on Study Area employment is provided by consideration of the following ratios:

1965	<u>SMSA Employment</u>	=	<u>97,600</u>	(1)
	Study Area/employment		26,634	(2)
		=	3.67:1	
1969	<u>SMSA Employment</u>	=	<u>115,800</u>	(1)
	Study Area Employment		32,300	(3)
		=	3.59:1	

157. If the 3.59:1 percent relationship were to be maintained through the planning period, Study Area employment becomes:

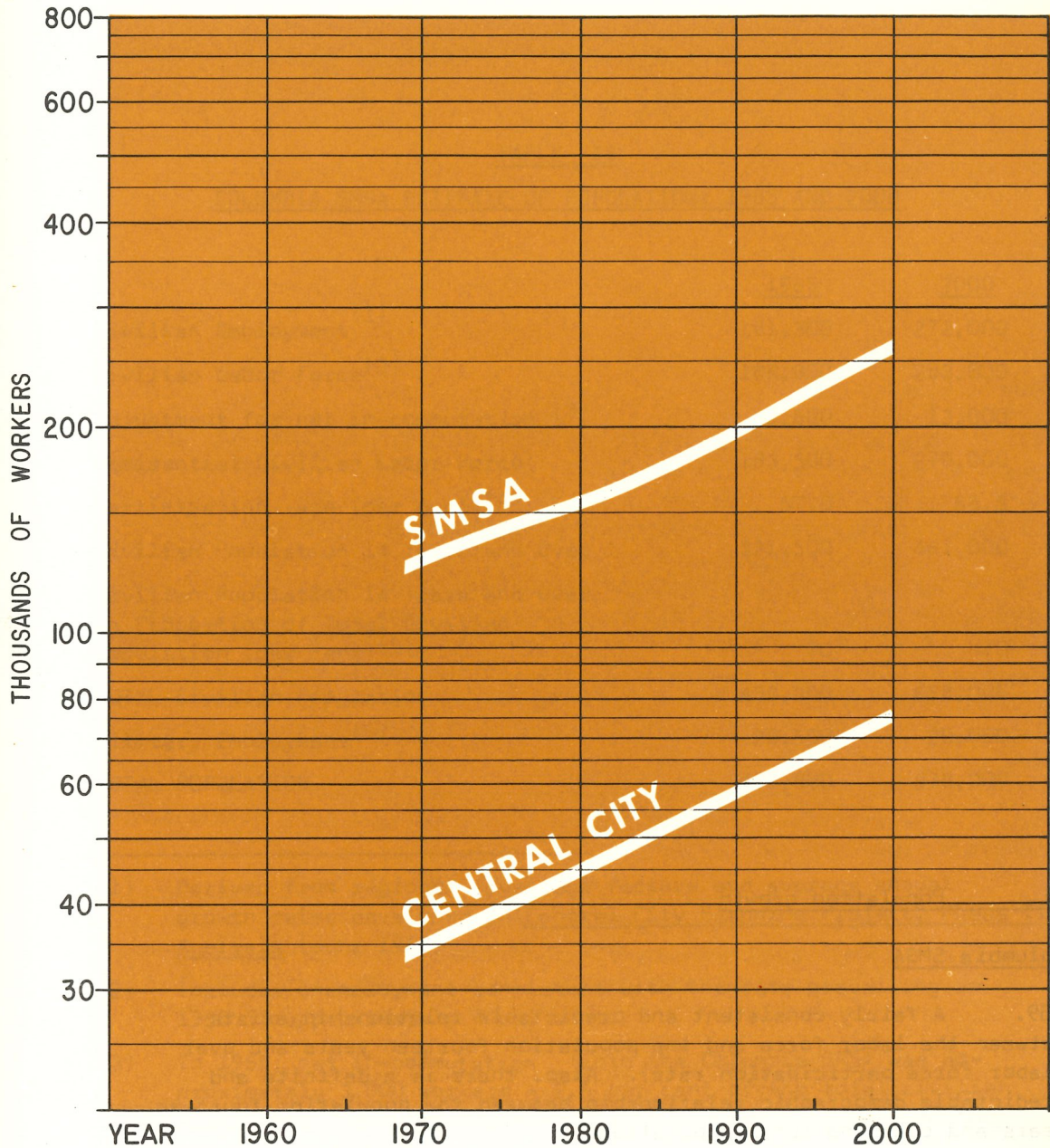
1985	<u>181,300</u>	(4)	=	50,500
	3.59			
2000	<u>272,000</u>	(4)	=	75,800
	3.59			

-
- (1) Employment here refers to total civilian employment.
 (2) COATS data.
 (3) Richland and Lexington Counties Joint Planning Commission.
 (4) Study Team.

158. The Columbia SMSA and Central City employment growth are graphically illustrated opposite.

FIGURE 1

COLUMBIA SMSA AND CENTRAL CITY CIVILIAN EMPLOYMENT 1969 - 2000



Source: SMSA, 1969 South Carolina Employment Security Commission
SMSA, 1969-2000 Doxiadis Associates, Wilbur Smith and Associates,
Lyles, Bissett, Carlisle and Wolff
Central City, 1969, Richland and Lexington Counties
Joint Planning Commission
Central City, 1969-2000, Doxiadis Associates, Wilbur Smith and Associates,
Lyles, Bissett, Carlisle and Wolff

COLUMBIA SMSA AND CENTRAL CITY
CIVILIAN EMPLOYMENT 1969-2000



ii. Population growth

Columbia SMSA

159. A fairly consistent and predictable relationship exists between the labor force and the population fourteen years and over (labor force participation rate). Also, there is a definite and predictable demographic relationship between the population fourteen years and over and total population.

160. The estimates shown in Table 18 opposite were derived using an approach which combines the logic of population concentrations (viz., the availability of job opportunities) with a profound appraisal of the future capability of the Columbia SMSA to utilize its regional economic advantages. Accordingly the population of Columbia is anticipated to increase from 335,000 in 1969 to 480,000 by 1985 and to nearly 680,000 by the year 2000. This means that over the next thirty years Columbia will reach a size approaching that of Birmingham, Alabama, or Memphis, Tennessee, today.

TABLE 18

COLUMBIA SMSA ESTIMATE OF POPULATION: 1985 AND 2000

	<u>1985</u>	<u>2000</u>
Civilian Employment ⁽¹⁾	181,300	272,000
Civilian Labor Force ⁽²⁾	188,800	283,000
Adjustment for net in-commutation ⁽³⁾	5,500	13,000
Residential Civilian Labor Force	183,300	270,000
Participation rate (per cent) ⁽⁴⁾	57.0	58.5
Civilian Population 14 Years and Over	321,500	461,000
Civilian Population 14 Years and Over as Proportion of Total Civilian Population (per cent) ⁽⁵⁾	70	70
TOTAL Civilian Population	459,300	658,000
Military Employment ⁽⁶⁾	20,500	20,000
TOTAL POPULATION	479,800	678,000

-
- (1) Derived from regional advantage factors and average annual growth rates developed in Central City Planning Project, Phase II, Analysis (June 1969)
- (2) Includes unemployment consistent with the rate prevailing in 1968 of approximately 4 per cent.
- (3) In 1965, net in-commutation into the Columbia SMSA was approximately 3,000 workers - 2.6 per cent of the total civilian work force. For the planning period, it has been assumed that net in-commutation will amount to 3 per cent of the SMSA civilian work force in 1985 and 5 per cent in 2000.
- (4) Proportion of population 14 years and over in the labor force - values based on Department of Labor estimates (Monthly Labor Review, October, 1966).
- (5) Based on Hammer, Greene, Siler Associates, The Economy of Metropolitan Columbia, 1965, p.132.
- (6) Equivalent to military personnel at Fort Jackson in 1964.

Central City

161. The special character of the Central City precludes any approach to estimating future population on the basis of historical trends which provide a static picture. The Inventory showed the population of the Study Area remaining constant at approximately 18,000 persons.

162. Any attempt to categorize the nature of a population inevitably falls short of giving a satisfactory picture. However, for the purpose of this study, it is helpful to point out what appear to be the principal characteristics of the central city residential population. This evaluation is inevitably broadbased and is intended merely to provide a background against which the assessment of the level of future population should be made.

163. The principal characteristics of the Central City population, therefore, are seen as follows:

- a. Low income (predominantly Negro) persons living mainly in single and some multi-family units. On the assumption that there will be public sector assistance in replacement of the low-income housing stock, the Negro population in the Central City is expected to remain at present levels over the study period -- that is, at about 11,000 to 12,000 persons.
- b. Students living in dormitories and in single - and multi-family units. Students comprise an important and increasingly less seasonal element in the Study Area population. However, in spite of the continued, even spectacular growth of university enrollments expected in the Study Area, the great part of the future living accommodations of the students are seen as being located outside the Study Area. This is only a technical differentiation since future accommodations will be located in close proximity to the University and their occupants will use Central City retail and service facilities.

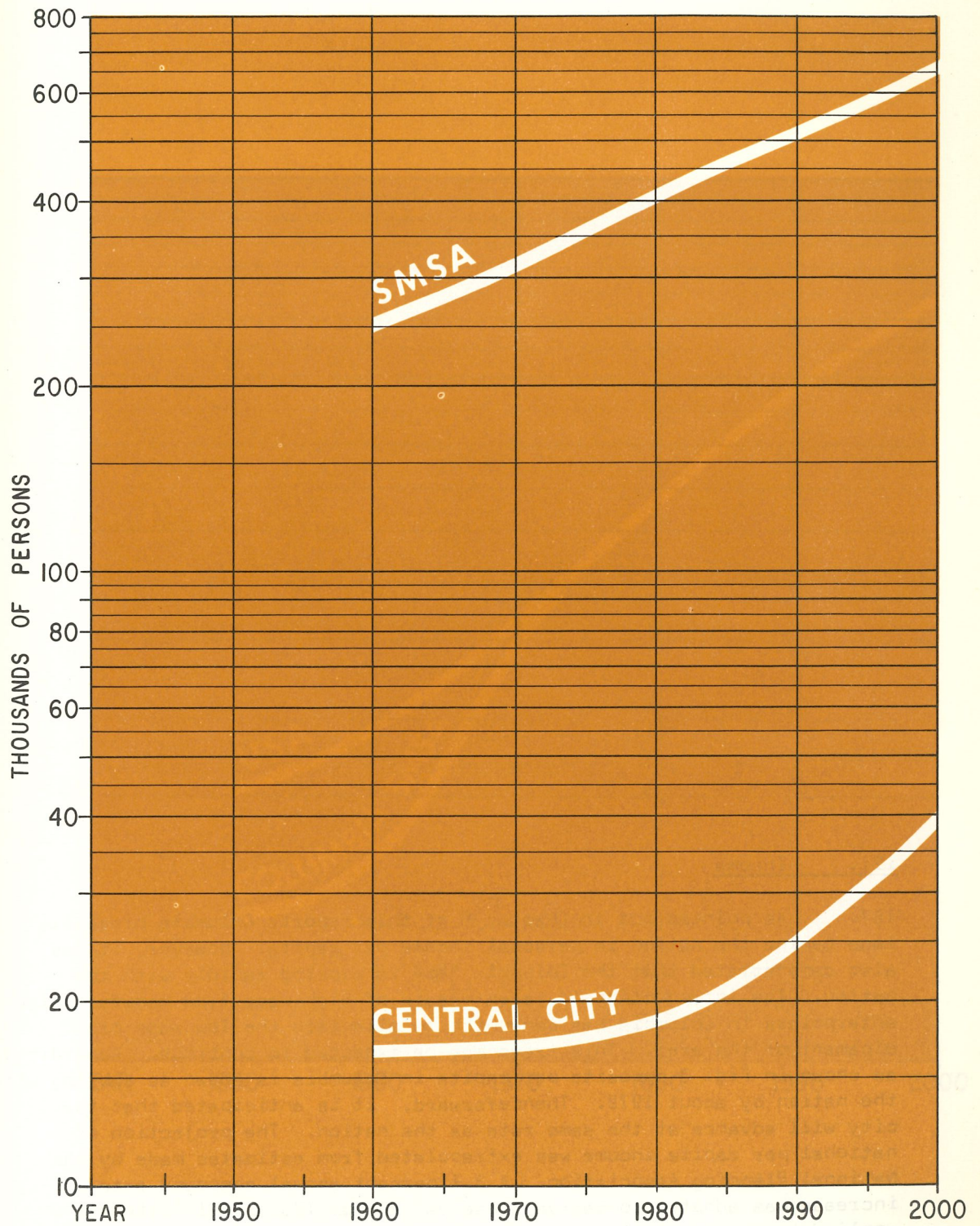
- c. University Faculty. The Faculty represent a small element in the total Central City population. It should be appreciated that these people have an acutely developed aesthetic sensitivity to the Central City environment.
- d. Elderly persons of low income. Some progress has been made in accommodating this group in recent years.
- e. A numerically insignificant but substantially important group of people living in the "old residences" particularly around the Ainsley Hall historical area.
- f. Elderly or middle aged persons whose families are grown who have taken up residence in the Central City -- often in apartments. This group is presently poorly represented in the Central City. However, for the future, it is people resembling the characteristics described above that represent the best possibility of providing a satisfactory income "mix" in Study Area. The degree to which these people are attracted to the Central City depends in large part on the sophistication of the accommodations that are available and the general conductiveness of the urban environment.
- g. Single or young married persons living mainly in apartments. Ranging from "small town" girls to executives, this group contributes to the vigor and image of the Central City.
- h. Prisoners at the State Penitentiary.

164. On the basis of past trends and in consideration of this broad-based evaluation, the population of the Study Area is only anticipated to increase moderately above the prevailing level of 18,000 persons -- perhaps to 20,000 persons. This must be considered as the "null" or "do nothing" situation and therefore, a break must be made with past patterns.

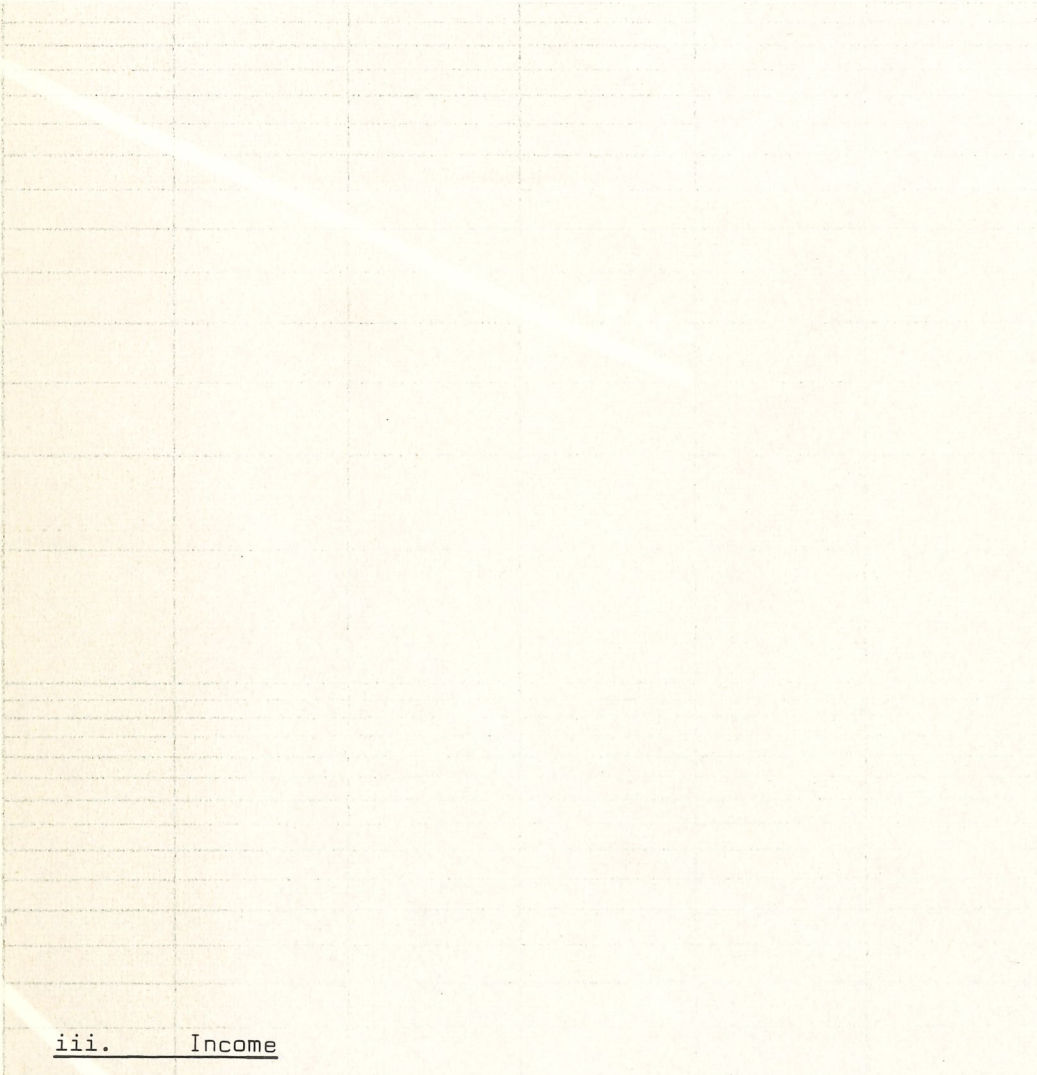
165. The attainment of the new urban arrangement which will result by the implementation of the Central City Plan will provide both enhanced housing and infrastructure. In short, the livability of the central area will be increased and residential population will be attracted from other areas. An additional advantage of a central location will be an avoidance of the ever-increasing travel costs and emotional and physical strain that may be expected as the urban highway system becomes more extensive.

166. The revitalization proposals incorporated in the Central City Plan will create a demand for close in housing. It is estimated that provision should be made for 12,500 to 13,500 new or remodeled dwelling units. Assuming that families within the Study Area will average 3 persons per family, a population of up to 40,500 persons should be planned for by the year 2000. The Figure opposite shows the growth of population in the Columbia SMSA and the Central City up to year 2000.

COLUMBIA SMSA AND CENTRAL CITY POPULATION 1950 - 2000



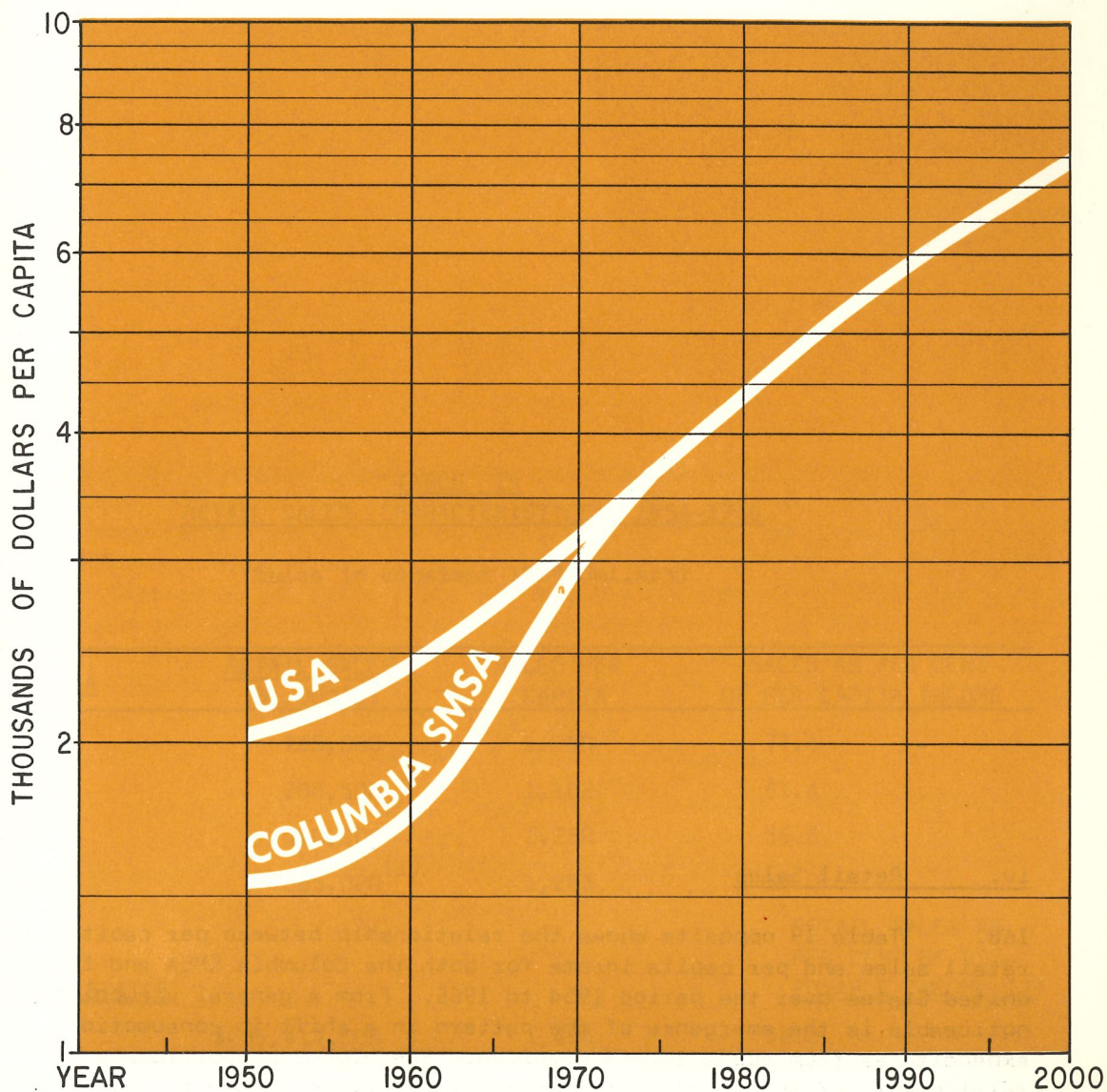
Source : Doxiadis Associates, Wilbur Smith and Associates, Lyles, Bissett, Carlisle and Wolff



iii. Income

167. As pointed out in Chapter B of this report, Columbia presently lags behind the nation in personal income per capita. However, it was also demonstrated that the Columbia SMSA is closing rapidly with the nation. The introduction in recent years of high-wage type manufacturing enterprises in Columbia has done much to alleviate the low wage predicament of the area. This trend may be expected to continue. Accordingly, as shown in Fig. 3 opposite per capita in Columbia is shown as closing with the nation by about 1975. Thenceforward, it is anticipated that the city will advance at the same rate as the nation. The projection of national per capita income was extrapolated from estimates made by the National Planning Association. A 3.1 percent annual compound rate of increase was adopted to derive these values for 1985. This rate was applied to the national level of per capita income. Over the period 1985 to 2000, an average annual rate of 2.5 percent was adopted. The estimates are in constant dollars discounting an annual price increase of 2 percent. On this basis, income per capita in Columbia is shown as reaching \$5,295 by 1985 and \$7,664 by 2000.

UNITED STATES AND SMSA PER CAPITAL INCOME



Source: 1950-1969, Office of Business Economics,
Survey of Current Business August 1968
1969-1985, National Planning Association,
National Planning Projection, 1977-1978, Feb. 1968
1985-2000, Doxiadis Associates, Wilbur Smith and Associates,
Lyles, Bissett, Carlisle and Wolff

iv. Retail Sales

168. Table 19 opposite shows the relationship between per capita retail sales and per capita income for both the Columbia SMSA and the United States over the period 1954 to 1966. From a general viewpoint, noticeable is the emergence of the pattern in a shift in consumption expenditures from goods toward services. The higher proportionate relationship of retail sales to per capita personal income in Columbia as compared with the United States may be attributed to two factors. First, the markedly lower average incomes in Columbia which in earlier years led to proportionately higher expenditures on goods rather than on services. Second, the expanded trade area served by Columbia which is greater than the area of the Columbia SMSA. This has tended to inflate the sales per capita value developed for the SMSA. Over time, the increase in per capita incomes has counterbalanced this tendency, and sales as a proportion of personal income in Columbia are seen to be approaching the same proportionate distribution as in the nation.

TABLE 19
RETAIL SALES CHARACTERISTICS: 1954-1966

(Sales in constant 1969 dollars)

<u>COLUMBIA</u>	<u>RETAIL SALES</u> (\$1,000's)	<u>SALES PER</u> <u>CAPITA</u>	<u>SALES AS PER CENT</u> <u>OF PER CAPITA INCOME</u>	
1954	265,000	1,250	77.4	
1958	288,500	1,182	61.4	
1963	340,000	1,259	56.6	
1966	385,000 ⁽¹⁾	1,283	50.0	
			RETAIL SALES AS PER CENT OF DIS- POSABLE INCOME (2)	
<u>UNITED STATES</u>				
1954	\$235,412,000	1,454	58.8	-
1958	248,590,000	1,146	49.0	61.4
1963	282,640,000	1,306	47.4	55.3
1966	305,000,000 ⁽¹⁾	1,592	48.8	56.7

(1) Estimate

(2) Retail sales are here equivalent to personal consumption expenditures on durable and non-durable goods.

169. Table 20 below shows the income-sales per capita relationships extrapolated to the year 2000 and applied to the estimated SMSA population over the planning period. On this basis, retail sales in the Columbia SMSA are expected to increase to one billion dollars (\$1,072,000,000) by 1985 and two billion (\$2,073,000,000) by 2000. This is equivalent to increases of 137 percent and 350 percent above today's level for the years 1985 and 2000 respectively.

TABLE 20
TOTAL AND PER CAPITA RETAIL SALES
COLUMBIA SMSA
1954-2000

(constant 1969 dollars)

YEAR	INCOME PER CAPITA	SALES PER CAPITA	RETAIL SALES PER CAPITA AS PERCENT OF PER CAPITA INCOME	RETAIL SALES (\$1,000's)
1954	\$1,613	\$1,248	77.4	265,000
1958	1,923	1,180	61.4	288,000
1963	2,223	1,258	56.6	340,000
1966	2,564	1,282	50.0	385,000
1969	3,000	1,350	45.0	452,000
1985	5,295	2,383	45.0	1,072,000
2000	7,646	3,058	40.0	2,073,000

The Future of the Retail Trade in the Central City

170. While retail activities will continue as an important function of the Central City there are cogent reasons for expecting that the Central City's competitive position vis-a-vis suburban marketing outlets will continue to be eroded. This has been the experience of central cities throughout the nation. As urban populations grow, retail sales in the central city also grow but not in proportion. The dispersion of residential development results in more areas becoming less accessible to downtown.(1)

171. Between 1951 and 1965 the Columbia CBD market share of total sales in the Columbia SMSA declined from 30.6 percent to 17.8 percent. In 1965, it is estimated that sales in the total Study Area amounted to 30 percent of total SMSA sales and in 1968 to 28.3 percent.

(1) A recent statistical analysis of the growth performance patterns of urban places found that "for the country as a whole, probability of urban center decline increases outward from a central city to a distance of about eighty miles, after which it tends to decrease slowly. Also, probability of urban center decline is relatively low within twenty miles of the central city or a 30-45 minute travel time". R.M. Northan in "Population Decline in Urban Centers" Land Economics, University of Wisconsin, August 1969, p. 321.

172. The Central Business District is not coextensive with the Central City. However, in terms of the city's retail function, it is more nearly so than, for example, in terms of employment. If total sales in the Central City area outside the CBD are included for 1965, the proportion of total central city sales would rise to 30 percent of total Columbia SMSA sales. That is above the 17.8 percent recorded for the CBD.(1)

173. But, and this is a point of great significance, a considerable proportion of these peripheral CBD sales are comprised of new and used car sales. In 1965, car sales accounted for an estimated 45 percent of peripheral sales and 18 percent of total Study Area sales. If car sales are deleted, shopping goods sales in the Study Area become 24.6 percent of total Columbia SMSA sales. Likewise, for 1969 the deletion of car sales would make shopping goods sales in the Study Area equivalent to an estimated 24.7 percent of total SMSA sales.

174. In order to provide perspective on the interpretation of these proportions, a comparison has been made with the central city retail sales distribution of certain other cities which are similar in regional context. The cities range in size, being both smaller and larger than Columbia⁽²⁾. These data are given in Table 21 opposite.

175. Linear correlation analysis of the selected city CBD sales and population variables shows that Columbia has a typically weakening CBD sales involvement. It appears reasonable to expect that this typicality will continue over the planning period. Based on the correlation trends of the larger cities, it is anticipated that as Columbia grows in population and spatial residential dispersion, the proportion of sales in the Central City will decline to approximately 18 percent by 1985 and 14 percent by 2000. These values assume a strengthening of the Central City residential base, with implementation of improvement programs devised by this study.

(1) Based on COATS data.

(2) Unfortunately, at the Census of Business in 1963, the incorporated population of Columbia was of insufficient size to be eligible to have separate statistical treatment of CBD sales.

TABLE 21
CENTRAL BUSINESS DISTRICT RETAIL SALES AS A
PROPORTION OF TOTAL SMSA SALES 1958-1963

(Selected Cities)

	POPULATION <u>1966 est.</u>	CBD SALES AS PERCENT OF TOTAL SMSA SALES	
		<u>1956</u>	<u>1963</u>
Jacksonville, Fla.	500,000	17.7	14.4
Nashvill, Tenn.	523,000	25.9	21.0
Knoxville, Tenn.	380,000	21.8	18.4
Oklahoma City, Okla.	588,000	15.9	9.0
Richmond, Va.	493,000	26.8	19.0
Norfolk, Portsmouth, Va.	637,000	16.6	12.4
Winston-Salem, N.C.	207,000	42.4	35.5
Birmingham, Ala.	734,000	26.7	19.9
Montgomery, Ala.	174,000	47.3	37.2
Charlotte, N.C.	312,000	36.1	34.7

SOURCE: Sales data, U.S. Department of Commerce; Census of Business, 1963.

176. Table 22 below shows retail sales in the Central City in dollars value and as percentage of the SMSA sales. It can be seen that, in real terms, retail sales are expected to more than double to \$193 million by 1985 and to reach \$290 million by 2000.

TABLE 22
COLUMBIA CENTRAL CITY: RETAIL SALES, 1951-2000

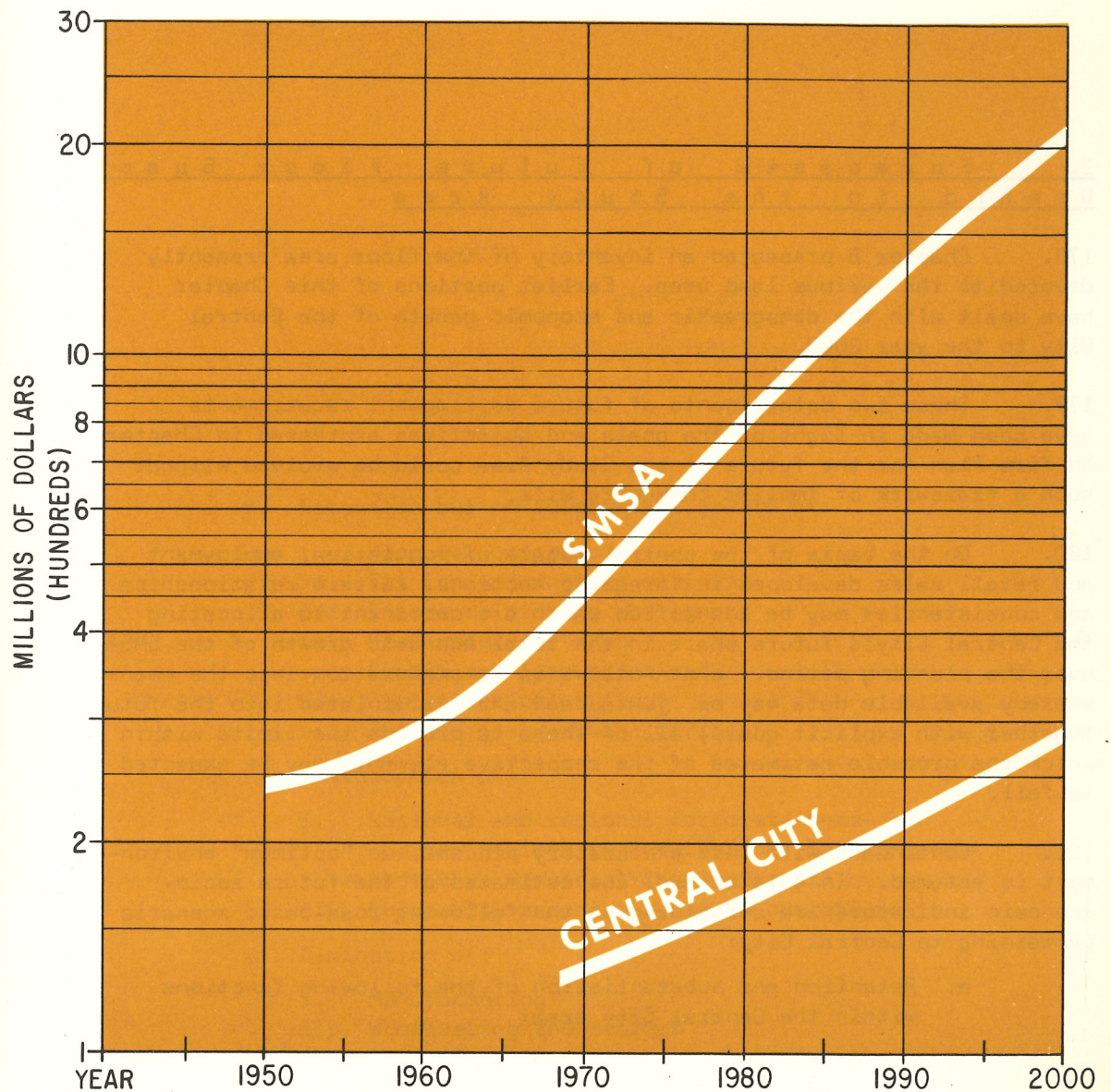
<u>Year</u>	<u>Amount</u> <u>(\$1000's)</u>	<u>Per cent of SMSA Sales</u>
1951	(74,888)	(30.6)
1957	(54,343)	(18.8)
1965	(67,078)	(17.8)
	112,700	30.0
1969	128,000	28.3
1985	193,000	18.0
2000	290,000	14.0

Note: 1. Figures in parentheses refer to the CBD.
2. Car sales are included.

SOURCE: 1951 and 1957, Columbia City Planning Commission
1965, COATS data.
1969, Richland and Lexington Joint Planning Commission.
1985 and 2000, Study Team.

177. The retail sales growth for the Columbia SMSA and the Central City are graphically presented opposite.

COLUMBIA SMSA AND CENTRAL CITY RETAIL SALES 1950 - 2000 (Constant Dollars)



Source : SMSA, 1950-1963, Bureau of the Census

SMSA, 1963-2000 Doxiadis Associates, Wilbur Smith and Associates,
Lyles, Bissett, Carlisle and Wolff

Central City, 1968 Richland and Lexington Counties
Joint Planning Commission

Central City, 1968-2000 Doxiadis Associates, Wilbur Smith and Associates,
Lyles, Bissett, Carlisle and Wolff

2. Forecasts of Future Floor Space Demand in the Study Area

178. Chapter B presented an inventory of the floor area presently devoted to the various land uses. Earlier portions of this Chapter have dealt with the demographic and economic growth of the Central City to the year 2000.

179. These two determinants of future development requirements have been made in light of the goals and objectives expressed in Chapter C. No firm Plan for the future of the Study Area could be evolved without such a framework of implied community will.

180. On the basis of the control totals of population, employment and retail sales developed in foregoing sections, certain relationships and consistencies may be identified which are pertinent to allocating the Central City's future share in the total economic growth of the SMSA over the planning period. What follows is an exploration into the means whereby available data may be juxtaposed and extrapolated into the future, together with explicit goals, all of these to provide the limits within which the probable estimates of the respective elements may be expected to fall.

181. Continuant with this exploratory process, an "optimum" environment is assumed. In this regard, the estimates of the future socio-economic indicators are structured on the following road-based scenario pertaining to Central City:

- a. Retention and substantiation of the following functions within the Central City area:

- Government
- Legal
- Financial (central banking)
- Retail (comparison and novelty goods)
- Utility company headquarters
- University (operations)
- Hotel and Motel (both transient service and convention functions)
- Insurance (corporate headquarters)
- Low income housing
- High income housing

- b. Retention but no substantial growth of:
 - i. Hospital operations
 - ii. Clinics and doctors offices
 - iii. Insurance brokers and agents
 - iv. Real estate offices
 - v. Credit and loan agencies
 - vi. Ecclesiastical offices
 - vii. Professional service offices
- c. Introduction of:
 - i. National and regional corporate head-quarter offices (manufacturing, insurance, and other financial institutional)
 - ii. University oriented research operations⁽¹⁾
- d. Diminution of:
 - i. Manufacturing
 - ii. Wholesaling and storage
 - iii. Rail operations
 - iv. Automotive service and repair facilities
 - v. Deteriorated and slum dwellings

(1) The possibility of including research and development firms in the Study Area can only be entertained providing an intense effort is made by the universities to compete in this highly competitive field.

a. Forecast for major uses

i. Office floor space requirements

182. Office space ratios in the Study Area per capita of total civilian Columbia SMSA population were as follows:

1960	=	$\frac{1,987,600}{241,000}$ (1)	= 8.2 sq. ft./capita
1969	=	$\frac{2,555,000}{310,000}$ (2)	= 8.2 sq. ft./capita

183. While there has been a noticeable increase in suburban office building in the last four years, it is anticipated that with a few notable exceptions this new office capacity outside Central City will be aimed primarily at the smaller, mainly service-oriented businesses. Table 23 opposite gives an indication of the relative strength of Columbia with regard to Central Business District office space compared with ten other U.S. cities with populations ranging from 929 thousand to 243 thousand. Of the cities listed, Columbia ranks 4th in office space per capita, after Des Moines, Hartford and Little Rock. It should be noted that all four cities are State Capitals.

184. Assuming that the relationship of 8.2 square feet of office space per person is maintained over the planning period, office space requirements for 1985 and 2000 are:

1985	459,300 (8.2) = 3,766,000 sq. ft.
2000	658,000 (8.2) = 5,395,600 sq. ft.

(1) Study Area office space derived from sum of private and public space -- specifically the "downtown and adjacent central area" as given in In Step with Tomorrow, p. 48.

(2) Study Team field sheets -- does not include Post Office.

TABLE 23
SELECTED CITIES AND COLUMBIA OFFICE SPACE
AND OFFICE SPACE PER CAPITA

CITY	METROPOLITAN AREA POPULATION 1960	OCCUPIED NET USABLE FEET OF CBD OFFICE SPACE	SQUARE FEET PER CAPITA
Denver	929,383	7,149,800	7.7
New Orleans	868,480	4,903,600	5.6
Louisville	727,139	4,586,200	6.3
Dayton	694,623	2,208,676	3.2
Fort Worth	573,215	2,096,450	3.7
Syracuse	563,781	2,249,200	4.0
Hartford	525,207	4,683,859	8.9
Toledo	456,931	2,236,720	4.9
Des Moines	266,315	4,011,000	15.1
Little Rock	242,980	2,153,550	8.9
Columbia	260,828	2,555,000	8.2

SOURCE: Selected Cities: Real Estate Corporation and various
planning department and commission surveys.
Columbia: Study Team.

185. A check on the reasonableness of the forecast office space may be made by relating office space to office employment. Accepting average space requirements at 220 sq.ft. per employee, we estimate the Central City Office Employment as follows:

$$1985 = \frac{3,766,000}{220} = 17,100 \text{ workers}$$

$$2000 = \frac{5,395,000}{220} = 24,500 \text{ workers}$$

186. These figures fall within the office employment estimates resulting by the following:

1965	<u>Study Area Employment</u>	=	<u>26,634</u>	(1)
	Office Employment		9,995	(2)
		=	2.7:1	
1969	<u>Study Area Employment</u>	=	<u>32,200</u>	
	Office Employment		11,609	(2)
		=	2.7:1	

using total Central City employment developed in paragraph 155, page 87 Study Area office employment becomes:

1985	$\frac{47,000}{2.7}$	=	17,500
2000	$\frac{67,000}{2.7}$	=	24,3000

-
- (1) Data from COATS, includes 900 workers comprising a single shift at Columbia Hospital
- (2) Study Team estimate.

ii. Retail floor space requirements

187. Retail sales in the Central City were estimated to be as follows:

1985	\$ 193,000,000
2000	\$ 290,000,000

188. In 1968, average dollar sales per square foot at shopper goods stores in the CBD were \$ 49.00. (1). Assuming that sales per square foot of CBD space will increase to \$ 65.00 in 1985 and \$ 80.00 in 2000, the retail floor space is estimated to:

1985	2,969,000 sq.ft.
2000	3,625,000 sq.ft.

(1) Wilbur Smith and Associates: market research study for private client. For comparative purposes, other CBD floor space sales values which may be considered are Chicago \$ 42.00 (1963) and San Antonio \$ 45.00 (1966). Also, average gross leasable area sales per square foot at 259 selected shopping centers in the U.S.A. and Canada in 1966 were:

<u>TENANT CLASSIFICATION</u>	<u>SALES PER SQUARE FOOT</u>
Supermarkets	\$ 96
Department Stores	52
Junior Department Stores	43
Variety Stores	27
Drug Stores	57

Urban Land Institute, The Dollars and Cents of Shopping Centers, 1966.

iii. Service floor space requirements

189. Service receipts⁽¹⁾ in the Columbia SMSA were estimated to be as follows:

1985	\$ 172,800,000
2000	\$ 284,800,000

190. In 1963, the ratio of service receipts to retail sales in the Columbia SMSA was 6.9:1. Assuming that the above ratio will hold over the planning period and may be applied to the Study Area, we estimate the following service receipts:

1969	$\frac{\$ 128,000,000}{6.9}$	=	\$ 18,600,000
1985	$\frac{\$ 193,000,000}{6.9}$	=	\$ 28,000,000
2000	$\frac{\$ 290,000,000}{6.9}$	=	\$ 42,000,000

191. Currently there are 1,088,800 feet⁽²⁾ of service floor space in the Study Area⁽²⁾. Based on estimates of present Central City service receipts, this is equivalent to $\frac{\$ 18,600,000}{1,088,800} = \$ 17.0$ per square foot of service floor space.

Assuming that receipts per square foot will increase to \$ 22.00 by 1985 and \$ 27.00 by 2000, the required service floor space is estimated as follows:

1985	$\frac{\$ 28,000,000}{\$ 22}$	=	1,270,000 sq.ft.
2000	$\frac{\$ 42,000,000}{27}$	=	1,570,000 sq.ft.

(1) Hotel and motel receipts are excluded.

(2) Study Team field sheets.

iv. Hotel-Motel Floor Space Requirements

192. Columbia's hotel and motel capability in the Central City is under what in recent years may be termed rejuvenation and, only recently, expansion. The loss of the Jefferson and Columbia Hotels has been compensated for by the construction, over the last five years, of three major/hotel-motel in the Central City with a fourth, the Sheraton, only recently completed and planning to double its present room capacity. However, presently at least, the availability of convention and meeting facilities is limited.

193. There are now approximately 1,100 hotel-motel rooms in the Study Area. With the inclusion of the new Sheraton Hotel, there will be approximately 1,260 rooms available. This is equivalent to 3.8 rooms per 1,000 of the Columbia SMSA population⁽¹⁾.

194. Assuming that this relationship could be maintained over the planning period, the estimated demand is:

1985	459,000	x 3.8 = 1,744 units
2000	678,000	x 3.8 = 2,576 units

195. On the basis of 450 sq.ft. per unit, Hotel-Motel floor space requirements would be:

1985	784,800 square feet
2000	1,160,000 square feet

(1) Other cities for which this type of relationship is available for comparative purposes are:

	<u>POPULATION</u> 1960	<u>HOTEL ROOMS PER 1,000</u> <u>OF POPULATION</u>
Indianapolis	697,597	3.1
Columbus	682,962	2.8
Syracuse	563,781	1.1
Omaha	457,873	2.2
Des Moines	266,315	5.2

v. Wholesale and Manufacturing Floor Space Requirements

196. In 1969, wholesale-manufacturing activities involved approximately 21 percent of the total floor space in the Study Area. Wholesale and storage activities accounted for 1,700,000 square feet and manufacturing for 1,087,000 square feet.

197. Most of the manufacturing operations presently located in the Central City must be regarded as unacceptable in terms of both amenity and use of space. Owing to the dispersed location of sites and to the advanced deterioration of many of the individual enterprises, manufacturing operations as a whole in the Study Area may be judged as representing a loss of amenity which generally outweighs their contribution to the Central City economic base.

198. Accordingly, a radical reorganization of manufacturing operations is envisioned. The existing activities are seen as being phased out of the area and replaced by light non-noxious industry consolidated in a 19-block zone in the southwest corner of the Study Area. The zone would take advantage of the accessibility provided by the railroads located in this area which would themselves be relocated over time into a depressed, North-South corridor. The area would comprise 1,680,000 square feet and would accommodate industrial-research oriented enterprises non-noxious industry, and warehousing. Thus, the Central City would retain its important central employment involvement in the manufacturing category while, at the same time, would eliminate the loss in amenity that prevails today.

199. Such reorganization would introduce into the Study Area the potential of reducing unemployment and also providing a spectrum of employment opportunities which by comprising a hierarchy of skills, would upgrade the quality and earning power of the workforce through training. It is estimated that employment in this sector would ultimately range between 1,500 and 2,000 persons.

200. In the wholesale sector in spite of the evident advantages for many types of wholesaling enterprise using a peripheral location, it is not anticipated that these activities will be eliminated from the Study Area over the planning period. It is therefore intended that wholesaling should be included as an associated activity in the light manufacturing zone. Additionally, there will be storage both in the retail area of the Central City and on a more random basis in deteriorated structures, the suitability of which for alternative higher order use has elapsed. It is anticipated that there will be a reduction in wholesale floor space over the planning period from the 1,700,000 square feet maintained today to approximately 500,000 square feet by the year 2000.

vi. Residential floor space requirements

201. As estimated in the population forecast some 13,000 new or remodeled dwelling units will be required by the year 2000. Based on an average dwelling unit size of 1,000 square feet the residential floor space requirement for the target year is estimated to 13,000,000 square feet.

vii. Total floor space requirements

202. Table 24 opposite summarizes the floor space requirements of the Central City for the period 1969-2000. It must be emphasized that these determinations reflect the new demand for floor space that will be needed to accommodate the future growth of Columbia. They do not include the constant replacement over time of obsolete, defunct, and otherwise inefficient structures. Over the planning period, a high proportion of existing structures in the Central City will become obsolete and require replacement.

203. The nature and consequences of aging are difficult to assess the inexorability of deterioration being a function of the workings of usage, maintenance, and climate. Also, the process of aging is hard to disentangle from technological obsolescence and, more important, is often confused with growth per se.

204. The process of the replacement of aging buildings is an inherent part of a city's future and, if properly directed, affords an important means of complementing and reinforcing planning. The Central City Study has assumed that there will be coordinated replacement of deteriorated structures over the planning period and, accordingly, has included renewal as an "on-going" means of reinforcing the structural integrity of the city.

205. The floor space requirements given in Table 24 relate to the anticipated growth of the Central City as determined by evaluation of economic opportunities. Also taken into account are the "pull" factors as embodied in an increasingly attractive Central City. And, relevant in the case of noxious manufacturing and wholesaling activities, losses in floor space are also included. The result is a tabulation of total floor space by principal activity category which is an expression of the basic physical dimensions of the Central City's future spatial needs over the planning period.

TABLE 24
COLUMBIA CENTRAL CITY TOTAL SPACE REQUIREMENTS
1985 AND 2000

ACTIVITY USE	FEET		
	1969	1985	2000
Retail	1,875,000	2,969,000	3,625,000
Service	1,088,800	1,270,000	1,570,000
Office	1,351,000	2,050,000	2,960,000
Government Office	1,100,000	1,800,000	2,530,000
Wholesale and Storage	1,909,200	980,000	500,000
Manufacturing	877,800	200,000	1,680,000 ⁽¹⁾
Hotel-Motel	472,200	784,800	1,159,000
Public-Semi Public	640,000	-	1,000,000
University of S.C.	2,480,000	4,000,000	5,460,000
Residential	4,100,000	7,200,000	13,000,000
Parking	6,120,000	9,300,000 ⁽²⁾	14,820,000
TOTAL	22,013,800	30,553,800	48,204,000
Vacant Land	280 acres ⁽³⁾		

- (1) This floor space value represents 'non-noxious light manufacturing, research oriented business and warehousing -- all concentrated in the southwest industrial park.
- (2) Equivalent to 26,600 spaces in 1985 and 40,600 in 2000 using 350 square feet per space.
- (3) Vacant floor space not included, 1969 inventory showed 194,475 square feet of vacant floor space.

SOURCES: Doxiadis Associates, Inc., Wilbur Smith and Associates Lyles, Bisset, Carlisle and Wolff, Columbia Central City Planning Project, Phase II, Analysis, June 1969.

206. Comparison of quantities of Table 24 for the year 2000 with the corresponding data for 1969 reveals the dynamics of the Central City forecasts. In particular, it can be seen that the major land use shifts will occur in the Wholesale-Storage and Residential land use categories.

207. In the former category, a 74 percent decrease is forecast by the year 2000, largely as a result of a declining use-value relationship. The total floor area however, of wholesale storage and manufacturing is forecast to decline by only 21 percent. The Residential category, is forecast to increase in floor area by more than 270 percent.

208. Finally, the most dramatic shift occurs in total floor area. Underscoring the goals for reversing economic decline in the Study Area, an absolute change of more than 100 percent is forecast. Upon this increase rests much of the case for reclaiming ill-used land and building a competitive Central City.

209. The Figure opposite illustrates the change in floor space requirements of each land use category in the Study Area and permits comparison between existing and proposed floor space.

GROSS FLOOR AREA IN SQ. FT.

14,000,000

13,000,000

12,000,000

11,000,000

10,000,000

9,000,000

8,000,000

7,000,000

6,000,000

5,000,000

4,000,000

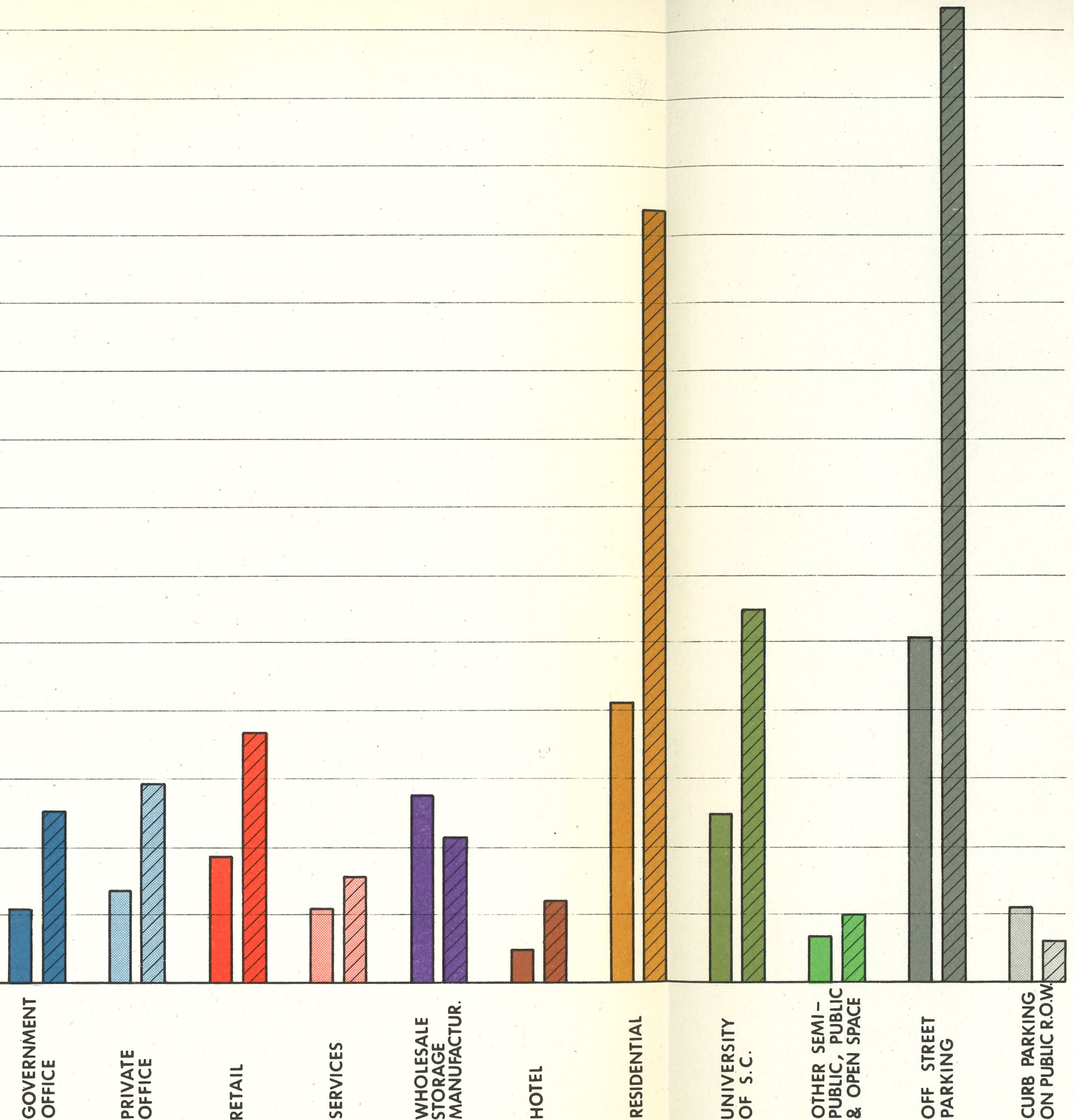
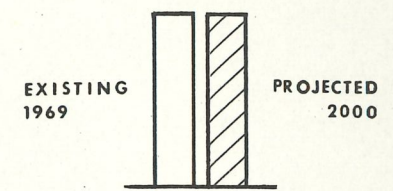
3,000,000

2,000,000

1,000,000

0

**EXISTING AND
PROJECTED
FLOOR AREAS**



CENTRAL CITY PLANNING PROJECT - COLUMBIA, S. C.

PREPARED FOR THE CENTRAL CITY DEVELOPMENT COMMITTEE
BY DOXIADIS ASSOCIATES INC
WILBUR SMITH AND ASSOCIATES
LYLES, BISSETT CARLISLE & WOLFF
D - USA - WS 360 / A 15

E. THE MASTER PLAN

1. The Concept Plan - Constraints and Opportunities

210. In the previous chapters investigation of phenomena and analyses have detailed the physical and economic forces which have been at work in the heart of Columbia and beyond it. This work has led to measurements and forecasts of future requirements.

211. To translate the quantitative expression of the proposed future to a physical plan is to select between alternative paths the one which is closest to the perception of environmental opportunities and constraints. It is these environmental forces which influence the planning ideas, or concept plan, which is finally translated to land use, circulation, and facilities, which make up the Master Plan. The following statement explains the basic physical relationships which underlie the conceptual framework for the Central City.

212. The present Central Business District is expanding, mostly toward the east but also toward the north and to some degree to the west. The dome of the State Capitol Building at the south end of Main Street is a focal point which terminates the present commercial axis of Main Street. At the north end of Main Street there is no such focal point, corresponding to the manner in which commercial development at this point dwindles into lesser commercial uses. Related to this fact is the situation of the historic districts on the east and west sides of Main Street. At present, these areas are separated by a lack of pedestrian and visual connection.

213. The University of South Carolina is also expanding, primarily to the east and south beyond the Study Area boundary. Its possible expansion to the west and north is limited by the presence of the State Capitol Complex, itself expanding. However, a link is tending to be formed between the heart of the University and the University's Coliseum as an arm extending to the northwest.

214. Extending through most of the western part of the Study Area, the railroads and adjacent industrial and warehousing uses cause a severe environmental deficiency. They are a serious detriment to future development possibilities for the entire west side of the Study Area.

215. The existence of the Congaree River, an important natural asset, is at present completely ignored. The negative influence of the State Penitentiary as well as several concentrations of heavy industrial uses at present, now prohibit development of this area and hides the River from view. The sewage outlets just south of the Penitentiary also militate against any pedestrian usage of the Riverfront. Plans currently under way foresee correction of this deficiency during the early 1970's. Yet, the presence of open space around the existing reservoir and in the large tract of vacant land along the River to the south give rise to hopes for returning the Riverfront to appropriate usage. The desirability of a view over both the canal and the Congaree River and accessibility to the Riverfront should be taken into serious consideration as an important aid to future development of Columbia. This two-mile long, quarter-mile wide area is one key to a more rational future development of the entire Study Area.

216. The Study Area's topography includes two areas of steep incline which create physical barriers for future development. The first occurs north of the Post Office building, while the second begins at Pickens and Washington Streets, extending around to the east of the University. Other physical determinants consist of major land uses which adjoin the Study Area around its periphery and tend to influence future development in their vicinity. Along the northern periphery are the Elmwood cemetery on the northwest, the State Hospital on the northeast and a somewhat undefined residential area containing two schools.

217. To the east of the Study Area lie Benedict College, Allen University and Columbia Hospital, all of which are expanding and may be presumed to become more clearly defined. On the south is another residential neighborhood, interrupted by the commercial center of Five Points, while on the west is a much better defined residential neighborhood. Along the southern boundary of the Study Area is an industrial area of light intensity, separated from the river by an almost unused strip of land.

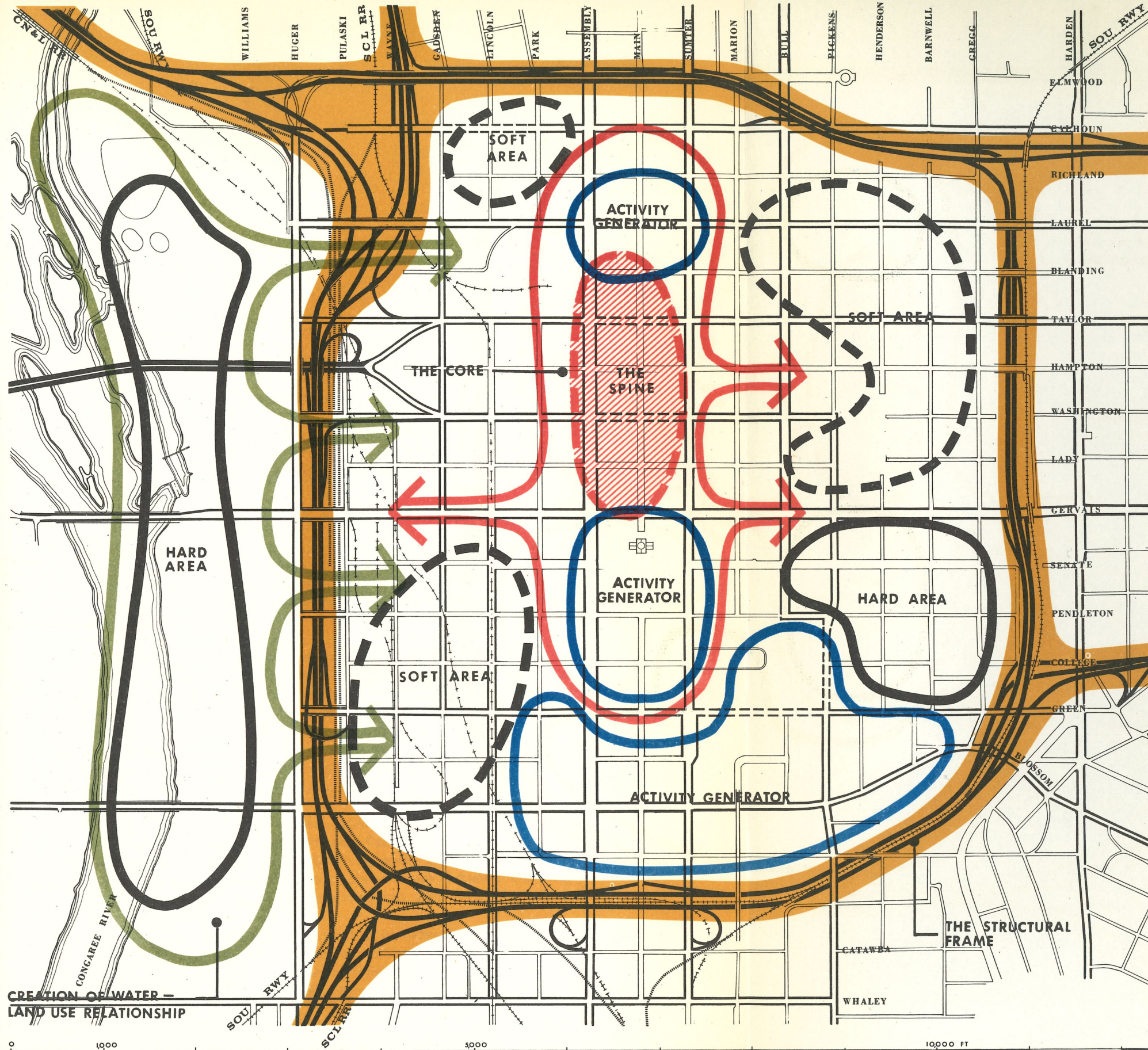
218. A final determinant for future patterns of organization is furnished by the present dynamics of development in the Study Area as expressed by building projects currently under way. As indicated by an overview of the map on page , there are three main areas in which present development projects tend to concentrate:

- a. The north-south axis formed by Assembly, Main and Sumter Streets.
- b. The east-west axis along Gervais Street.
- c. The general area along Laurel Street on both sides of Main.

219. The "I" shape provided by these developments constitutes a backbone around which organization of future developments could be structured.

220. The map opposite presents a visual summary of the various constraints and opportunities present in the Central City. Related also to the foregoing discussion, is the "Generalized Concept Plan" shown on page 125. This Concept Plan provides a necessary background to elaboration of the Master Plan for Central City.

THE CONCEPT PLAN



CENTRAL CITY PLANNING PROJECT COLUMBIA, S. C.

PREPARED FOR THE CENTRAL CITY DEVELOPMENT COMMITTEE BY DOXIADIS ASSOCIATES INC WILBUR SMITH AND ASSOCIATES LYLES, BISSETT, CARLISLE & WOLFF D - USA - WS 360 / A 18

2. Master Plan Alternatives

221. On the basis of the previous discussion, it is possible to construct variant alternative Master Plans depending almost entirely on the weight to be given to development goals and opportunities.

222. A Master Plan is primarily based on two sets of functional considerations: the need for a proper relationship of land uses and the requirement for a transportation system which is properly designed to serve the land uses.

223. One of the objectives which the Central City Master Plan has to meet is to provide better access to the area from all directions in the metropolitan area. Improved connections between the Central City and the broader metropolitan area of Columbia are an absolute prerequisite if the area is to be revitalized economically and physically rejuvenated.

224. To achieve this improved accessibility, a new North-South Freeway facility has been proposed to run through the western part of the Study Area, linking its northern and southern ends with the East-West Freeway and the Valley Freeway, respectively. However, this new freeway, combined with the existing railroad tracks running through the same area and the vast expanses of land taken by switching yards and associated uses, could well intensify the barrier which already exists between the downtown area and the riverfront.

225. On the other hand, as explained in the preceding section, one of the major opportunities offered for the Central City is precisely that riverfront. Every effort should be made to restore uninterrupted and effective functional and visual connections between CBD and a waterfront fully redeveloped for residential and recreational use.

226. The success with which it will be possible to resolve this conflict between freeway requirements and a meaningful and imaginative use of the potential offered by the area's riverfront will to a large measure determine the value and success of the planning effort for the Central City.

227. It is because of the extreme importance of this issue that the Study Team felt the need for presenting two Master Plan Alternatives reflecting two different attitudes regarding the resolution of the above conflict.

a. Master Plan Alternative A

228. Master Plan Alternative A, pictured opposite, assumes the creation of a straight line north-south "transportation corridor" occupying roughly the area between Huger and Pulaski Streets as a right-of-way. In this corridor it is proposed to locate the new North-South Freeway depressed over as long a distance as is technically feasible. It is also proposed to relocate in the same corridor and east of the freeway the two main lines of the Southern and Seaboard Coast Line Railroads which at present run through a wide area between Lincoln and Pulaski Streets. These would also be depressed over the major part of their length.














229. By so doing, three major objectives of the Plan can be achieved:

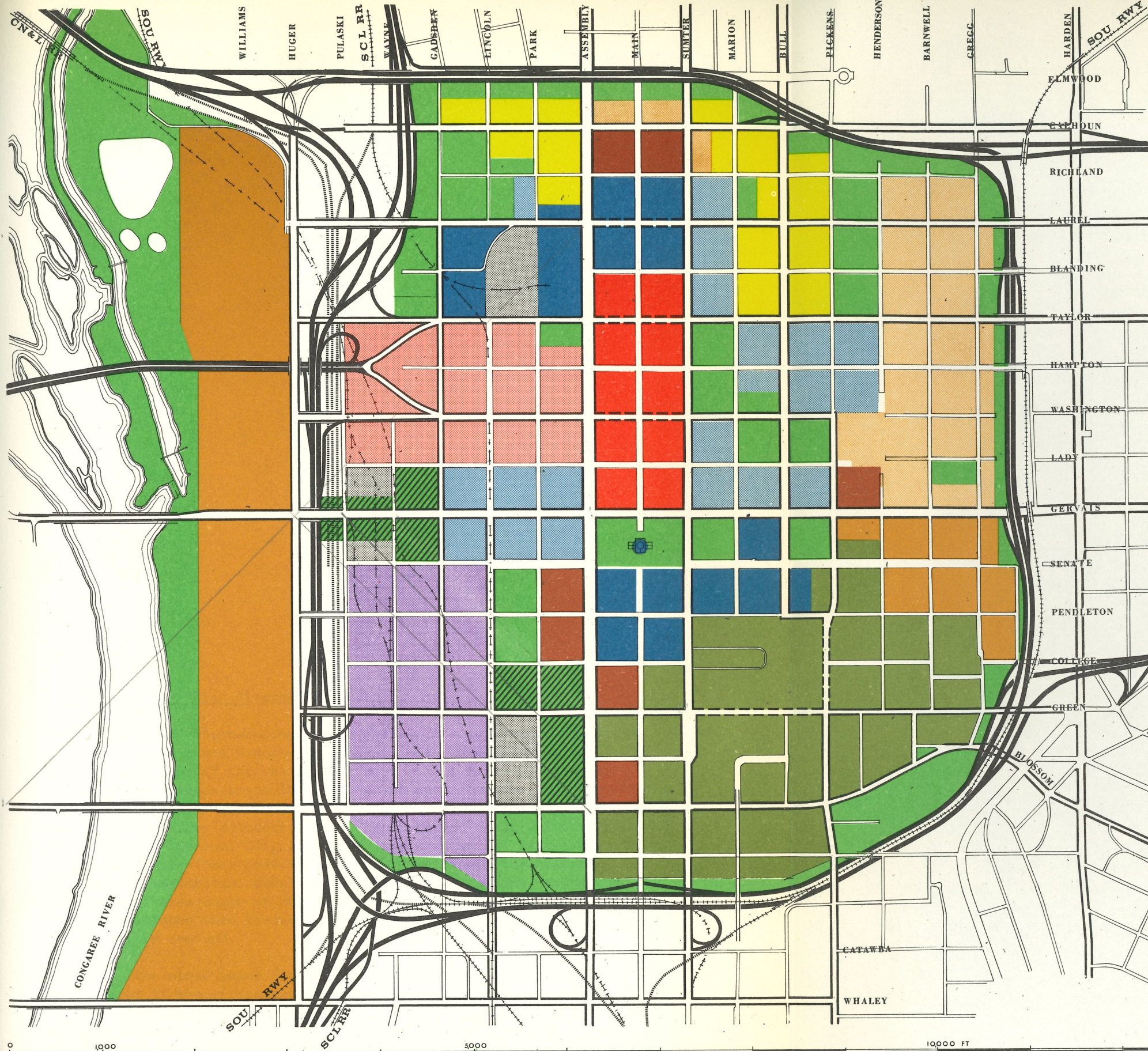
- a. One of the major blighting influences in the western part of the Central City, namely the large area occupied by railroad tracks, switchyards, and deteriorating warehouses, is eliminated.
- b. A continuous stretch of land extending over the whole length of the river front remains free and can be made available for redevelopment for appropriate uses: residential and open space.
- c. The barrier between the main core of the Central City and the riverfront is reduced to a minimum. Both functionally as well as physically; unity can be restored over the entirety of the Study Area, all the way to the Congaree River.

230. In addition, to the north-south transportation corridor, Master Plan Alternative A proposes a complete freeway loop system along the other three sides of the perimeter of the Central City. The need for this loop and the advantages derived from it are discussed in subsequent sections of this report. However, it should be stressed that the provision of an East-West Freeway, connection on the northern side of the Study Area makes it possible for Calhoun and Richland Streets, the two major streets running through the historical area of the city, to retain their local character free of through and heavy traffic. The two functional considerations (land use and transportation) of Master Plan Alternative A are illustrated opposite.

MASTER PLAN ALTERNATIVE A YEAR 2000

PREDOMINANT LAND USE

-  GOVERNMENT
-  PRIVATE OFFICE
-  MAIN COMMERCIAL
-  GENERAL COMMERCIAL
-  HOTEL - MOTEL
-  LOW DENSITY RESIDENTIAL
(HISTORIC DISTRICT)
-  MED. DENSITY RESIDENTIAL
-  HIGH DENSITY RESIDENTIAL
-  UNIVERSITY OF S.C.
-  INSTITUTIONS AND OPEN SPACE
-  COLISEUM - CIVIL CENTER
AND TRANSPORTATION CENTER
-  RESEARCH PARK
-  PARKING



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












b. Master Plan Alternative B

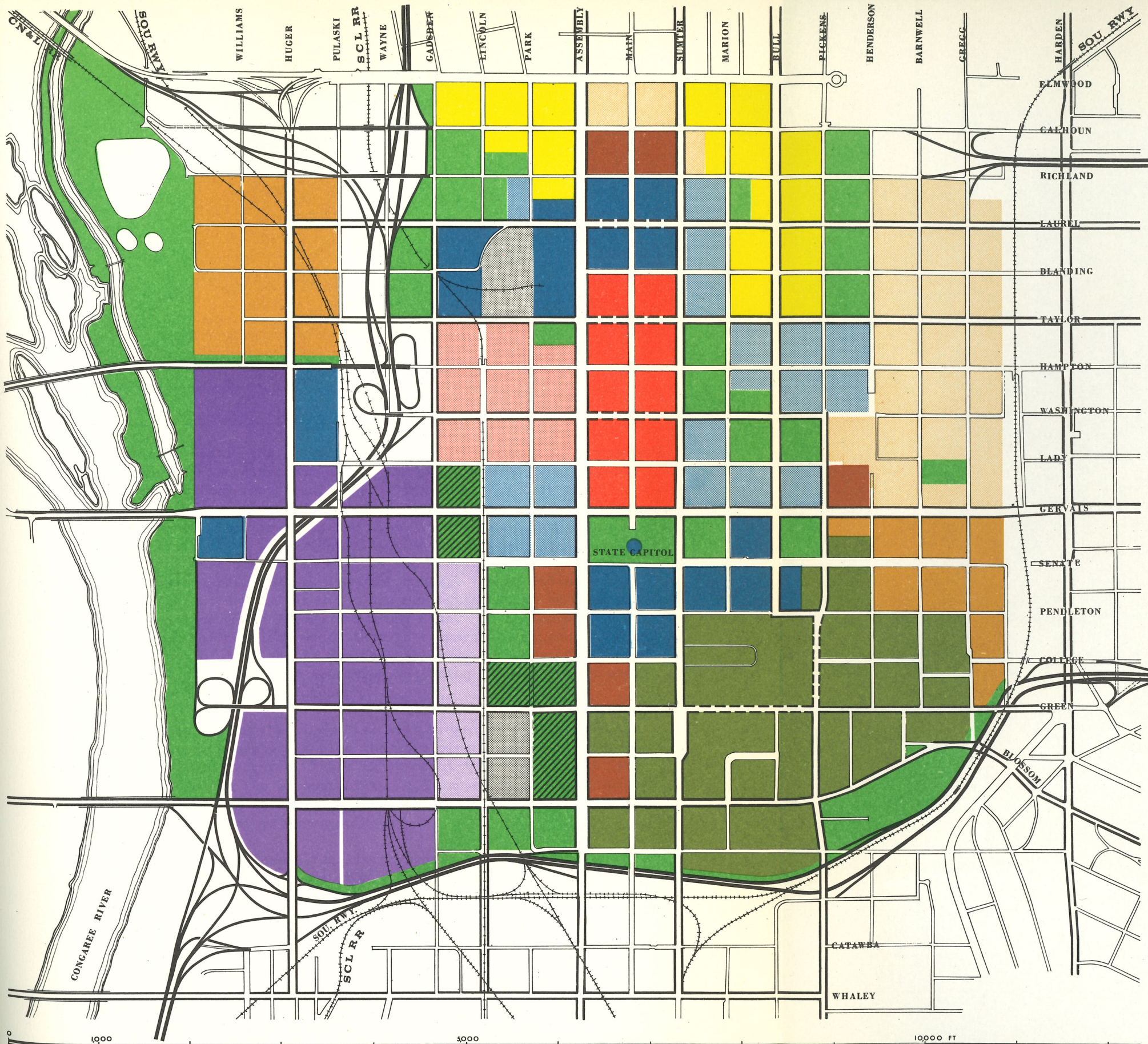
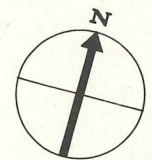
231. If the North-South Freeway follows its approved corridor, as proposed by the State Highway Department, with intersections as now proposed, and if the realignment of the rail lines proposed by Alternative A proves impossible, it can be seen that the area west of Gadsden Street might well be developed with medium or heavy industrial uses, thereby detracting from Plan purposes of an uninterrupted development of Central City land uses from the central retail core to the Riverfront. These possibilities would eliminate the potential for most of the residential development along the Riverfront, excepting only a small area north of Hampton Street. Even that area could only be developed with the understanding that the Penitentiary would ultimately be removed.

232. The other major departure from Master Plan Alternative A would occur if the circumferentials proposed in that plan were not accepted. In this case, the servicing via freeways to Central City would be greatly weakened. Further, the possibility of developing the historic area would also be weakened, since the areas' two major streets, Calhoun and Richland, would become a very heavily travelled one-way pair. It would be unlikely that these areas could then be developed successfully.

MASTER PLAN ALTERNATIVE B YEAR 2000

PREDOMINANT LAND USE

-  GOVERNMENT
-  PRIVATE OFFICE
-  MAIN COMMERCIAL
-  GENERAL COMMERCIAL
-  HOTEL - MOTEL
-  LOW DENSITY RESIDENTIAL
(HISTORIC DISTRICT)
-  MED. DENSITY RESIDENTIAL
-  HIGH DENSITY RESIDENTIAL
-  UNIVERSITY OF S. C.
-  OTHER SEMI-PUBLIC, PUBLIC
AND OPEN SPACE
-  COLISEUM - CIVIL CENTER
AND TRANSPORTATION CENTER
-  INDUSTRIAL PARK
-  INDUSTRIAL
-  PARKING



3. Elaboration of Master Plan Alternative A

a. The structural framework

236. As stated in the previous section, one of the basic characteristics of Master Plan Alternative A is its relationship to a freeway loop proposed to frame the Study Area. It is believed that the construction of such a loop would meet a number of objectives which are of fundamental importance to the plan. The freeway loop would give the Central City a better definition and identity. This is the identity which is at present lacking in the Central City, inasmuch as the various uses spread outward from the center, fading out with no clear definition of where it ends. This definition would be provided by the freeway loop which frames the Study Area. It is hoped that the introduction of the loop would tend to compact the various uses and raise the values of the land in the Central City. By so doing, it would initiate a natural process of selection regarding the uses which would seek to locate there in the future.

237. A loop around the Study Area with proper connections to the metropolitan freeway system is also the most direct way of providing the needed vehicular access. There is no doubt that the Central City cannot prosper unless its accessibility is improved so as to encourage people from the entire metropolitan area to come there for business, shopping, entertainment or other purposes.

238. Compared to freeway facilities around the Central City proposed by earlier studies, the loop proposed by this plan is much tighter. It is therefore brought much closer to the various land uses in the Study Area and permits more direct access from the freeway system to the activities associated with these uses.

239. The concept of the freeway frame as a structuring element of the plan is very fundamental and has a direct influence on the configuration of land uses and other development characteristics. It is for this reason that it was felt necessary to preface the proposed Master Plan with description of the freeway loop. Its more detailed functional characteristics are presented in a subsequent section of this Chapter in which also all transportation aspects of the Plan are discussed in considerable length.

b. Land Use Organization

i. The Primary Commercial Area

240. As indicated on the "Master Plan Alternative A," page 129, the first objective of the Plan is to strengthen the commercial core of the Central Business District. This is achieved by complementing the expanding Capitol Complex on the south end of Main Street with a new governmental complex which would include City-County buildings as the northern terminus of Main Street. Thus, two major employment generators are created which will stimulate further development of the Central Business District between these two poles. The governmental center would also help to define the Central Business District and is a focal point in terms of the proposed City-County Complex. The commercial core would be contained and private development would be encouraged to expand in high-rise buildings. Further expansion could occur both on the east and the west. The intent is to contain the total Central Business District within a space allowing reasonable walking distance as well as economic development possibilities. Containment will also cause appreciation of land and natural process of selection for CBD uses. The predominant use of this area shall be retail with substantial office, some service, hotel, and residential uses. Access to this central commercial core would be provided along the north-south arterials--Assembly and Sumter Street, as well as the east-west arterials--Gervais, Washington, Taylor and Laurel Streets.

ii. The General Commercial Area

241. To the west of and immediately adjacent to the primary commercial area is the general commercial area, consisting primarily of service use supplemented with some retail, wholesale and private office use. This area has a functional interrelationship with the central core.

iii. Government Office Areas

242. The plan calls for government office concentration in two locations, one south of the Commercial Core around the State Capitol and another north of it. These areas would contain all services and facilities, related to the central functions of State, County and City governments.

iv. Private office development areas

243. The Plan calls for the location of major private office development to the east of the commercial core as well as along Gervais Street between the proposed transportation center at Gadsden Street and Assembly Street. These areas of office use would consist primarily of private office space supplemented with retail, services and residential uses. The areas in close proximity to the primary Commercial Core would contain additional parking spaces to support the parking needs of the Core. In these locations, such offices would be in proximity with the governmental areas and with the Commercial Core itself.

v. Historic areas

244. To the north of the Central Business District lie the two historic districts. These would be linked by a pedestrian system created by the City-County Complex. It is anticipated that the two historic districts would become major residential cores for high-income families better able to afford restoration and maintenance of beautiful homes presently falling into disrepair.

vi. Hotel areas

245. Hotel development is placed in direct relationship to its functional generators, the Coliseum-Civic Center, the University, the governmental centers, the Central Business District and the two historic districts.

vii. Industrial area

246. The Plan proposes that a new industrial area be created along the lines of the present-day industrial park. This industrial park also calls for types of land uses which do not presently exist within the Study Area, i.e., industrial-research facilities, especially those directly related to the Central City and to the University. The Plan proposes that industrial areas be served by railways through a realignment of existing track rights-of-way. It is anticipated that if the warehouse and light industrial uses presently existing within the rail corridor and having a direct relationship to CBD could be relocated in the proposed industrial area by the year 2000, those industrial uses not directly related to inner-city uses could be located outside the Study Area, probably on the south side of the city. The intensity of development within the industrial park would be approximately three times its present use intensity.

viii. University area

247. The plan provides for the expansion program of the University of South Carolina. The southeast section of the Study Area is devoted to University expansion. The major arterial streets in this area, have been separated from local and pedestrian traffic and at the same time provide links between the campus and the Freeway system. The land adjacent to the freeways is devoted to playfields and open spaces, To maintain continuity of pedestrian movement through the campus, pedestrian underpasses or overpasses are provided at major arterials.

ix. Public and Semi-Public areas

248. These areas are distributed over the entire Study Area and contain uses such as schools, churches, clinics and hospitals, educational and civic institutions, the transportation center and Green Belts and open spaces.

249. To the west of the new Post Office building are located two new governmental functions, the city and county police and fire stations. These uses complement existing functions very well.

x. Residential areas

250. The Master Plan calls for a substantial increase in residential uses within the Study Area. The purpose for this is to increase the residential population within the Study Area and stimulate and support further commercial use; it would also provide high-intensity residential uses in close proximity to employment, shopping and entertainment activities. Residential expansion could also result in development of relatively unused land within the Study Area. In this connection, the most radical change of land use in the Study Area would occur within the two-mile long area of the Riverfront. The Plan proposes a linear residential use beginning north of the city reservoir and continuing south along the River. Other high-density residential uses may be expected adjacent to an immediately related to the University.

251. The Plan also calls for the development of medium-density residential uses between Henderson and Gregg Streets, from Richland Street south to Gervais Street, in the eastern portion of the Study Area. A limited amount of retail and service uses are included in the high and medium density areas.

252. Table 25 opposite provides a breakdown of areas to the various land uses described above.

TABLE 25

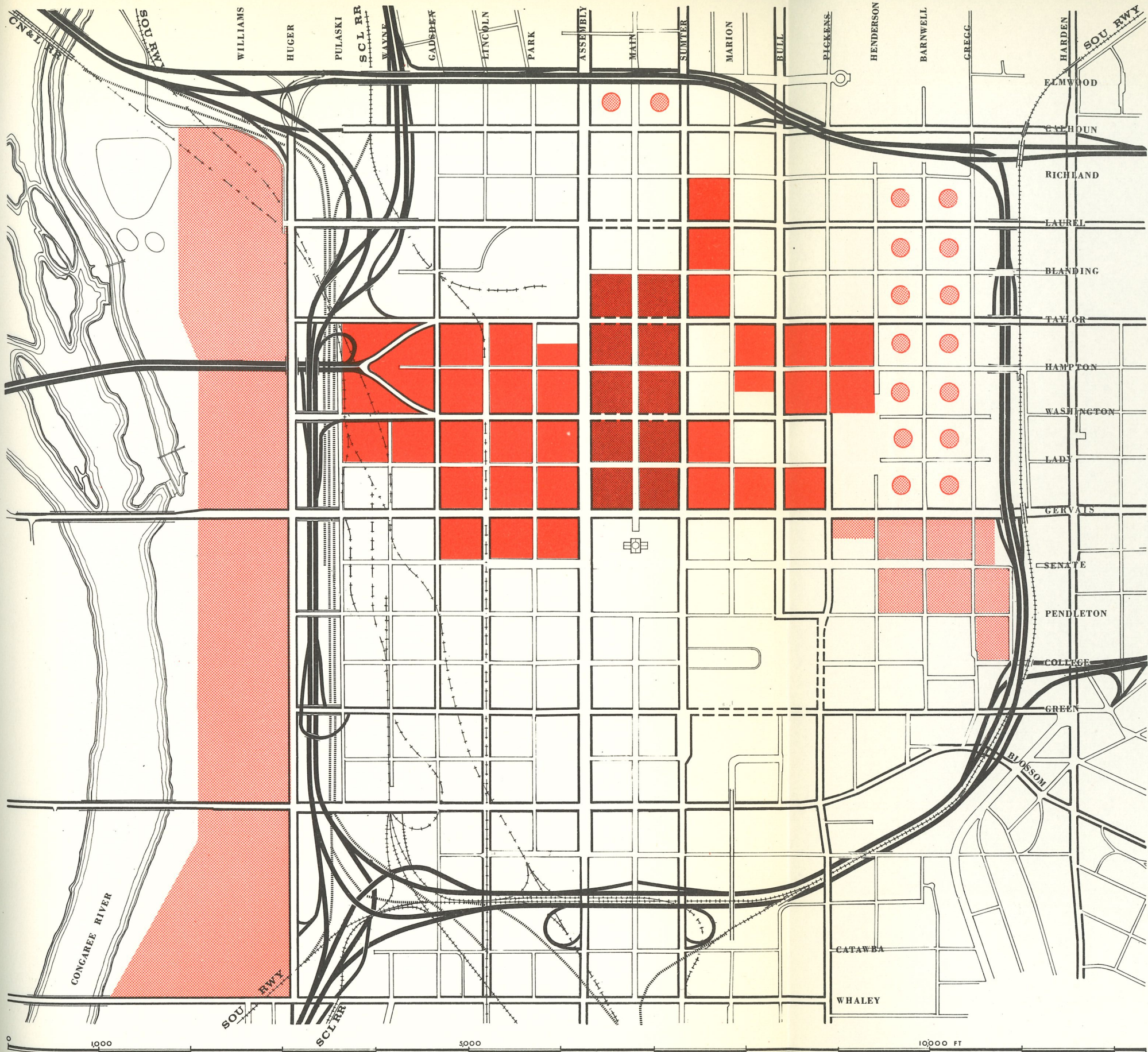
LAND USE DISTRIBUTION
STUDY AREA: YEAR 2000

Predominant Land Use Areas	Number of Acres	Percentage of Total
Commercial (retail, general, services, hotels, office-private)	200	10.1
Wholesale/Industrial	76	3.8
Social/Cultural (universities, schools, government offices, hospitals, parks, historic)	334	16.2
Residential	416	21.0
Parking	16	0.8
Vacant	-	-
Rights of Way (local streets, railroads)	580	29.4
Riverfront Park	102	5.2
Highways and Railroads r.o.w.	<u>256</u>	<u>12.9</u>
	1,980	100

c. Land use intensity

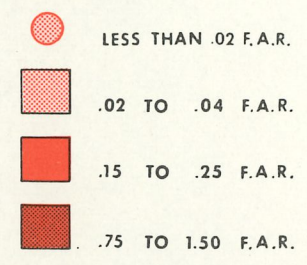
253. In the preceding section, the plan was described on the basis of land use areas and their geographic location. The present section discusses the quantitative values of very use in terms of land use intensity. These values are expressed as floor area ratios (F.A.R.) and are illustrated graphically on maps of "Use Intensity" for each use presented in pages 141 through 157. Appendix I to this report, page 233, presents the allocation of floor area by use FARs, and parking estimates by land use category.

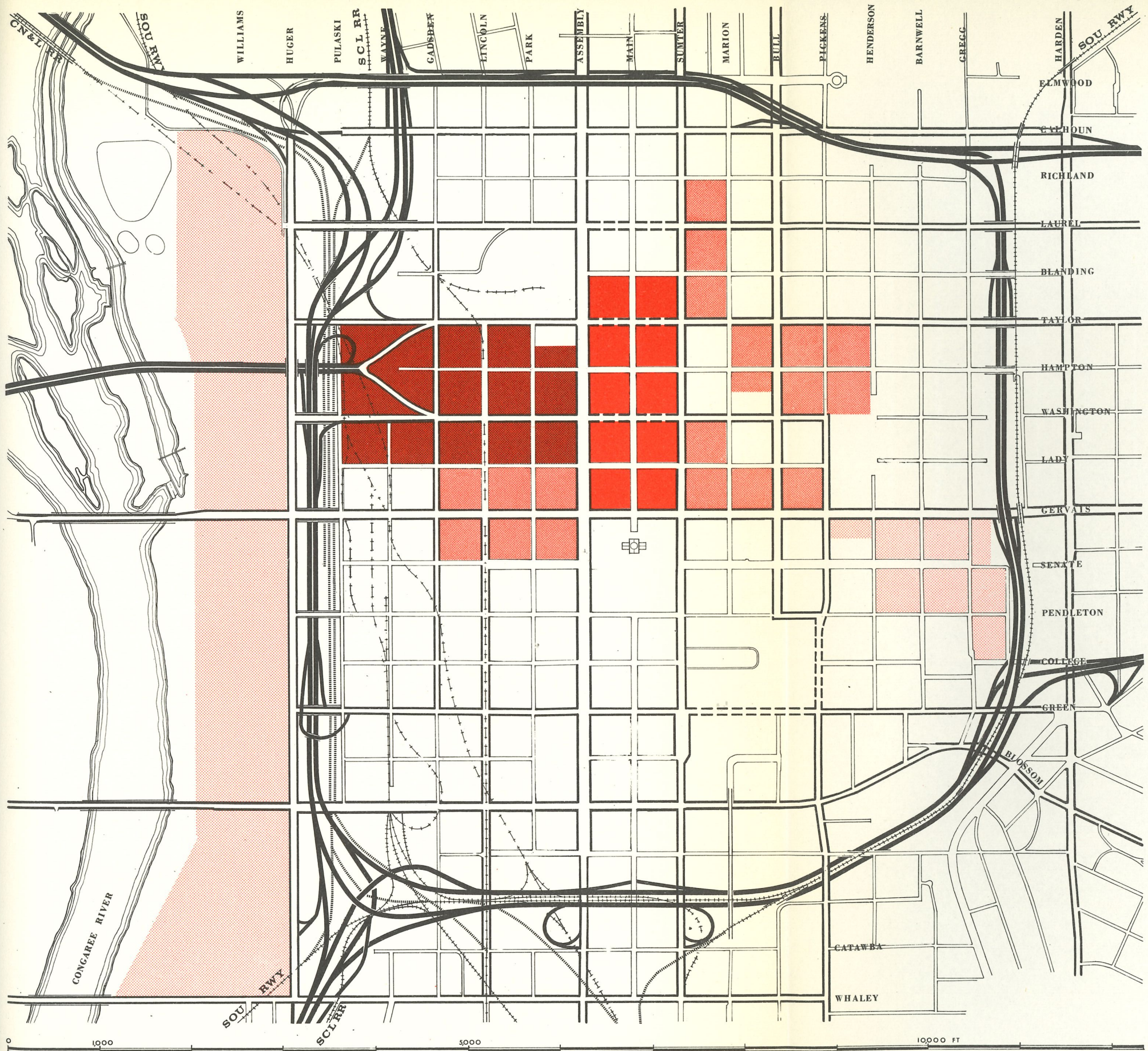
254. The maps on page 159 shows the composite development intensity proposed by the Central City Plan. It can be seen that use intensity is heaviest in the key areas, the C.B.D. and the Riverfront. Overall, there is a notable increase in use intensity compared with that of today. The Plan is firmly based on the concept of maximizing development possibilities in the Study Area, the most important portion of the city.



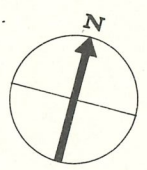
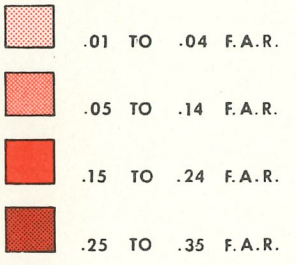
RETAIL USE INTENSITY

YEAR 2000





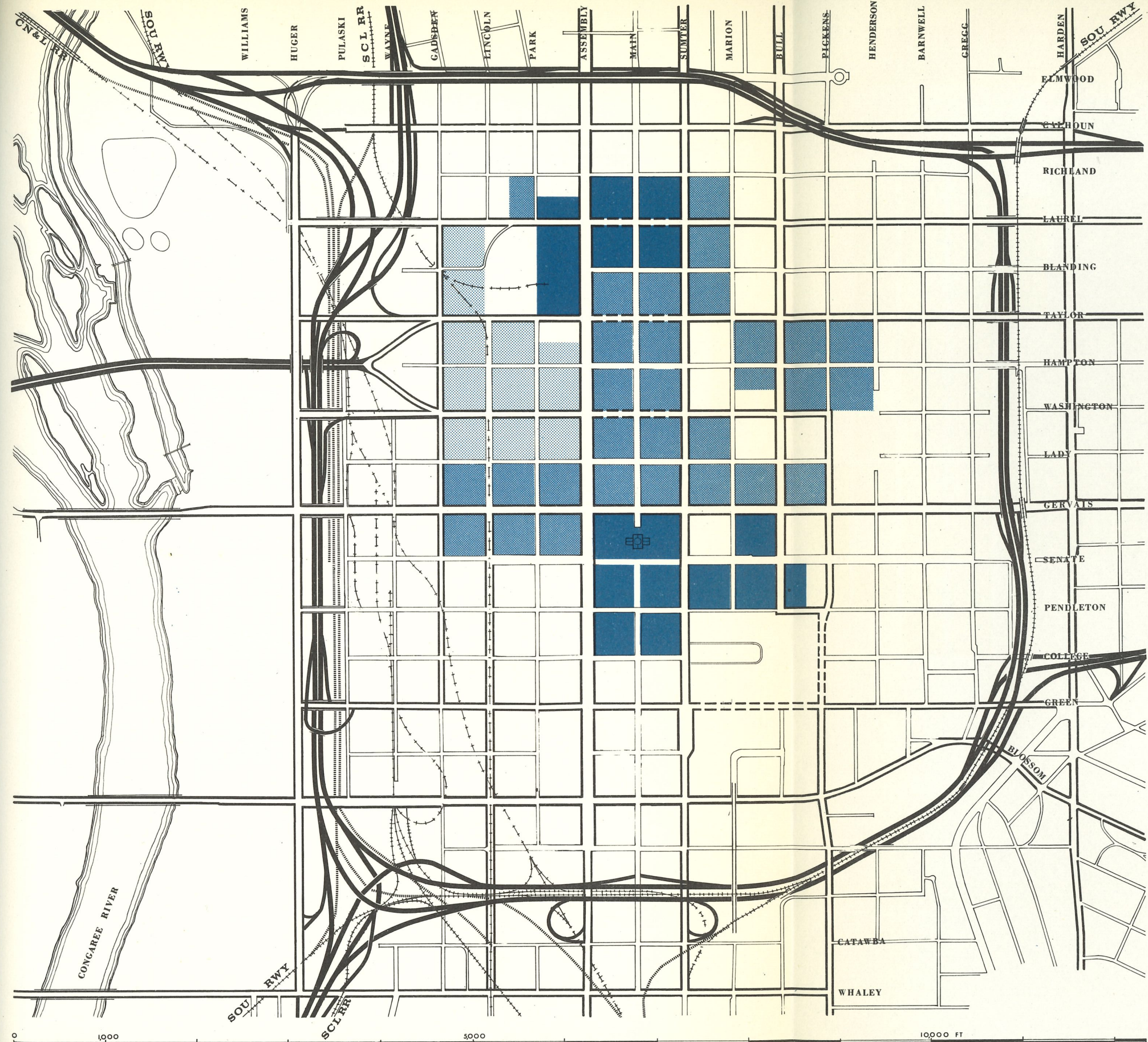
SERVICE USE INTENSITY
YEAR 2000



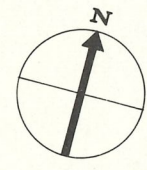
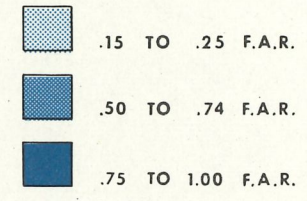
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BY DOXIADIS ASSOCIATES INC
WILBUR SMITH AND ASSOCIATES
LYLES, BISSETT, CARLISLE & WOLFF
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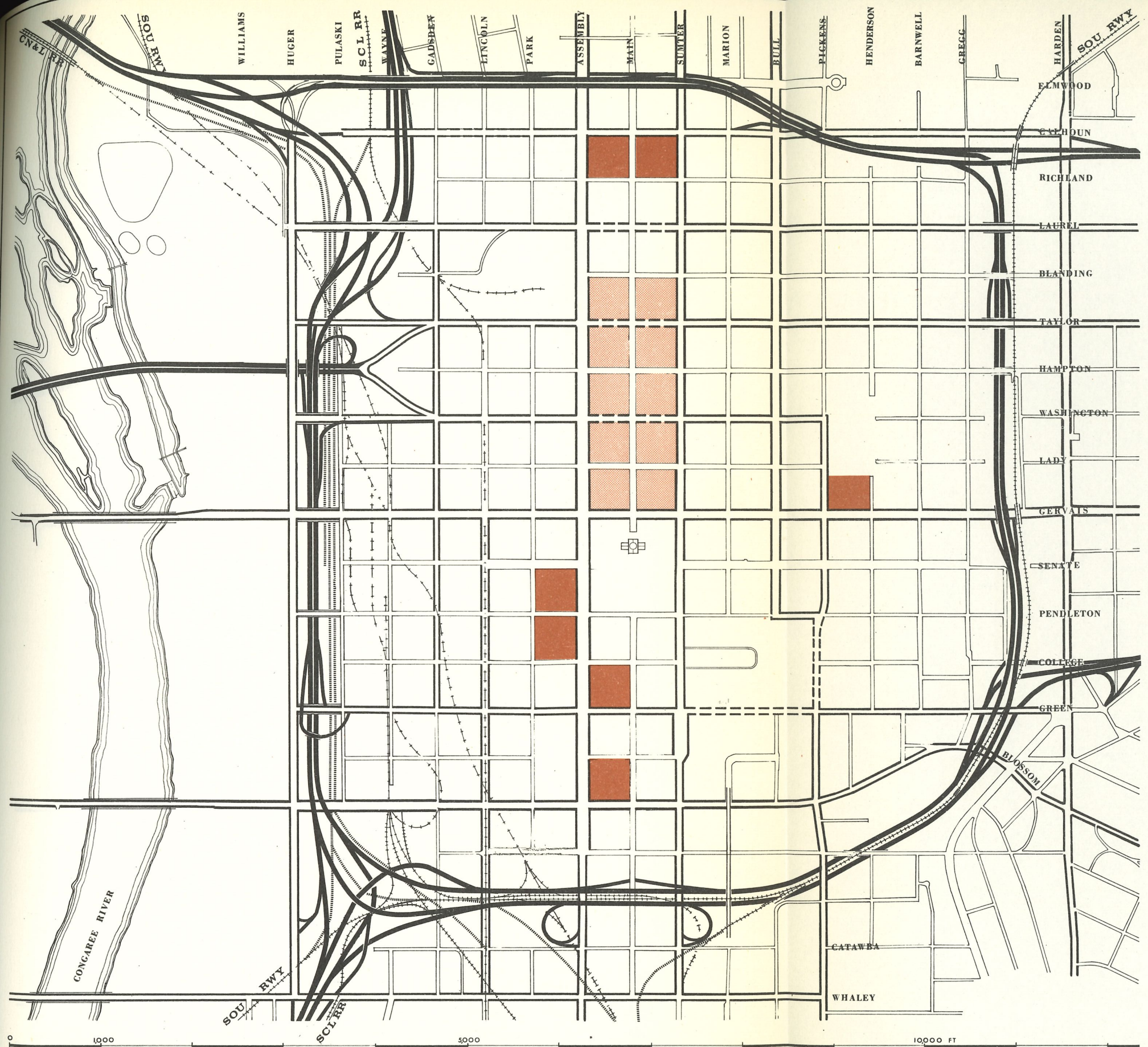


**OFFICE USE
INTENSITY**
YEAR 2000



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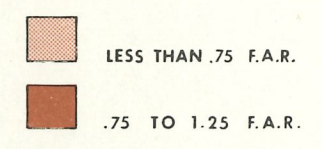
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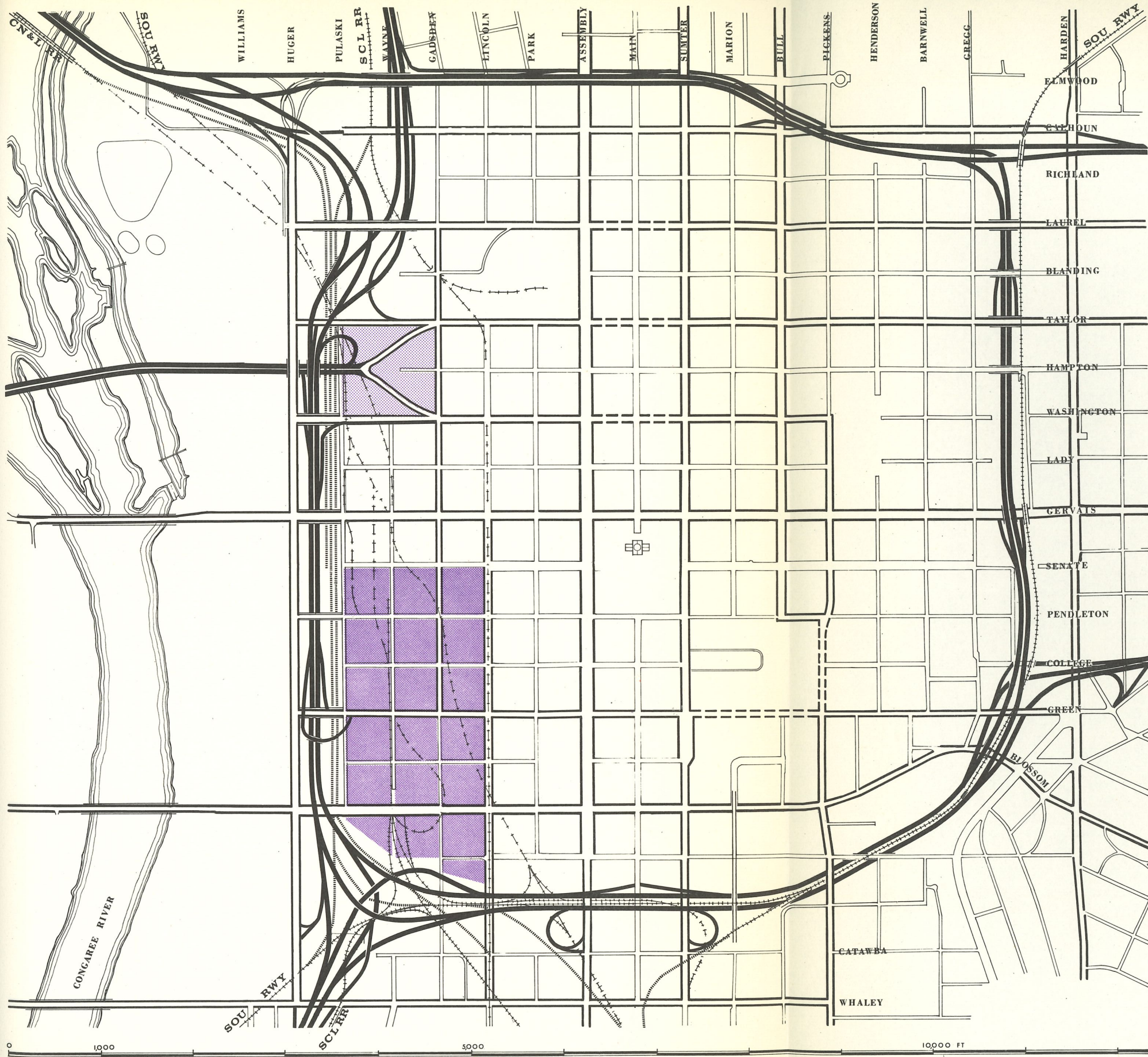


HOTEL USE INTENSITY

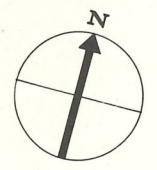
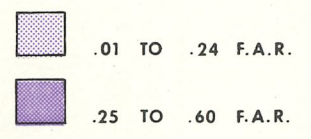
YEAR 2000

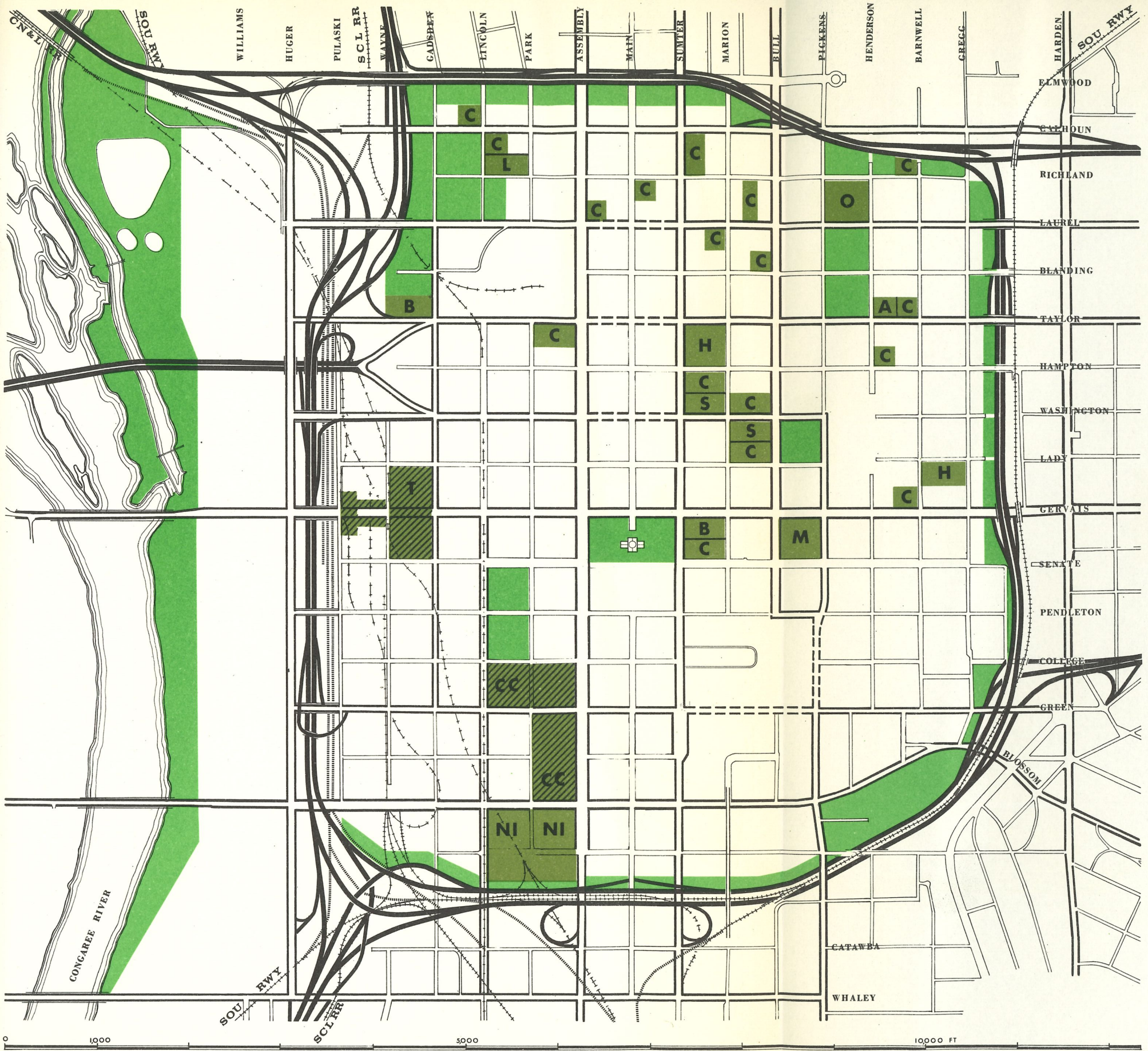
(INCLUDES MOTELS)








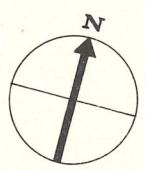
**INDUSTRIAL PARK
USE INTENSITY**
YEAR 2000







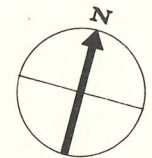
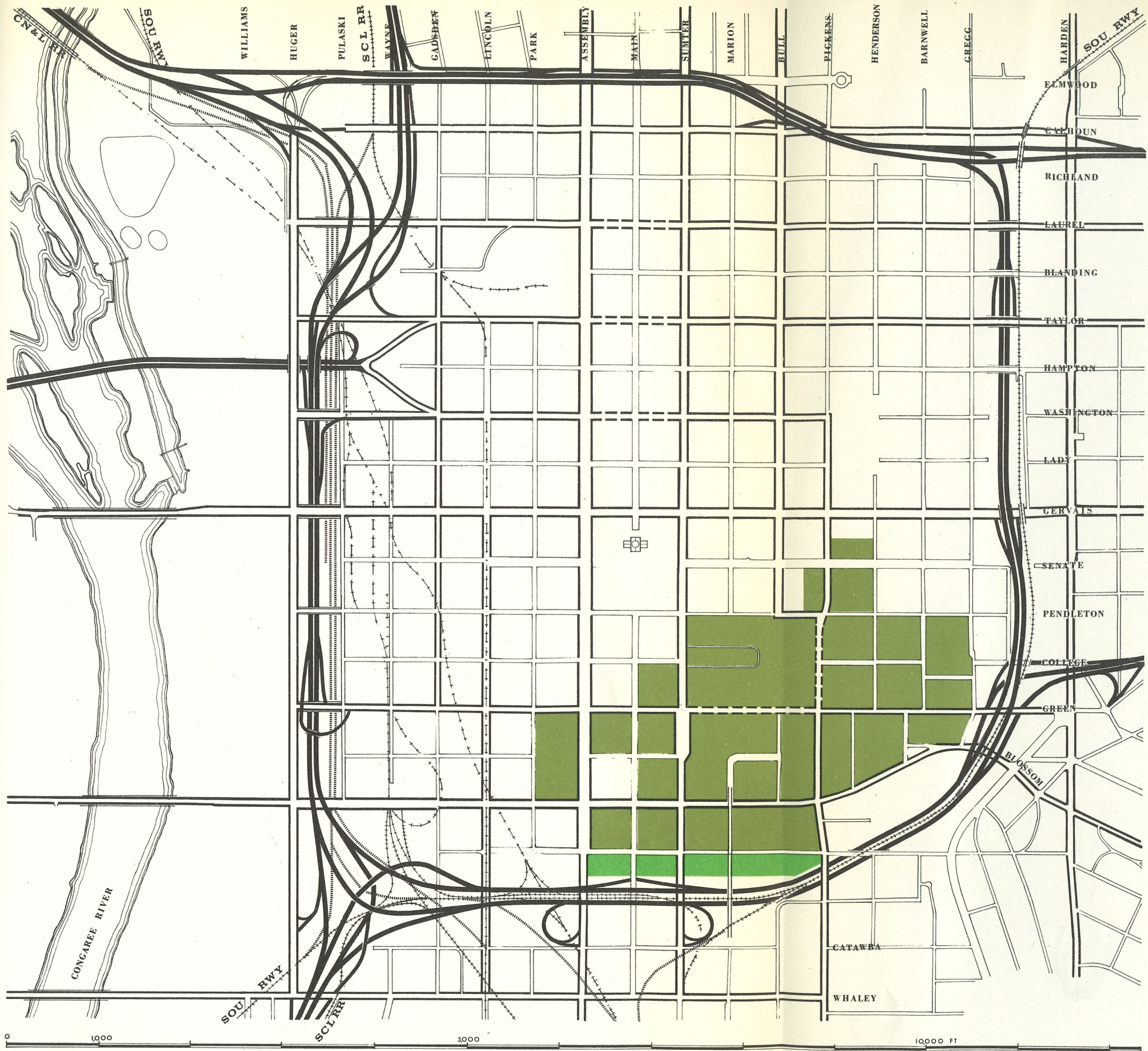
**OTHER SEMI -
PUBLIC, PUBLIC
AND OPEN SPACE
USE INTENSITY
YEAR 2000**

-  .05 TO .40 F.A.R.
-  .30 TO 3.00 F.A.R.
-  OPEN SPACE
- A** AUDITORIUM
- B** CEMETERY
- C** CHURCH
- H** HOSPITAL
- L** LIBRARY
- M** ART MUSEUM
- O** SCHOOL OFFICE
- S** SCHOOL
- T** TRANSPORTATION CENTER
- CC** COLESIUM - CIVIC CENTER
- NI** NEW INSTITUTE



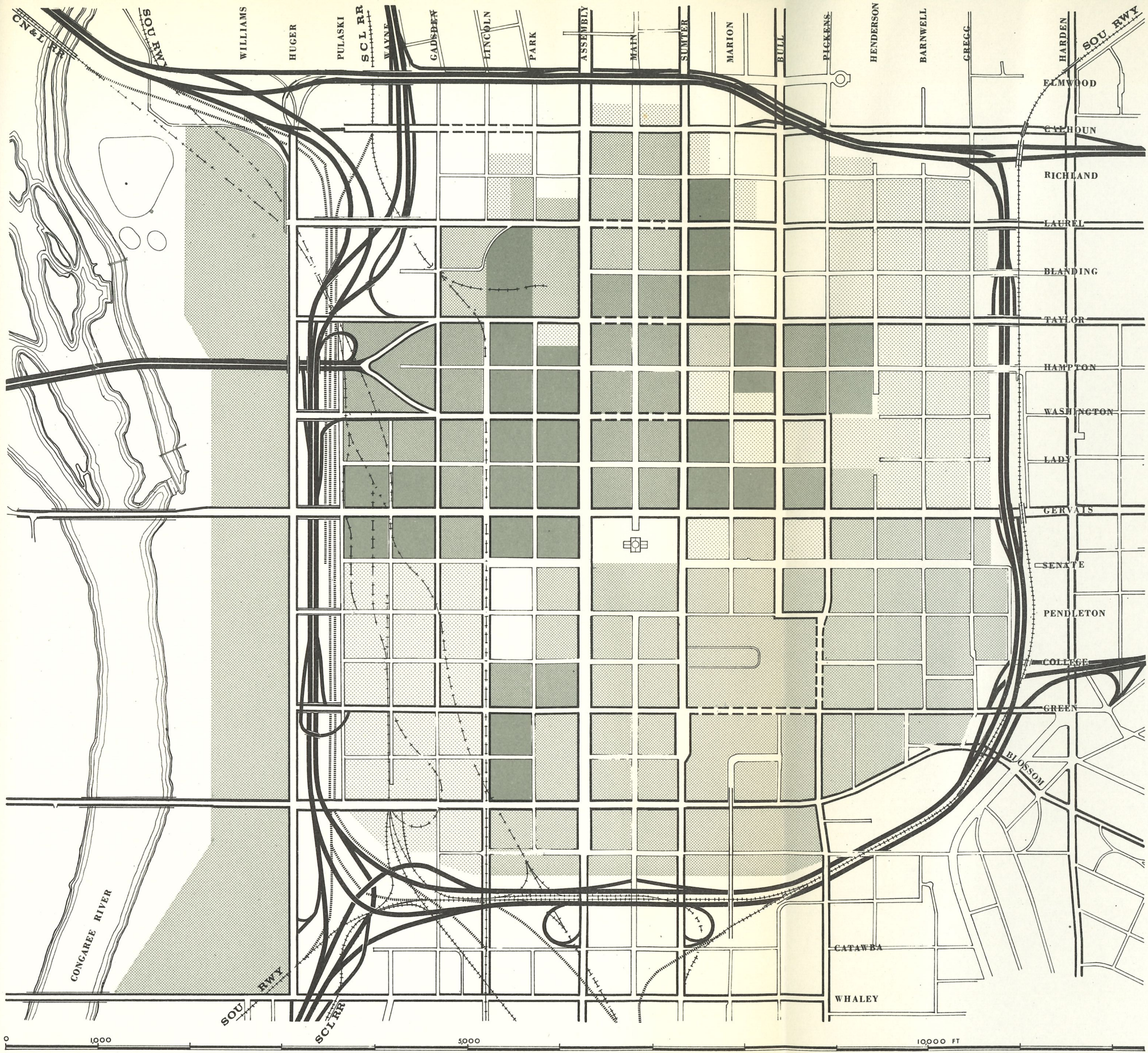
UNIVERSITY OF SOUTH CAROLINA USE INTENSITY YEAR 2000

-  ATHLETIC FIELDS
-  .30 TO 2.00 F.A.R.

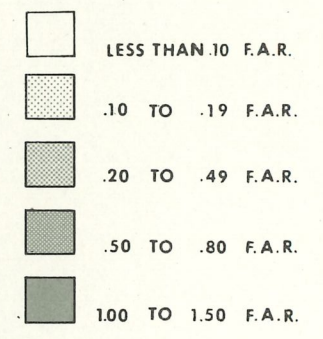


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D - U S A - W S 3 6 0 / A 2 7

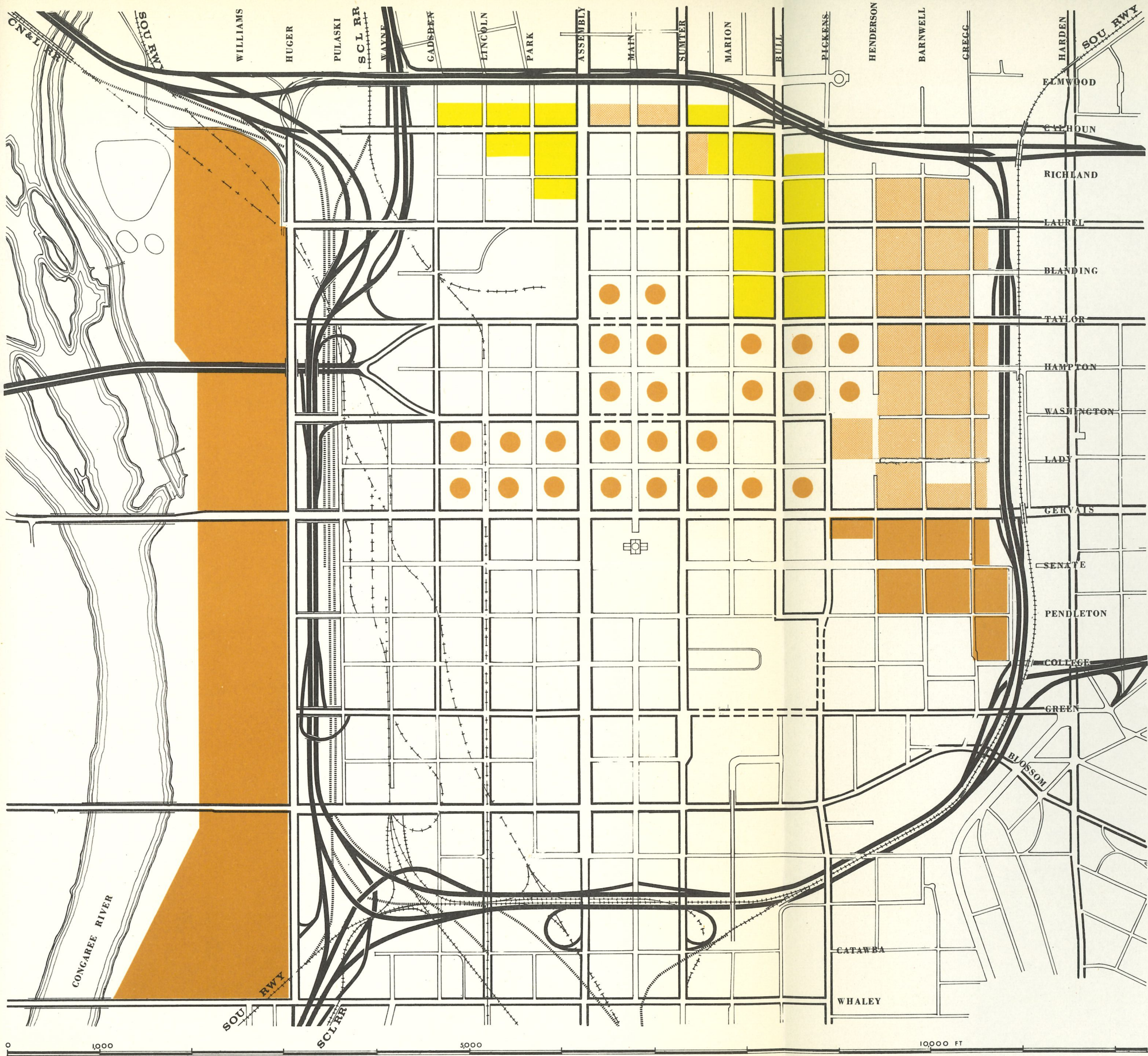


PARKING USE INTENSITY
YEAR 2000



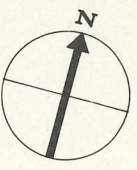
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RESIDENTIAL USE INTENSITY YEAR 2000

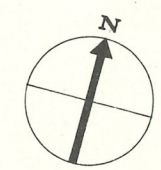
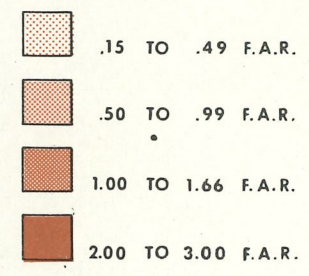
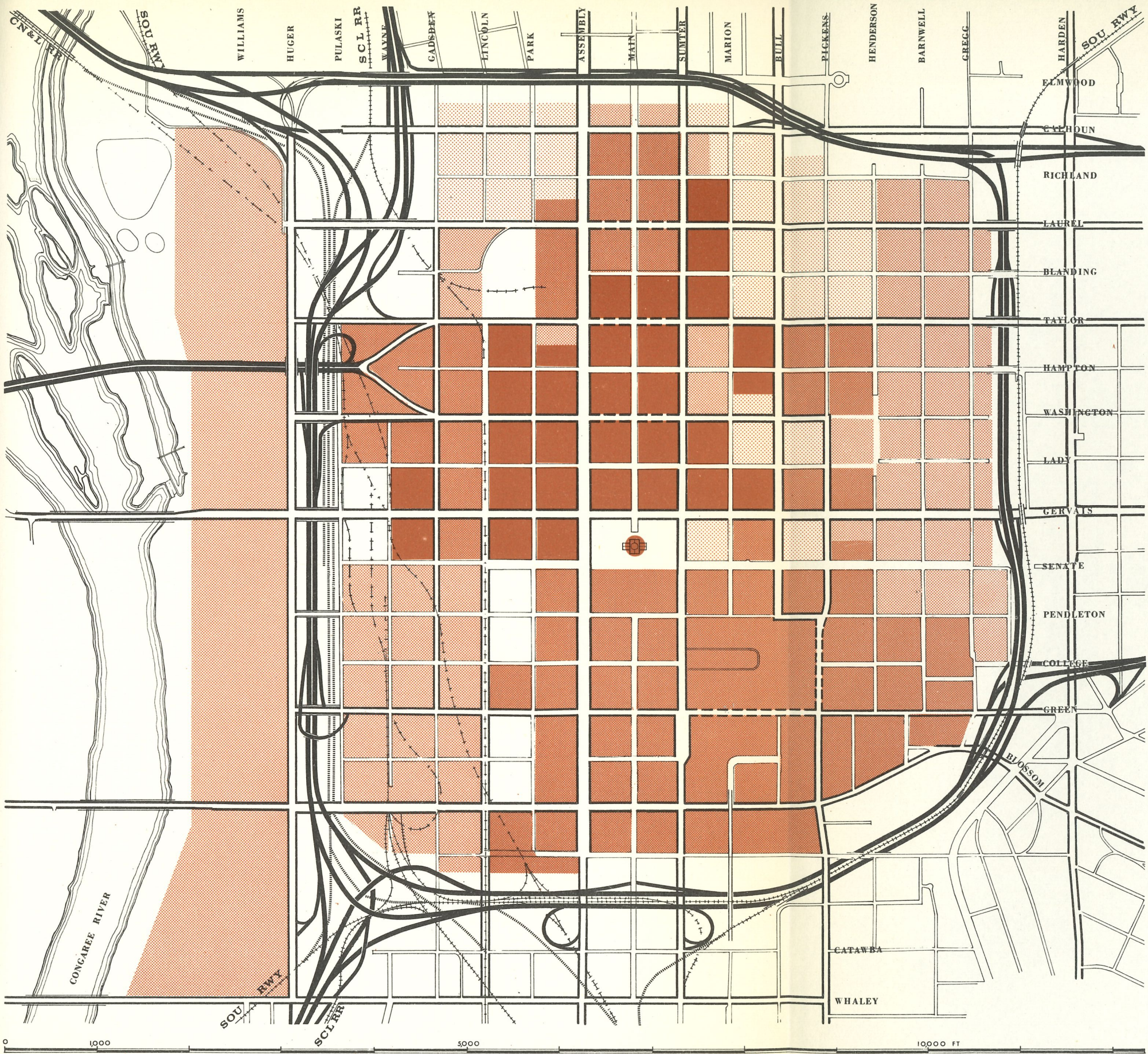
- LESS THAN .20 F.A.R.
- .20 TO .29 F.A.R.
7 TO 9 UNITS / ACRE
- .30 TO .40 F.A.R.
15 TO 20 UNITS / ACRE
- .50 TO .75 F.A.R.
25 TO 30 UNITS / ACRE



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COMPOSITE USE INTENSITY YEAR 2000



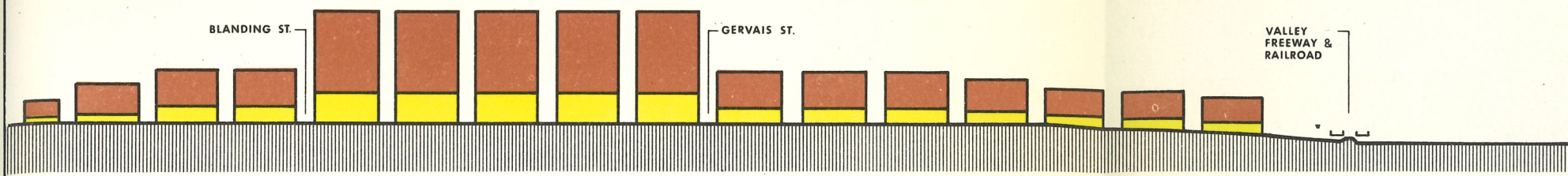
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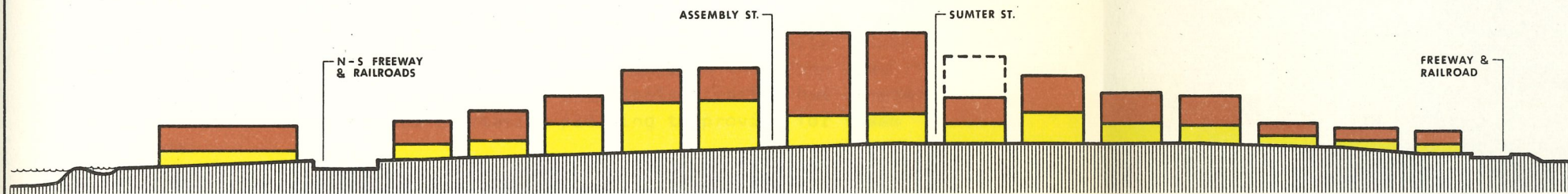
255. The land use organization and the resultant use intensity of the Master Plan Alternative A, not only maximizes the potential of the Central City but also creates a form and massing of proper vertical dimensions.

256. The drawing opposite shows the variation of development intensity along three major axes: east across Main Street, north across Hampton Street and north across College Street.

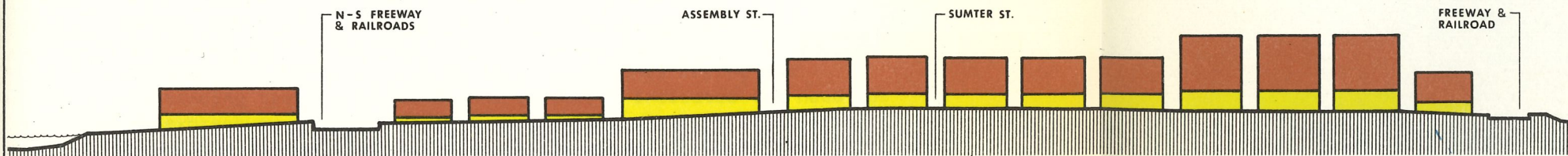
SCHEMATIC VARIATIONS OF DEVELOPMENT INTENSITY



SECTION A-A ACROSS MAIN STREET LOOKING EAST



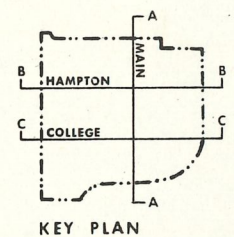
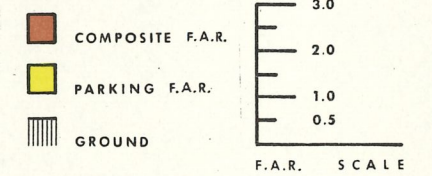
SECTION B-B ACROSS HAMPTON STREET LOOKING NORTH



SECTION C-C ACROSS COLLEGE STREET LOOKING NORTH



LEGEND



d. The Transportation System

257. The movement of Columbia urban area population from one location to another is heavily dependent upon the automobile. Substantial increases in vehicular traffic volumes in the urban area have been recognized in the past and anticipated traffic has created the need for areawide transportation planning to provide for these needs.

258. The Columbia Area Transportation Study which was completed in 1966, contained the transportation plan for urban area needs to the year 1985. It developed from extensive studies of then existing travel characteristics related to future population and land use parameters.

259. The COATS plan provided for about 37 miles of freeways and expressways, about 30 percent of areawide roadway improvements. Several of these freeways and expressways would have a direct impact on Central City, providing high capacity travelways in the Study Area and connecting with other such routes to population centers of the urban area. Proposed routes include the North-South Freeway, East-West Freeway, Valley Freeway and the Northeastern Freeway. Subsequent developments during the continuing transportation planning process indicated the need for an expressway into the Study Area from the west and an additional crossing of the Congaree River in the general area of Whaley Street south of the Study Area.

260. As previously noted, travel volume anticipated for 1985 were based on projected planning parameters within the Columbia urban area. With implementation of the Central City Plan enhancing the character and competitive position of Central City, further increases in travel to and from this important part of the city can be expected. An increased employment projection for the Central City, to 47,000 persons for 1985, will have significant influences on travel volumes, as will the anticipated population increase within the Study Area resulting from housing proposals for the Riverfront. This population growth would result in significant increases in trip productions for the Central City area.

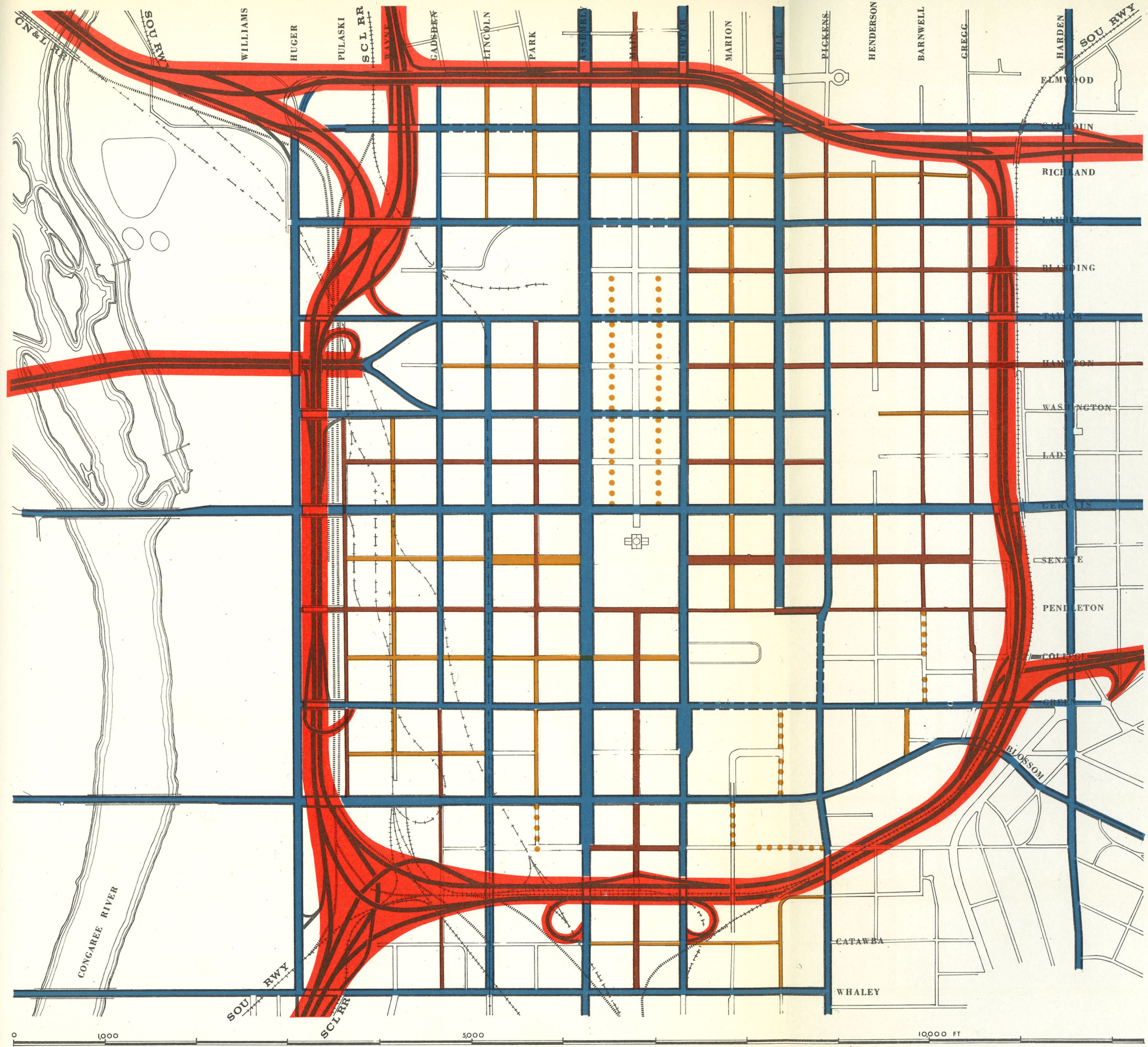
261. As a result of planning parameters introduced by the Central City Plan, the travel habits of the urban area must be revised in order to accommodate future volumes of person trips. To induce needed revisions in travel habits and to promote movement by transit, the proposed transportation system recognizes the need for a Transportation Center for all modes of transportation, as well as exclusive bus lanes on major arterials during peak hours of travel to facilitate the movement of these vehicles in the Central City area.

262. The transportation system proposed in the COATS Study indicated the need for freeways on the west, north and south of the Study Area. These freeways, respectively designated the North-South, East-West and Valley Freeways, were reviewed with respect to Central City planning proposals by the Study Team. Revisions required to these facilities were incorporated in the proposed Transportation Plan for the Central City.

263. In addition to the COATS recommendations, improvements in arterials to facilitate Central City traffic circulation have been included in the proposed plan to supplement capacity provided by the freeway system. Also, a freeway has been recommended on the east side of the Study Area, connecting the East-West and Valley Freeways. This freeway would serve to contain the Central City area and would provide additional highway capacity on the east. The potential growth on the south and east projected in the COATS Study requires this improvement to facilitate traffic flow.

264. Other improvements proposed in the transportation plan include a people mover system from the Transportation Center to the core area, State Capitol Complex and the University of South Carolina; a sophisticated traffic control and monitoring system; a realignment of railroad mainlines into a transportation corridor paralleling the alignment of the North-South Freeway; pedestrian separations and exclusive pedestrian areas; restriction of curb parking on the arterial street system, and development of off-street parking facilities to accommodate parking requirements.

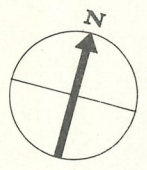
265. The proposed circulation system is shown in the map opposite and is described in following sections.



STREET SYSTEM

YEAR 2000

- FREEWAY
- ARTERIAL
- COLLECTOR
- LOCAL
- SERVICE



CENTRAL CITY PLANNING PROJECT - COLUMBIA, S. C.

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i. The Freeway System

266. A system of freeways is proposed for the Central City to accommodate projected highway needs of this area. This system will enclose the one mile square area with a loop and will connect to radial freeways extending to all parts of the city.

The North-South Freeway

267. The proposed alignment of the North-South Freeway has been altered from the original plan and from subsequent alternative solutions proposed by continuing transportation studies to accommodate the development of residential complexes along the Riverfront. The proposed freeway will extend in the Central City area from an interchange with the East-West Freeway along the Elmwood Avenue corridor to the connection with the Valley Freeway on the south. This alignment is relatively straight, paralleling Pulaski and Wayne Streets, part of the present street system.

268. Together with the development of the freeway in this corridor, the relocation of railroads paralleling this alignment is proposed. Realignment will necessitate depression of the North-South Freeway and the railroads in order to provide grade separations with the surface street system and to maintain interchange location at critical areas.

269. The North-South Freeway will maintain a 6-lane divided cross section within a minimum 200-foot right-of-way area. The proposed median for the freeway will vary in width depending upon the design criteria stipulated by geometrics.

The East-West Freeway

270. It is proposed that an elevated freeway be developed along the Elmwood Avenue alignment to connect I-126 on the west and the eastern portion of the urban area with a high-speed facility. Development of this facility will necessitate the provision of a one-way westbound street to parallel the East-West Freeway along the north side of the proposed right-of-way.

271. The proposed elevated facility and one-way street could be developed within the existing 150-foot right-of-way of Elmwood Avenue from Huger Street to Bull Street. From Bull Street to Harden Street, a new alignment for the freeway paralleling Calhoun Street will be required.

The Valley Freeway

272. The proposed transportation plan would require the Valley Freeway to be located along the existing alignment of the Southern Railroad in the southern portion of the Study Area. This alignment, which is relatively close to the proposals of COATS Study, would provide needed access to the University of South Carolina with a high-speed facility.

273. The proposed Valley Freeway would be a 4-lane divided facility with a variable width median in a minimum 200-foot right-of-way. The facility would be elevated over the existing surface street system with a major interchange located between Assembly and Sumter Street. This interchange would provide access to the State Capitol Complex and the University Area.

The East Connector

274. To complete the loop, it is proposed that a freeway be located from the Valley Freeway on the south to the East-West Freeway on the north along the existing Southern Railroad main line on the east side of the Study Area. This 4-lane divided freeway would serve the eastern portion of the Study Area through interchange locations at Taylor and Gervais Streets, would strengthen the freeway system in the Central City area and would contain the growth of the area in a well-defined transportation loop.

ii. The Arterial System

275. To supplement the freeway system proposed under the transportation plan, improvements to the arterial system are recommended to provide circulation routes and access to adjacent properties.

Lincoln Street

276. The improvement of Lincoln Street from Whaley Street to Taylor Street is recommended to provide an arterial in the north-south direction connecting these important east-west facilities. It is recommended that Lincoln Street be developed as a 4-lane divided facility with a 16-foot median to permit left turn storage area.

Whaley Street

277. The improvement of Whaley Street from the proposed crossing of the Congaree River to Pickens Street is recommended as a 4-lane divided facility with a 16-foot median to permit left turns at critical intersections. This facility will serve the area south of the Study Area and would increase east-west capacity in this important corridor.

278. Access to the north from Whaley Street can be made on arterials such as Huger, Lincoln, Assembly, Sumter and Pickens Streets. With this ability to serve the east-west corridor and to connect to important links into the central area, traffic can be routed on these arterials to their destination within the Central City.

Green Street

279. It is recommended that Green Street be developed as a 4-lane divided facility with a variable width median from Huger Street to Harden Street. This facility will provide an important east-west link in the southern portion of the Study Area. It is also recommended that Green Street be depressed from Sumter Street to the east side of Pickens Street to permit pedestrian separation through the University of South Carolina campus.

Pickens Street

280. Pickens Street needs improvement from Whaley Street on the south to Taylor Street on the north as a 4-lane divided facility with a variable width median. This facility will link important east-west arterials on the east side of the Study Area and will provide additional north-south capacity.

281. The facility should be depressed from a location south of Green Street to Pendleton Street in order to provide pedestrian separations through the University of South Carolina campus.

Gadsden Street

282. Gadsden Street is an important north-south arterial on the west side of the Study Area. It is recommended for improvement to a 4-lane divided facility with a 16-foot median. This facility could be improved from Elmwood Avenue on the north to Green Street on the south so as to permit access to the transportation center from major arterials in the east-west direction and to serve best the development proposed in this important area of the Central City.

Pendleton Street

283. Pendleton Street would be improved to a 4-lane divided facility with a variable width median connecting Huger on the west through the Central City area to Gregg Street on the east. This facility will add capacity to the east-west corridor in the University of South Carolina and State Capitol Complex areas.

Laurel Street

284. The depression of Laurel Street from Assembly to Sumter Street would provide pedestrian separation in the Jefferson Square area.

Taylor Street

285. It is recommended that Taylor Street be depressed between Assembly Street and Sumter Street to provide pedestrian separation through the retail core area of the Central City.

Washington Street

286. It is recommended that Washington Street be depressed between Assembly and Sumter Street in order that pedestrian separations can be maintained through the retail core area of the Central City.

iii. Railroad relocation

287. To utilize land within the Study Area to its full future advantage, it is recommended that the main lines of all railroads passing through the western portion of the Central City be consolidated into a single transportation corridor paralleling the recommended corridor of the North-South Freeway. With the railroad consolidation, the spur tracks which now meander through the Central City could be eliminated, providing valuable land for more economic development.

iv. The Transportation Center

288. An important element of the proposed transportation plan is the development of a Transportation Center to house the transfer of persons from all modes of transportation. This center would provide space for the storage of automobiles, intra and inter city bus terminal, rental car space, rail transit, a people mover system connecting the transportation center to high intensity locations of people, space for air travel on the roof of the facility and space for the handling of baggage and package delivery requirements associated with the transportation modes.

289. The Transportation Center is proposed to be located in the western portion of the Study Area contiguous to the transportation corridor. The facility would be located across Gervais Street between Lady, Senate, Gadsden and Wayne Streets. Access to the center is provided by the North-South Freeway and surface arterials. From the Transportation Center, access to other parts of the Central City area is provided through several modes of transport, principally the people mover system, taxis, limousines and bus service. Since the purpose of the Transportation Center is to provide a central location for all modes of transportation, persons from outside the area would be enabled to reach a central location for parking and for transfer to other modes of transportation with destinations throughout the Central City.

v. The People Mover System

290. Recent research and development in mass transit systems has led to increased hopes for future use of MAC (Major Activity Center) systems which are intended to relieve core area congestion by use of various conveyance devices. Thus, a new system is recommended as soon as is feasible in order to provide movement of people from the Transportation Center to other high intensity locations such as the retail core, State Capitol Complex and the University of South Carolina. This system would complement other parts of the area's transportation system. As proposed, the people mover system would extend from the Transportation Center along Gervais Street to the intersection with Sumter Street. From this point, routes are located north and south along the west side of Sumter Street. The elevated route to the north would circle the retail core area and return to the Transportation Center. The underground route to the south would provide access to the State Capitol Complex and the University of South Carolina and would circle back to the Transportation Center as with the route around the retail core.

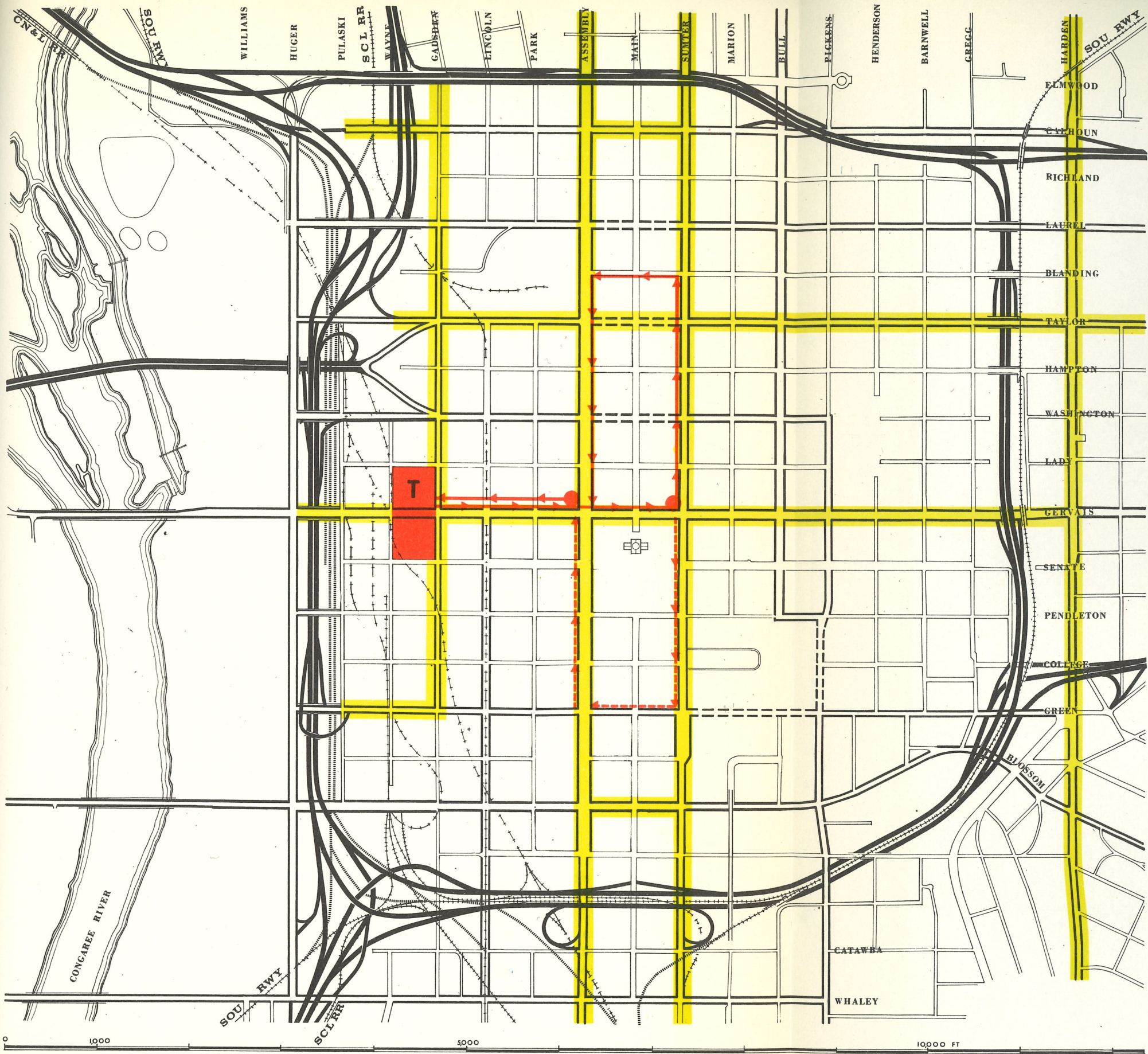
291. While systems employing fast pedestrian conveyors and small automated cars have been studied, no systems have yet been fully developed. One type of system which might be used in the future is a fixed guidance system such as a monorail. This system would have small vehicle modules with the ability of carrying 6 or 7 passengers in each. The modules could be self-powered, moving in a single unit or, during peak periods, connected as trains. A computer system would be required to ensure that the maximum number of modules would be available at areas of peak demand during all periods of the day.

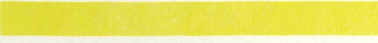

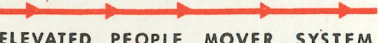


292. The elevated system around the core area would be integrated with buildings and would provide direct connections to the second level. These connections would strengthen the commercial potential of the second level by introducing additional activity. The elevated and depressed routes would be interconnected by a vertical lift station at the intersections of Gervais Street with Assembly and Sumter Streets.

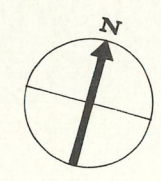
293. The arrangement of the People Mover System is shown opposite.

PUBLIC TRANSPORTATION SYSTEM

YEAR 2000



-  EXCLUSIVE BUS LANES
-  TRANSPORTATION CENTER
-  ELEVATED PEOPLE MOVER SYSTEM
-  UNDERGROUND PEOPLE MOVER SYSTEM
-  VERTICAL LIFT STATION



CENTRAL CITY PLANNING PROJECT - COLUMBIA, S. C.

PREPARED FOR THE CENTRAL CITY DEVELOPMENT COMMITTEE
 BY DOXIADIS ASSOCIATES INC
 WILBUR SMITH AND ASSOCIATES
 LYLES, BISSETT, CARLISLE & WOLFF
 D - USA - WS 360 / A 33

vi. Exclusive Bus Lanes

294. To improve the transit system in the central area, it is recommended that lanes be exclusively devoted to bus traffic along arterials such as Assembly, Sumter, Gervais, Taylor and Gadsden Streets. These lanes would enable bus service to move through the Central City area at a relatively fast speed, eliminating delays and congestion for this important service. With the ability to move unhampered by automobile traffic, service and efficiency of bus travel would become more attractive to persons entering the Central City.

295. Other streets serving the Transportation Center will require the designation of lanes for exclusive use by buses as a result of the number of vehicles within this area. The recommended exclusive bus lanes are shown on the previous map on page 175.

vii. Traffic Control System

296. Control of the surface street system through traffic signals is recommended to be provided by a computer system which would supervise the operation of all signalized locations within the Central City and would extend to encompass signals on the arterial system. This system of interconnected signals would be responsive to variations in traffic flow throughout the area. Variations along the street system would be measured through detectors and relayed to the computer for monitoring and response.

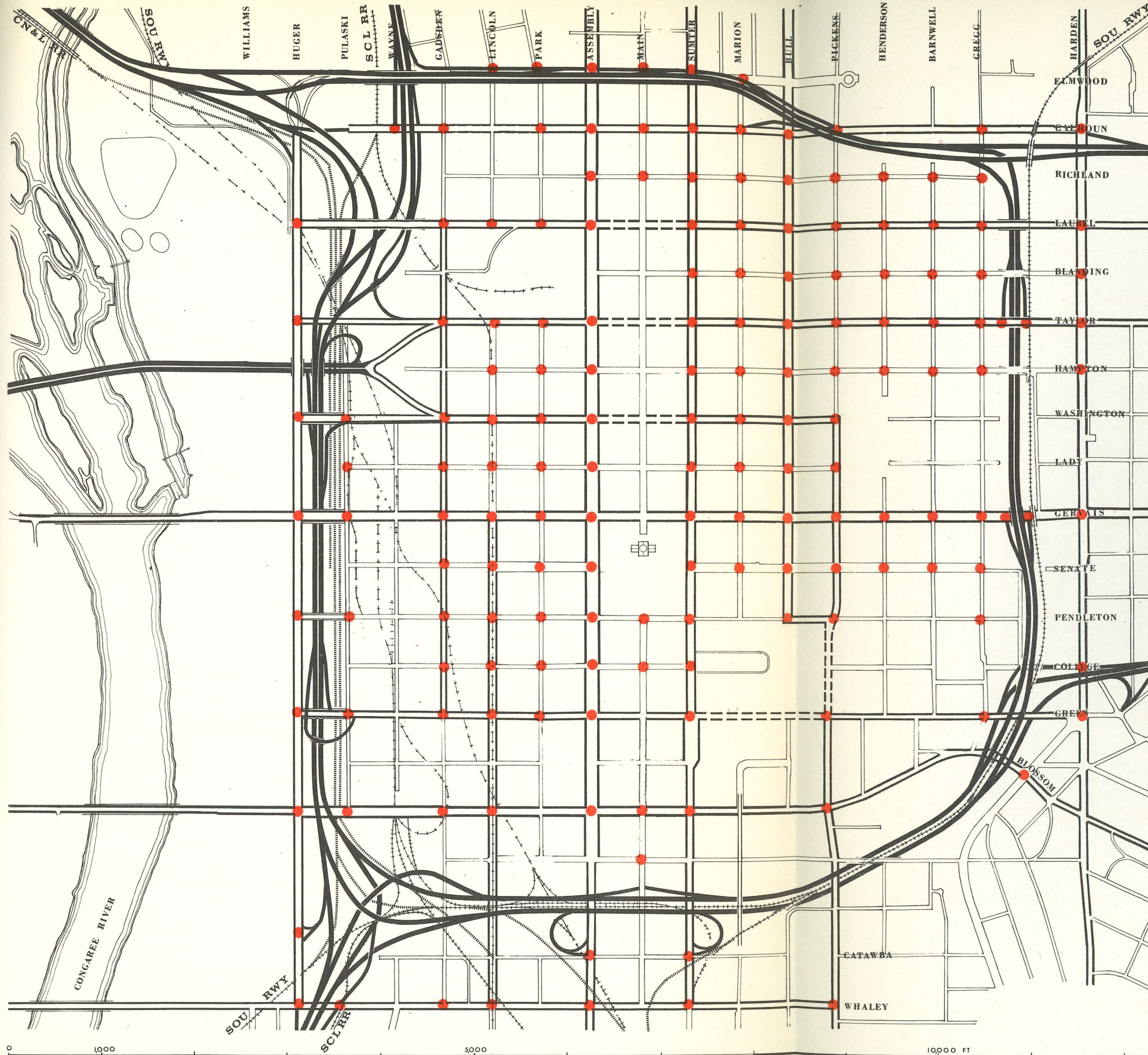
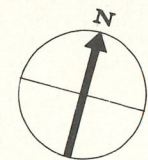
297. The system of interconnect signals would ensure progression along surface streets of the Central City and would minimize vehicular congestion and delays.

298. Other valuable information related to vehicular flow can be obtained from the computer system, including traffic volumes, vehicular speeds, delays and vehicular density. The system is depicted on the map opposite.

COMPUTERIZED TRAFFIC SIGNAL SYSTEM

YEAR 2000

● SIGNAL LOCATION



CENTRAL CITY PLANNING PROJECT - COLUMBIA, S. C.

PREPARED FOR THE CENTRAL
CITY DEVELOPMENT COMMITTEE
BY DOXIADIS ASSOCIATES INC
WILBUR SMITH AND ASSOCIATES
LYLES, BISSETT, CARLISLE & WOLFF
D - USA - WS 360 / A 34

viii. Pedestrian Movement

299. Pedestrian movement throughout the Central City was considered in light of an improved transportation system. Areas were designated for exclusive use by pedestrians in the Central City core area by eliminating vehicular conflict along Main Street. Other areas where complete separation of pedestrians and vehicles is provided include the State Capitol Complex, portions within the University of South Carolina and the historical districts.

300. All of these areas are considered to be locations with high intensity pedestrian flows. In other areas where intensity does not require the elimination of vehicular traffic by depressing or closing streets to automobiles, pedestrian separations are recommended, as on Assembly Street from the University campus to the Coliseum and from the University campus south of the Valley Freeway into the main campus along an elevated bridge. Pedestrian separations across Gervais Street at the State Capitol Complex would provide continuous flow capability from the State Capitol Complex to the retail core area.

e. Parking

301. Estimates of parking space demand for the Central City area have been prepared and are included in Appendix I to this report. The distribution of the parking spaces in the form of "Parking Use Intensity" was graphically presented on the map of page 155.

i. Curb parking

302. It is recommended that parking along curbs be prohibited on major arterials such as Assembly, Sumter, Gervais and Taylor Streets. Other service streets will be able to continue curb parking and traffic carrying capacities required of these streets. These include streets such as Marion, Senate, Richland and Blanding Streets. It is estimated that a maximum of 3,000 curb parking spaces will be available in the Study Area.

ii. Off-Street Parking

303. The location of off-street parking facilities throughout the Central City area is predicated on the land use development projected in the Central City Plan. It is recommended that off-street parking facilities be developed within each block of the retail core with access provided from Sumter and Assembly Streets. These facilities would be located within the center of the block, housing a minimum of 400 vehicles in each area. This capability would enable space to be provided for short term shopper and business parker with a limited number of parkers permitted on a monthly basis.

304. The worker parker in the Central City area would be encouraged to park at a location such as the Transportation Center or at other facilities in the periphery of Central City. These parkers could be transported to their final destination by a bus system from these mass parking locations.

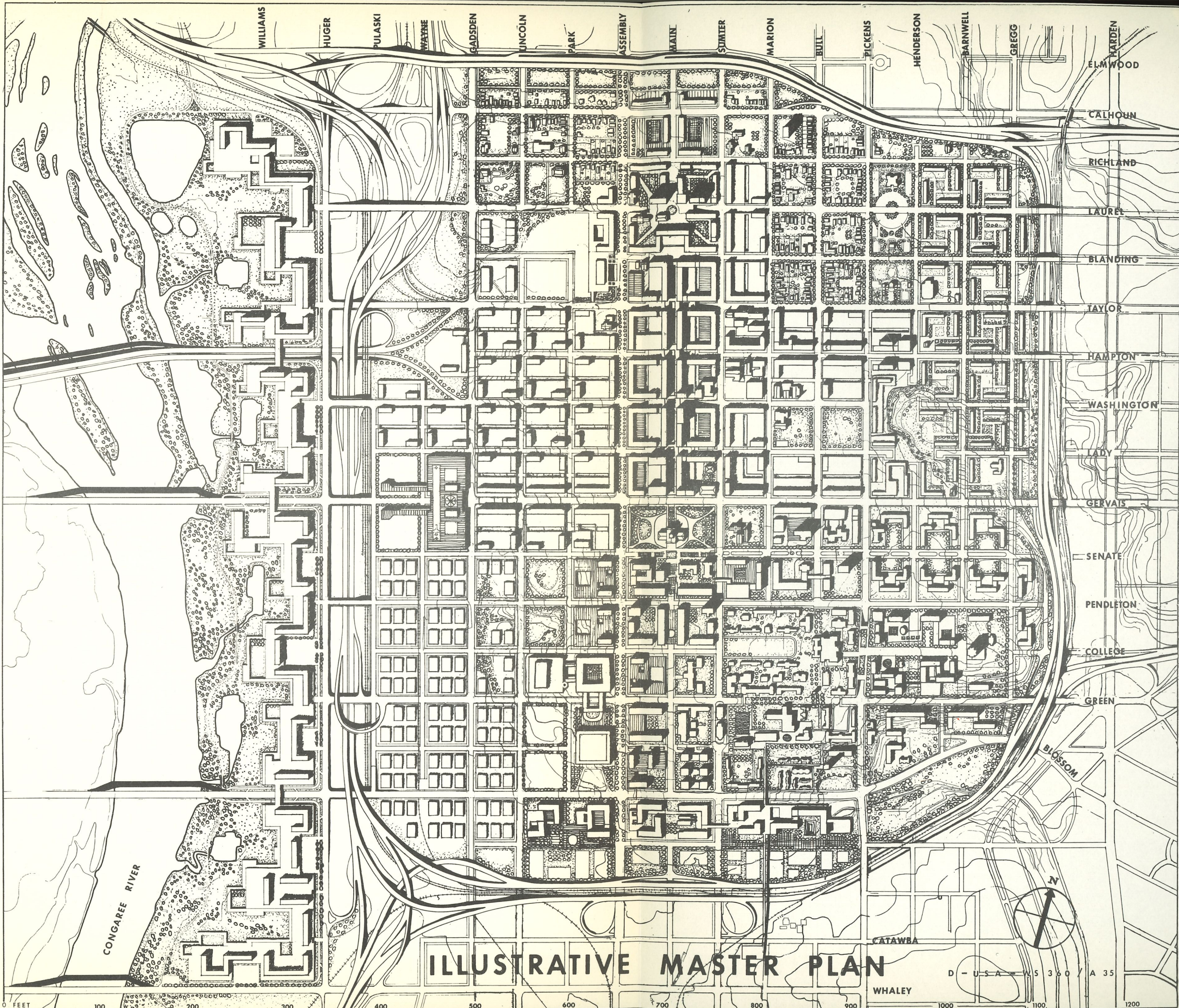
305. Major facilities such as the State Capitol Complex and the Coliseum area will continue to have convenient parking located adjacent to or within these facilities. Present plans for the State Capitol Complex include the development of an underground garage for approximately 1,100 vehicles with future development proposed to increase this number to about 1,600 spaces. The parking area contiguous to the Coliseum will combine usage for Coliseum events with vehicle storage requirements for University student parking. Immediate plans are for the development of approximately 1,000 spaces with future potential to increase this number as required by the University demand.

306. Parking facilities in the Transportation Center will enable storage of about 3,000 vehicles to accommodate long term worker parking. Workers destined to the Central City area could house their vehicles within the Transportation Center and be transported to the retail core or to other areas within Central City on the people mover system or on service street vehicles.

f. The Illustrative Master Plan

307. The drawing opposite illustrates the optimum development in the Central City by the year 2000. It represents in three dimensional design terms the essence of the concepts expressed earlier in this Chapter. The creation of an aesthetically attractive environment is viewed as one of the ultimate goals of Central City planning effort and form has been one of the principal concerns of the Study Team during the course of the planning period. The Illustrative Master Plan is an attempt to picture what the "cityscape" in Columbia Central City could look like in the year 2000.

308. The basic determinants of urban form are the location, bulk and height of buildings, and their relationship to open space. Therefore, a brief description of these two aspects as represented by the Illustrative Master Plan is given below.



WILLIAMS HUGER PULASKI WAYNE GADSDEN LINCOLN PARK ASSEMBLY MAIN SUMTER MARION BULL PICKENS HENDERSON BARNWELL GREGG

ELMWOOD CALHOUN RICHLAND LAUREL BLANDING TAYLOR HAMPTON WASHINGTON LADY GERVAIS SENATE PENDLETON COLLEGE GREEN

CONGAREE RIVER

ILLUSTRATIVE MASTER PLAN

0 FEET 100 200 300 400 500 600 700 800 900 1000 1100 1200

WHALEY D - USA - VS 360 - A 35



i. Building Configuration

309. The location, bulk and height of buildings shown in the Illustrative Master Plan have been established on the basis of the land use mixture and intensity discussed in foregoing sections. Total floor area ratios were broken down to floor areas devoted to particular uses and building volumes were determined to include these floor areas and satisfy location and form requirements of the respective uses.

310. Naturally, the same floor area ratios can be given an infinite number of alternative volume configurations. Therefore, building configurations shown in this Plan are only illustrative, representing an ideogram which could serve as an ultimate design objective. There is no doubt that the final form taken by Central City will be the sum total of design decisions to be taken by the public, corporate and individual developers of its land. However, a unified design concept could serve as a general guide for these individual decisions and would help in developing a more unified approach to the solution of individual problems, shaping the development configurations toward a harmonious total form.

311. To serve this purpose, the Study Team deliberately chose to give the Illustrative Master Plan a simplified abstracted form. With the exception of very important building complexes which are likely to be present in the year 2000 and the historic areas for the conservation of which a very determined effort will have to be made, all other areas have been shown with new developments. Such developments will be brought either by organized public and private effort or through the natural replacement process by individual landowners; therefore the form shown for each block should not be interpreted to mean that such block should be cleared and rebuilt now, far less that it should be rebuilt in that particular fashion. It means only that if and when redeveloped it could be taking that shape which expresses a desirable typical pattern for its use and intensity.

312. The bulk and height of buildings shown in the Central Business District express a maximum utilization of the land on the first two floors in which retail and service facilities will be located and some of the related parking will be accommodated. High-rise buildings are provided on top of this solid base around the periphery of the blocks to accommodate office, hotel and residential uses.

313. The location, bulk and height of buildings, shown in the residential districts, historical areas, the University of South Carolina and other institutional and public spaces express the desire for an inter-related sequence of open spaces to be provided by an appropriate configuration of built-up areas.

314. The building configurations clearly reflect the intensity of use in the various sections of the Study Area, with the most intense development taking place along Main Street and between the two poles of attraction, i.e., the State Capitol Complex and the City-County Complex. To a lesser degree intensive development expressed by high buildings is also shown in other areas of proposed specific, organized developments, such as the eastern section of the University campus and the Riverfront residential development. Starting from these areas, the intensity of use and height of buildings gradually decreases toward the peripheral areas of Central City. The topography of the Study Area also helps to accentuate the impact of the Central Business District within the skyline of the city as the top of a pyramid.

ii. Open spaces

315. The Illustrative Master accents the retention of established pedestrian open spaces, provision of new ones and their interrelationships. The mall of Main Street extends northward to the proposed City-County Complex where it intersects with the open space axis linking the two historical areas. The same mall extends southward, through the State Capitol Complex, to Senate Street which forms the backbone of the proposed medium-density residential development, as well as to the main campus of the University of South Carolina.

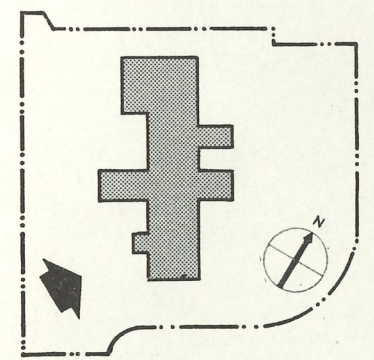
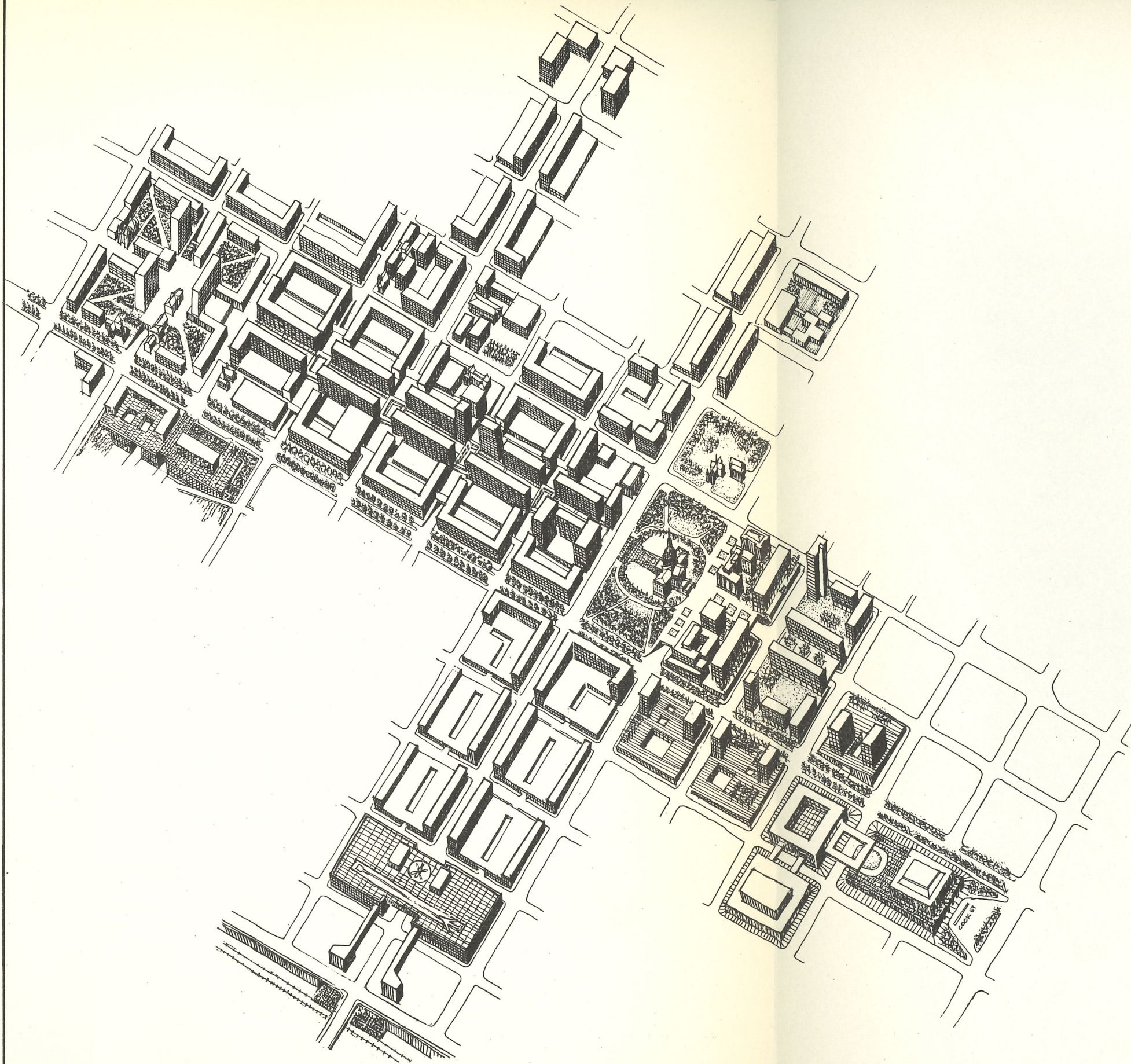
316. A system of secondary open paths penetrates the residential area to the east and blends with a major open space in the area of the abrupt topographical drop east of Pickens Street and between Hampton and Lady Streets. The secondary paths terminate at the green belt, which acts as a buffer of the proposed highways, surrounding the Study Area along its northern, eastern and southern boundaries. To the south and southeast of the Study Area, the playfields of the University and the Maxcy Gregg Park fall within this green belt.

317. To the west of the Study Area, lie the proposed Riverfront development and the adjoining open space along the River. It is proposed that an easement of between 400 and 800 feet along the River be maintained as public open space for the benefit of the citizens of Columbia. This open space should include the flood plains at the southwestern corner of the Study Area and the reservoir at the northwestern corner. Proper development of this open space along the River would enhance the residential development and, in general, the whole Study Area.

F. THE DEVELOPMENT PROJECTS

318. The purpose of the present Chapter is to identify and explain the concepts for various development projects within the Study Area. Included are isometric plans, perspectives and model photographs providing the reader with a glance of the future Central City.

319. The isometric drawing opposite shows the proposed ultimate development of the Central City core. This development of which the components are described following will provide the framework around which private action will evolve.



KEY PLAN

PROPOSED MAJOR DEVELOPMENT

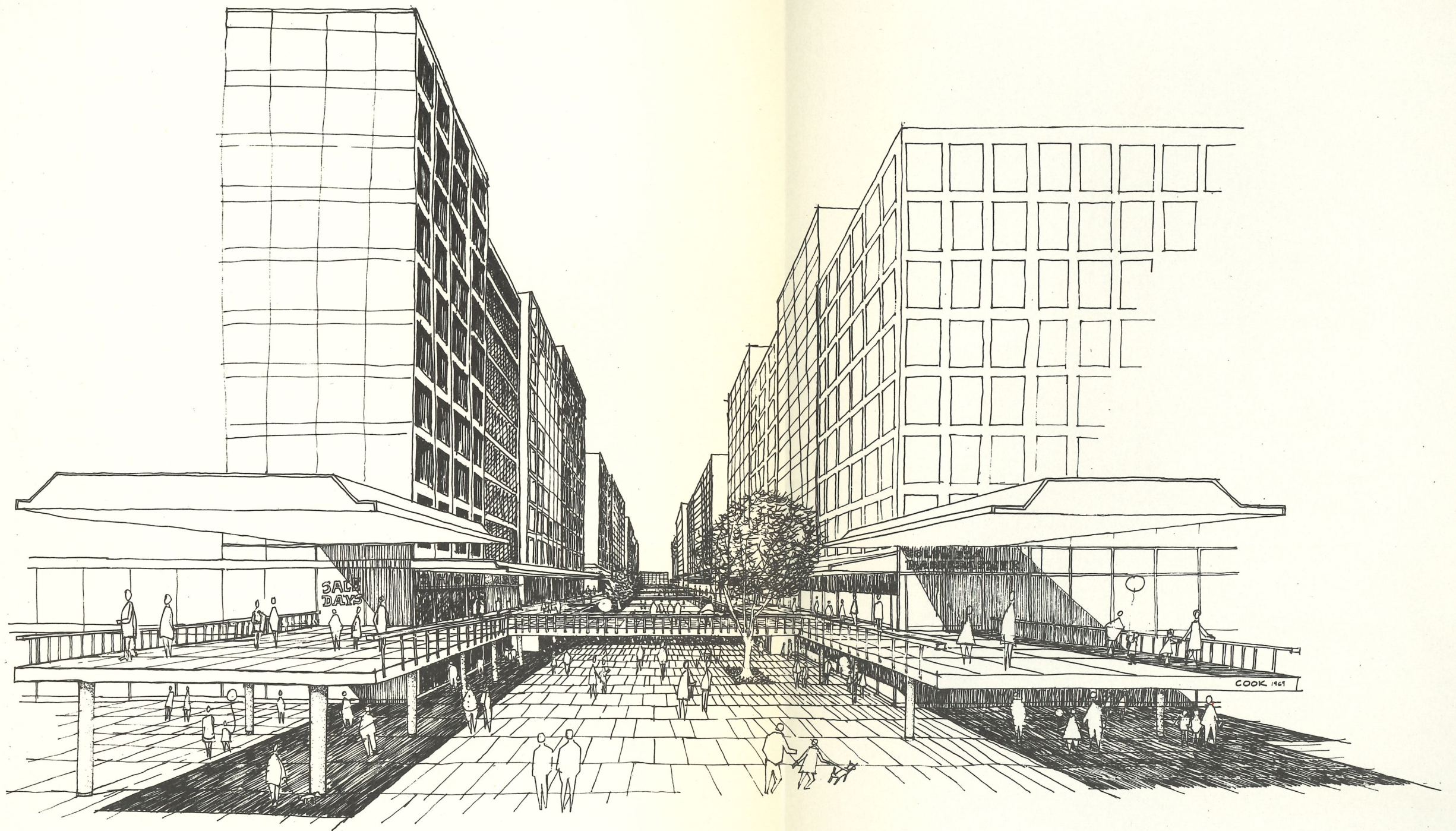
1. The Commercial Core

320. The commercial spine of Central City, Main Street, would be organized as a mall. The mall's major function will be to promote design coordination in abutting structures and create a right-of-way width more conducive to shopping interaction than the present 100 foot right-of-way. Specifically, the plan proposes a 20 foot wide, one-story high addition to the buildings on both sides of the street, of which 10 feet would serve as a covered walkway and 10 feet would be given to adjoining stores as additional retail and display area. A widened pedestrian area, resulting from closing of the street to vehicular traffic, would provide space for street furniture, landscaping and other amenities for the shopper. Structures lining the mall are intended for heights of 10 stories. This intensively developed area would be accompanied by a corresponding intensity of pedestrian activity, much of which would be related to the retailing usage. To intensify this usage, raised walkways are proposed over the entire length of the mall providing direct access to second stories used as retail space. Upper stories are intended mainly for offices, but also residential use.

321. An integral facet of the mall concept is the provision of loading and other business services from the rear. Although emergency vehicles would always be permitted access to storefronts, it is entirely desirable to separate service functions from retailing activities. In the case of the Main Street Mall, it is proposed that service vehicles be accommodated on existing alleys located on the east and west of the mall area. Though presently an incomplete system, these alleys would serve as bases for eventual service drives. It will be necessary for additional rights-of-way to be secured by the local government in order to complete the system.

322. The concept outlined above is intimately dependent upon the provision of an adequate supply of parking space. It is felt that such storage functions can best be accomplished on the adjacent service drives, using parking garages. Generally, two-story facilities would be constructed on the basis of need, i.e., as mall intensity increases, providing of course that the service drives have been opened up in advance. Additional parking to serve the retail area is proposed in adjacent blocks, east of Sumter Street and west of Assembly Street.

323. The perspective opposite illustrates the visual image of the mall looking north. In the background is the anchoring building of the City-County complex.



PROPOSED MAIN STREET MALL

2. City - County Complex

324. The City-County Complex is planned to provide sufficient office space - accompanied by a parking facility - to handle government employment growth through the year 2000.

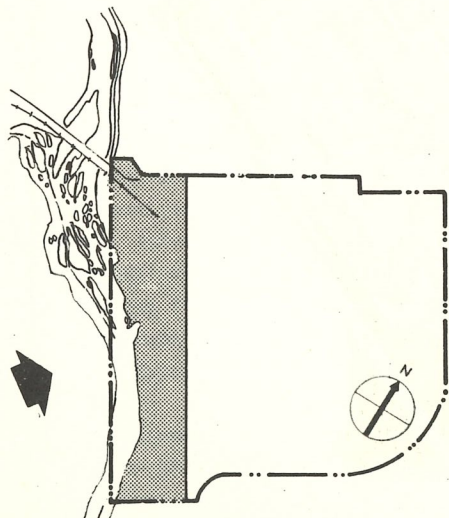
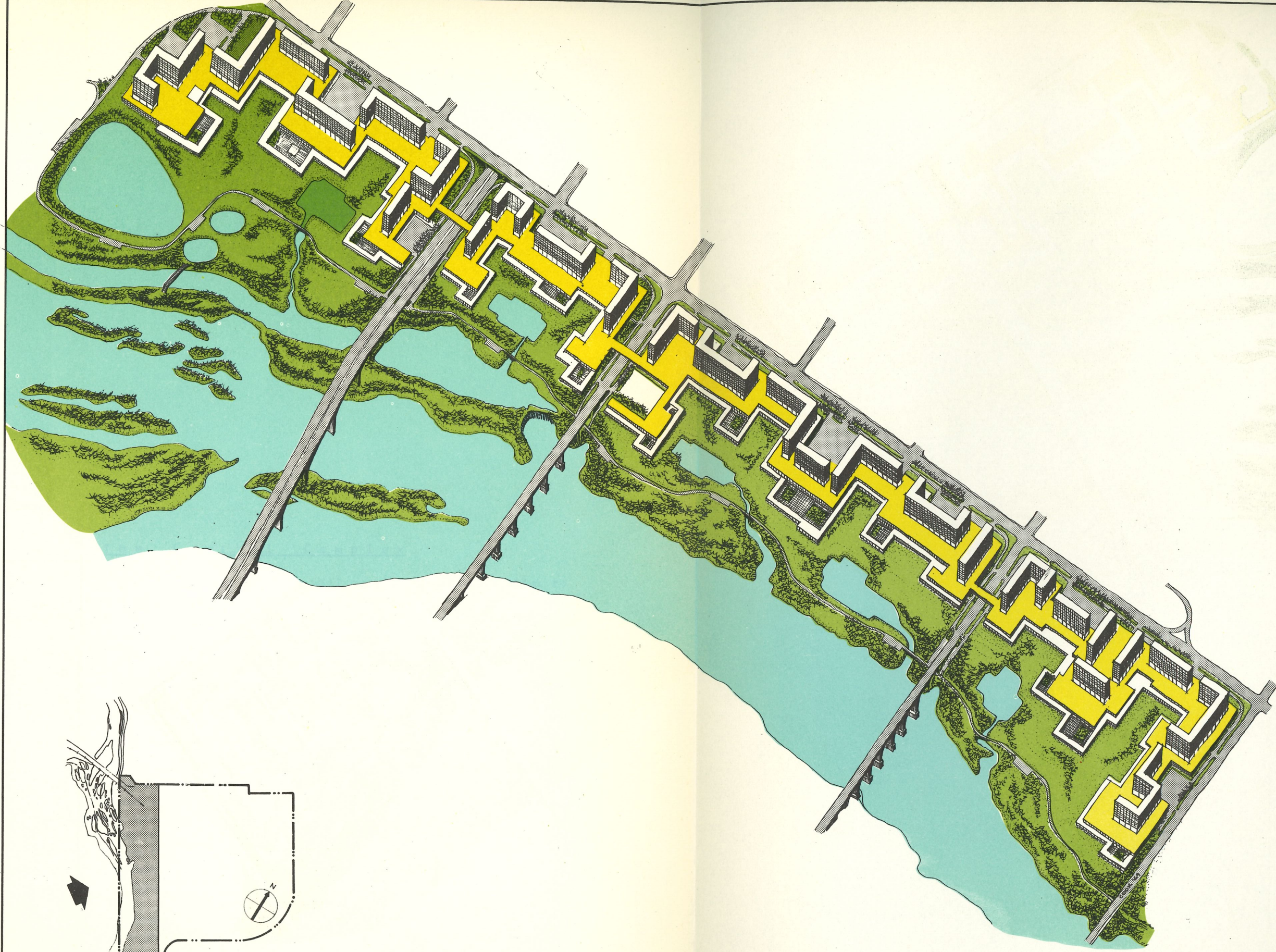
325. The presence of a unified governmental center lends additional strength to Central City. As a native function of the core area, government furnishes an essential source of services and great stability in terms of employment opportunity and support for the retailing center.

326. The Central City Plan calls for the City-County building to be constructed over Main Street, between Laurel and Blanding Streets. This means that the governmental units will have to acquire air rights over Main Street. In addition to providing needed governmental office space, this facility will permit a "natural" visual closure to the mall proposed along Main Street. Further, the proposed site facilitates unification of widely scattered municipal and county facilities. As a new, major focal point, the Complex would form an impressive counter-balance to the expanding Capitol Complex, on the south, providing the missing anchor on the north end of the proposed mall. This is illustrated in the drawing on page 189.

3. Riverfront Redevelopment

327. It is the intent of the plan to make use of the sloping topography and scenic attraction of the water as a choice area for future residential development. The area could, by the year 2000, accommodate as many as 23,000 persons in some 7,500 dwelling units, as well as schools, parks, convenience commercial and all ancillary facilities. These facilities could be built on about 270 acres of the riverfront lands lying close to the commercial center of Central City out of a total of some 380 acres lying just west of Huger Street. The riverfront strip measures, at the longest dimension, some 3,000 yards, including a large vacant tract in single ownership just south of Blossom Street. The overall development should be served by ground floor commercial uses in preference to an isolated shopping center which would tend to interrupt residential continuity and attract automobiles to the pedestrian-oriented, innermost sections of housing areas. Parking structures will be built along the eastern periphery, on Huger Street, under a platform on which the highrise structures will rest. The inward edges of these two-story structures will accommodate low rise housing terraced down the slope in the direction of the river. This arrangement of parking will limit vehicular disruption to the minimum.

328. Finally, the Riverfront concept includes designation of lower lands along the Congaree for a permanent park area serving riverfront housing and the entire city. Its use as a natural park would combine values related to conservation with those relating to aesthetics, and environment. In Columbia, as elsewhere in the nation, the riverfront has been disused rather than considered as an important asset. The isometric opposite illustrates the riverfront development which aims at achieving overall densities of about 95 inhabitants (28 units) to the net acre.



KEY PLAN

VIEW OF PROPOSED RIVERFRONT DEVELOPMENT

4. The Capitol Complex

329. The State Capitol grouping will provide functions similar to those proposed in the City-County Complex, i.e., the expansion of existing governmental offices to accord with year 2000 requirements of the State. As with the City-County Complex, it would terminate the Main Street Mall with a major focal point, a catalyst for effective development of this important portion of the Study Area. The development of the Complex is well underway, with initial designs already completed.

5. Civic - Cultural Center

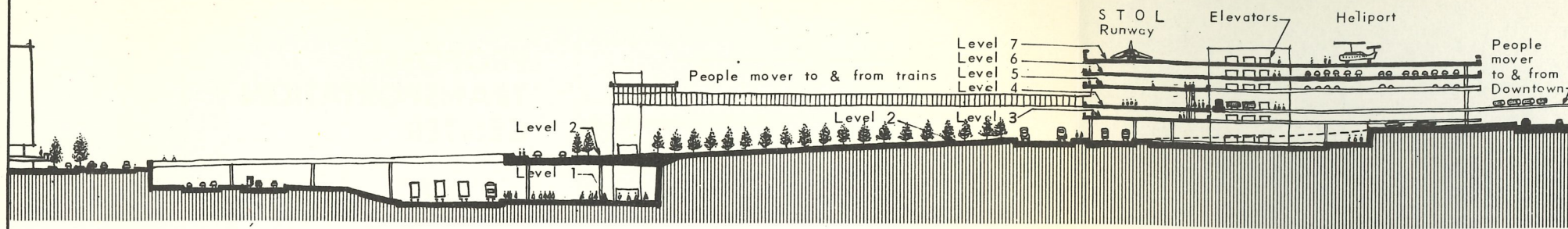
330. The recently completed University of South Carolina Coliseum established the framework for developing a new civic and cultural center. It is proposed that the two blocks just north of the Coliseum bounded by Assembly, Green, College and Lincoln Streets be developed for a 2,000 to 2,500 seat auditorium and exhibit hall containing 75,000 to 100,000 square feet of seating and display space. Through proper design, these facilities can be related to the Coliseum and to parking facilities proposed nearby.

331. Because of unusual changes in elevation, pedestrian facilities can unite the three buildings making up the complex and can provide for easy pedestrian and vehicular access to the Convention Center and the proposed Transportation Center. These new facilities will also be in close proximity to the expanding University of South Carolina campus and the State Capitol Area.

6. The Transportation Center

332. As previously explained the development of the Transportation Center would provide space for the storage of automobiles, intra and inter city bus terminal, rental car space, rail transit, a people mover system connecting the Transportation Center to high intensity locations of people, space for air travel on the roof of the facility and the space for the handling of baggage and package delivery requirements associated with the transportation modes. A total of 1,700,000 square feet of floor area is estimated for the Center. Of this total, a 96,000 square feet area would be allocated to uses other than storage of automobiles. The drawing on the facing page shows the operational aspects and various levels of the Center.

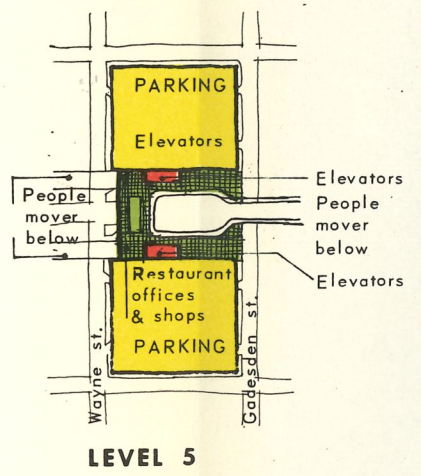
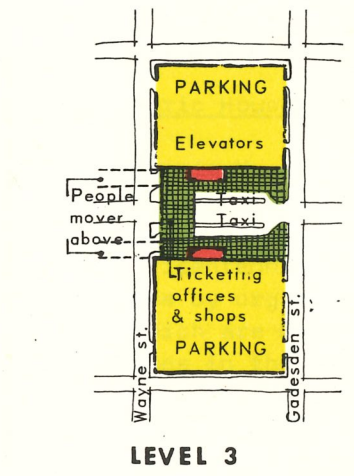
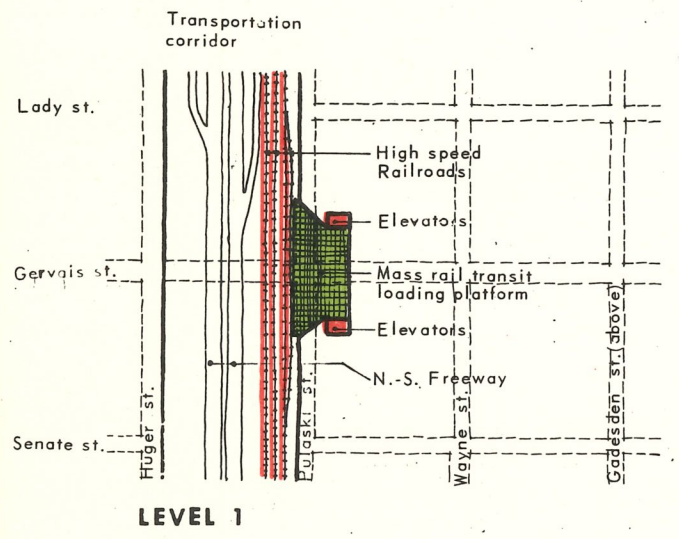
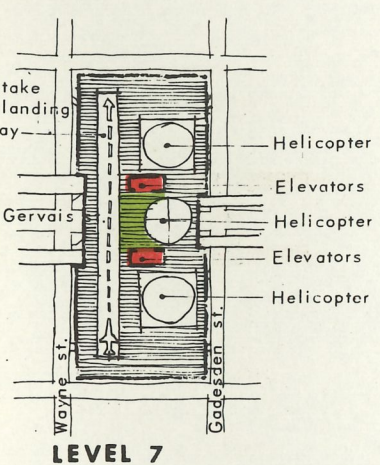
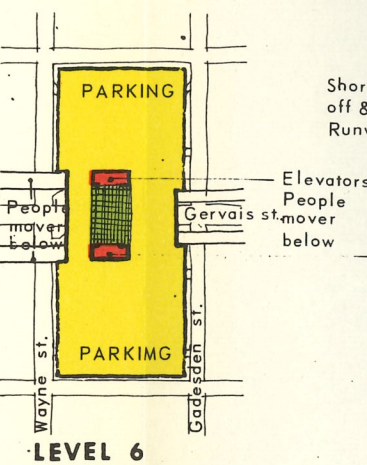
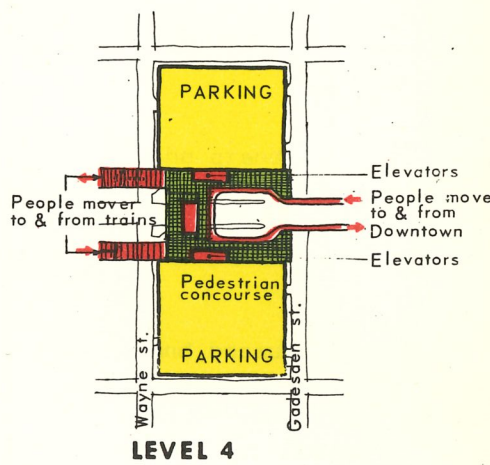
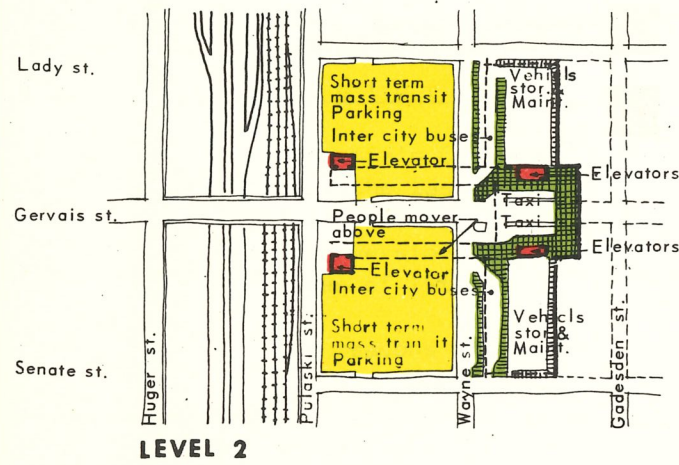
333. Since the purpose of the Transportation Center is to provide a central location for all modes of transportation, persons from outside the area are enabled to reach a central location for parking and for transfer to other modes of transportation with destinations throughout the Central City.



SCHEMATIC CROSS SECTION

PROPOSED TRANSPORTATION CENTER

- PARKING
- CONCOURSES LOADING TICKETING SHOPS AND OFFICES
- HORIZONTAL PEOPLE MOVERS AND VERTICAL ELEVATORS



NOTE: Plans and sections are schematic not to scale

7. Historic Areas

334. Columbia's Central City Area is rich in the grand old structures of the last century. Many of these are now endangered by the different needs of present-day Columbia. As in other cities, commercial conversions and outright demolitions threaten to remove these vestiges of 19th century Columbia.

335. For reasons of inherent aesthetic value and because of the need to retain a common heritage, the Central City Plan has improved upon extent proposals for protecting and strengthening the two major historic areas -- the Tricentennial Center, Robert Mills Historic House and Governor's Mansion areas. The most significant aspects of Plan proposals lie in their definition of major land use areas, a dependable means of relieving present commercial pressures on the historic areas and of guiding commercial growth within the framework of the overall Plan. The more noteworthy of existing historic area developments are discussed below.

a. Tricentennial Center - Robert Mills Historic House Area

336. Located adjacent to the Robert Mills Historic House, the Tricentennial Center is seen as a major stimulant to restoration of this area, aside from the historical purpose of representing Columbia's second century. Another possible effect of the Tricentennial project might be to deter further conversions to office use by organized rehabilitation efforts - public and private - actions which are marring the historic and architectural significance of buildings in the area.

337. The Tricentennial Center proposals will apply to the one-block area bounded by Blanding, Laure, Henderson and Pickens Streets. This block is an area which is now particularly subject to the growing tide of land use conversions.

338. The Commission's chief proposal involves restoration of the Hampton-Preston House, a 150-year old structure which was at one time the Governor's Mansion. Several other structures would be retained within nearby blocks so as to enhance the historic setting of the main structure. Gardens, fountains and landscaped parking areas would supplement structural restorations.

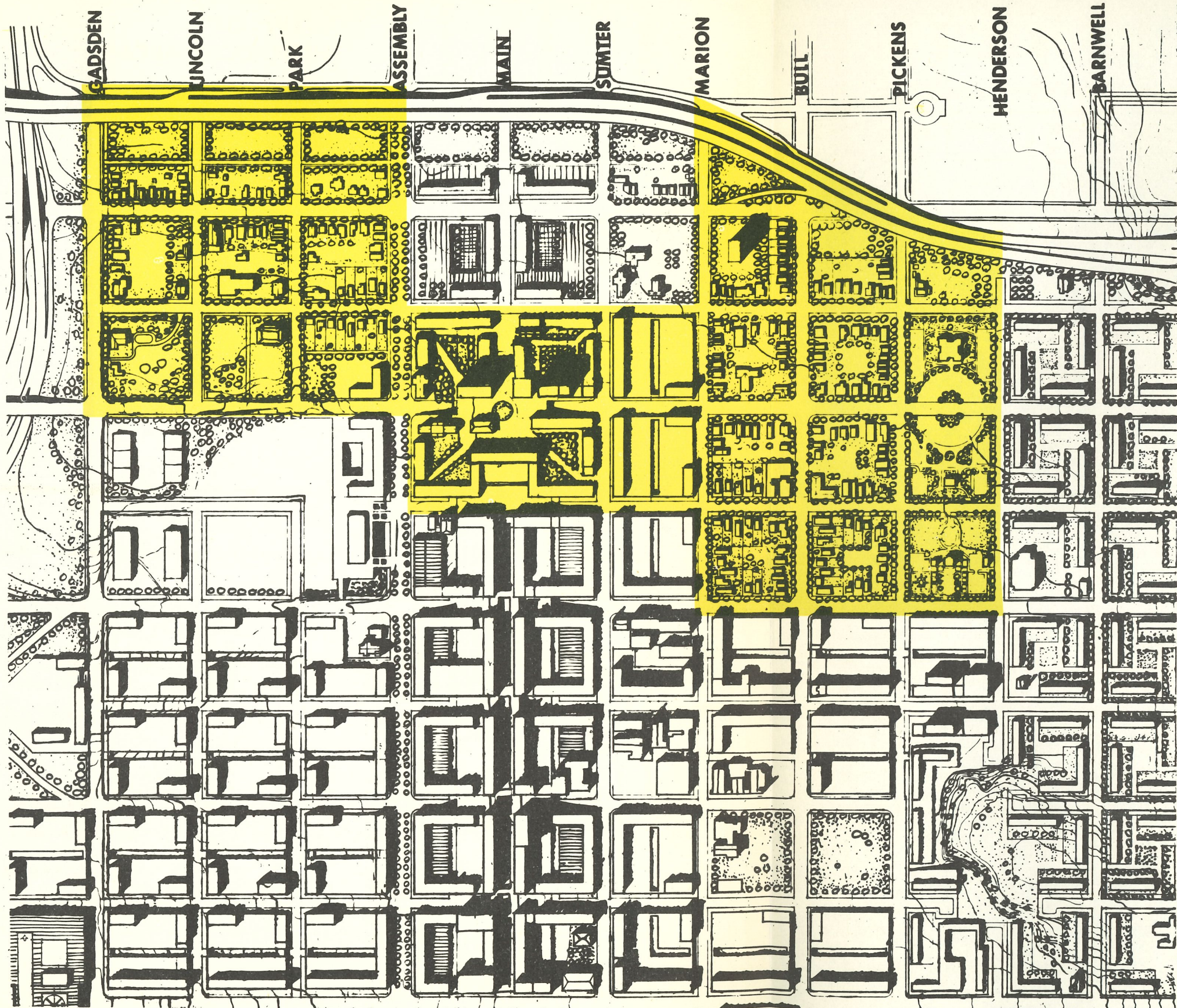
339. The Columbia Historic Foundation is handling development of the Robert Mills Historic House. The House, for the most part, has now been restored and efforts are being made to complete the project in time for the State's Tricentennial celebration.

340. Because of the significance of this historic area and in view of the somewhat limited nature of the proposals described above, it is recommended that a concentrated rehabilitation program be instituted for the entire area. Such a program should involve the broad spectrum of community involvement since the Central City cannot afford to lose this valuable asset.

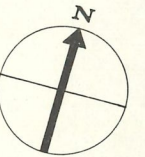
b. Governor's mansion area

341. Located generally in the area bounded by Assembly, Laurel, Calhoun and Gadsden Streets, this area offers excellent opportunities to develop new housing, private and public offices. The Governor's Mansion along with the Boylston Gardens creates a focal point which cannot be matched anywhere in South Carolina. Since this area is characterized by a lesser historic unity than the Tricentennial - Robert Mills House area, the opportunities for historic preservation are relatively less significant. Nevertheless, those structures judged to be of historic importance should be restored wherever possible, generally in the fashion described above.

342. The drawing opposite presents a layout plan of the Historic Areas. Photographs of the prepare model illustrating the visual image and form in space of the Central City in the year 2000, are shown on pages 207 and 209.

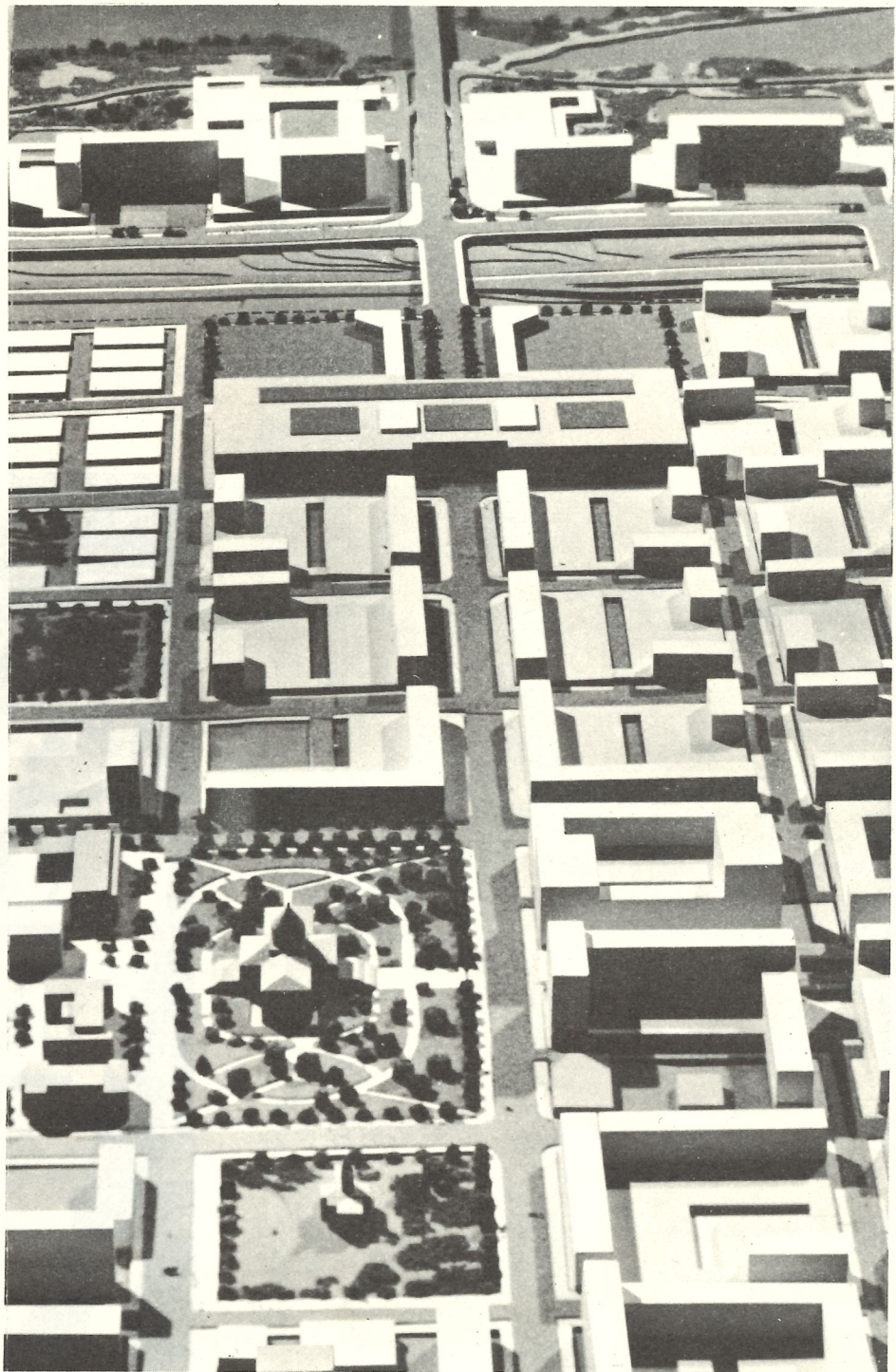


VIEW OF HISTORICAL AREAS



CENTRAL CITY PLANNING PROJECT COLUMBIA, S. C.

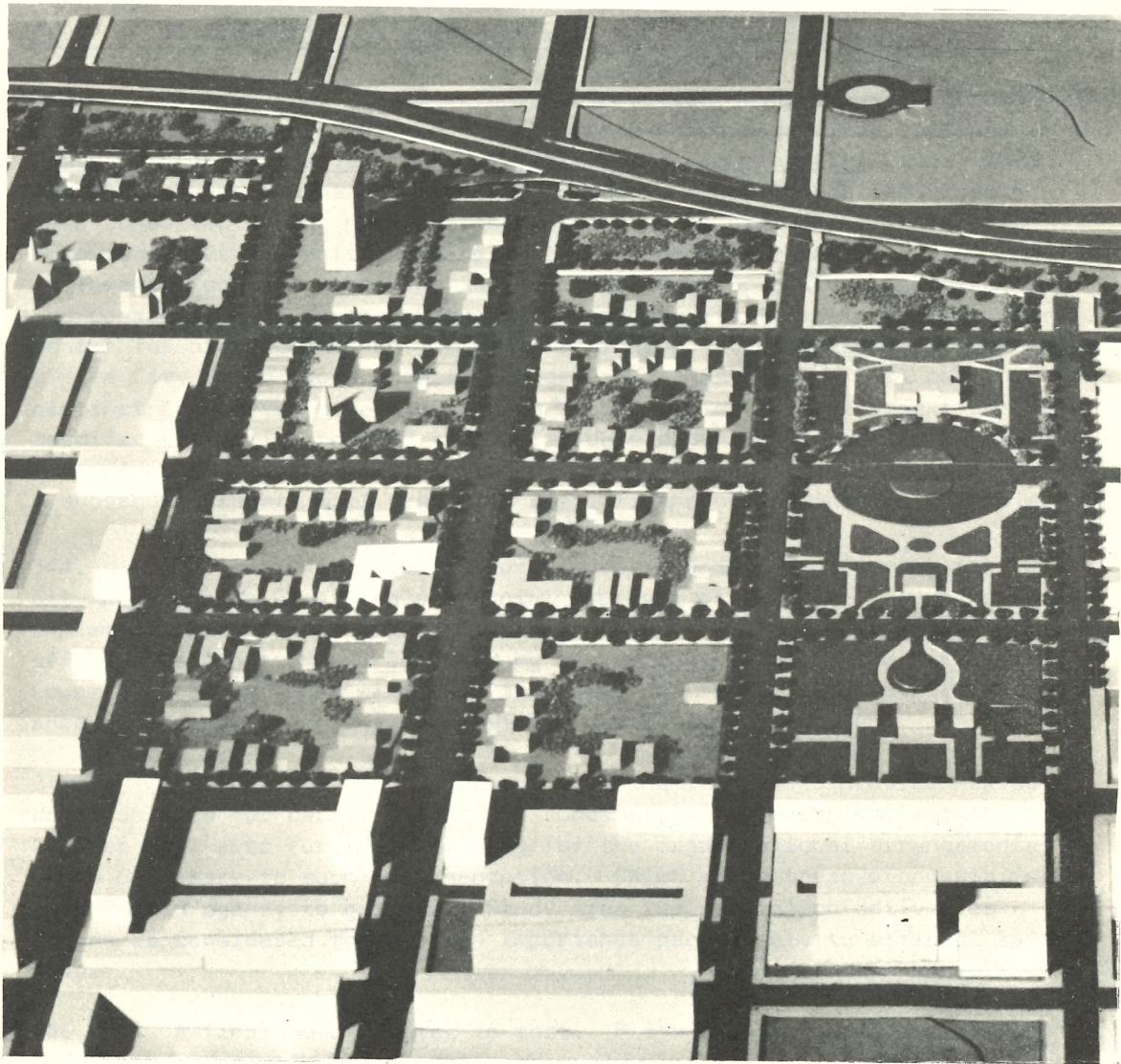
PREPARED FOR THE CENTRAL CITY DEVELOPMENT COMMITTEE BY DOXIADIS ASSOCIATES INC WILBUR SMITH AND ASSOCIATES LYLES, BISSETT CARLISLE & WOLFF D - USA - WS 360 / A 38



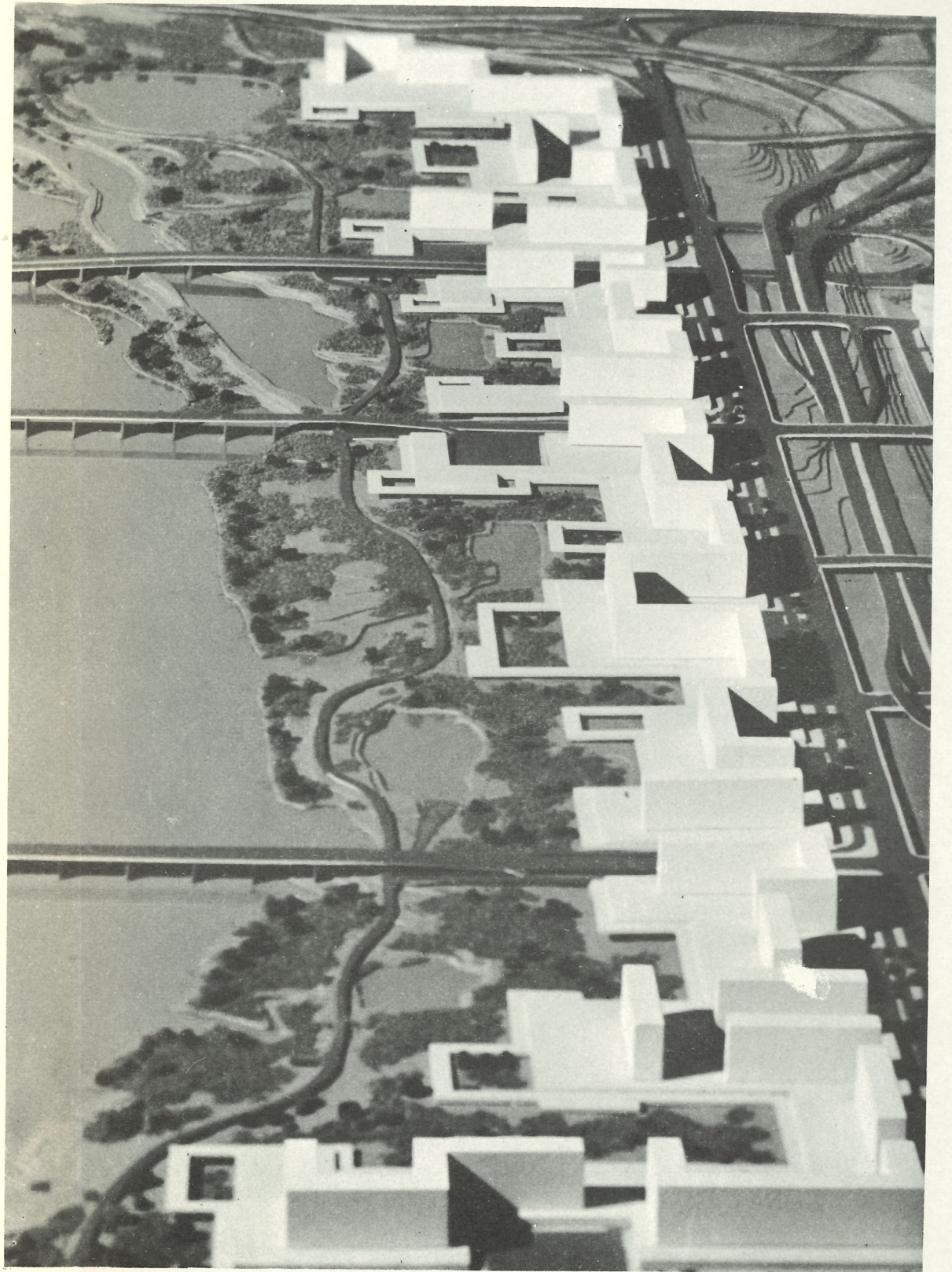
View of Transportation Center from
Gervais street looking west



View of Capitol Complex, University of S.C
and Main Street Mall from Hampton street
looking south



View of historic Area east of Marion
and north of Taylor streets



View of Riverfront development from:
Whaley street looking north

G. IMPLEMENTATION

343. The Central City Development Committee has reviewed and accepted the goals and objectives presented in Chapter C which were first outlined in the Phase II Report: Analysis of the Central City Planning Area (June 1969).

Though the Development Committee and numerous agencies and individuals were consulted during preparation of the Central City Plan, it is also important that the entire Greater Columbia community participate in Plan implementation since the Plan is indeed based on area-wide considerations. The consequence of Central City is measured by its three-fold role: nerve center for State government, core of a growing metropolitan area, and heart of the City of Columbia itself. In general, this Chapter will outline two distinct categories of activities to be carried out over the next 30 years: specific activities related to special development projects for parts of the Study Area and general activities having application to the whole Study Area. A subsequent report will deal with cost, financing and phasing of projects.

344. The implementation action of most immediate concern is the Central City Development Committee's official approval of the Plan. Thus can the implementation process begin most reasonably. The Plan should also receive official recognition and adoption by the City of Columbia and Richland County. These actions will help to create the framework of public acceptance necessary for coordination with official city plans.

345. To assure a high degree of coordination and to provide maximum opportunities for carrying the Plan successfully into implementation, this Chapter will also furnish proposals for the organizational arrangements found necessary to such implementation. Chief among these proposals is the need for an agency to guide all Study Area implementation activities. This action is considered to be of an importance second only to official approvals.

346. A final note relates to cost. Plans such as those depicted in this report cannot be accomplished inexpensively in view of the enormous wastage of resources which has characterized the relative lack of public building activity from Depression years until the recent past. Revitalization projects are expensive and will require all of the resources which can be brought to bear on the matter.

347. Moreover, it should be clearly understood that Columbia presently lacks the full set of legal and administrative tools with which to attack its core area problems. Unless such measures as urban renewal for private uses and coordination of public planning efforts receive broad support, there is little doubt that only small scale private efforts will result. Certainly, the existence of Federal programs offering assistance in such undertakings is a tremendous resource potential, underutilized at present but impossible to ignore if the Central City Plan is to be accomplished successfully.

1. Special Development Projects

348. Following is a listing of development activities, each of which is geared toward implementation of the Central City Plan for the Year 2000. Each of these proposals thus relates to the overall concept for Central City; each relates to the eventual revitalization of the Central City area.

a. The Commercial Core Project

i. Purpose

349. The Central City currently lacks the compactness normally associated with high order retailing areas. The few high-rise buildings are found in the high-value area bounded by Sumter and Assembly Streets on the East and West and by Taylor and Gervais Streets on the North and South. This core area is weakly defined and does not offer the focal point deserved by the Capitol City. The commercial core proposals are intended to create the missing strong spine for the Central City. Intensive retailing and office uses would eventually be concentrated in the five-block area between the State Capitol on the South and the proposed City-County Complex on the North, at Blanding and Laurel Streets.

ii. Implementation

350. As with other key elements of the overall Plan for the Central City area, commercial core development depends upon unity of purpose as much as upon economic justification. The mall will not be built unless agreement is reached to that end. For this reason, it is believed that effectuation of the spine concept must certainly depend upon effective liaison between the city and the Main Street merchants. However, effectuation must also be geared to the support and guidance of a single sponsoring group, perhaps, in this instance, the Chamber of Commerce.

351. The reality of present, low-density commercial development along Main Street militates against the implementation of full mall treatment until strengthening takes place to the North. Instead, it is proposed that the mall be instituted in phases dependent upon adjacent development as well as on progress made toward completion of the City-County Complex, which would terminate the mall on the North. Thus, a first phase could consist of the three-block portion of Main Street just North of the Capitol Area. Redirection of Main Street traffic should not prove difficult, given the abundance of parallel streets of comparable traffic-carrying capacity. The overall circulation scheme has taken Main Street closure into consideration. The first step towards the realization of the mall would be the preparation of detailed drawings for the mall area. Actual implementation could proceed in phases as follows:

- a. Installation of special pavement.
- b. Planting of appropriate trees and placement of street furniture, fountains, etc.
- c. Extension of store fronts.
- d. Placement of canopies.

352. It is important that the mall elements be carefully designed in order to promote a high quality of urban environment. Since this would be one of the first components of the new Central City, there is an urgent need to achieve a design excellence which can be communicated in subsequent phases and in adjacent structures. It is possible to utilize the mall for a lessened traffic flow consisting entirely of service vehicles at designated non-peak hours. Such an arrangement would simplify implementation of the mall and would permit service drive installation to be phased with construction of the mall itself. Ultimate mall development would require completion of the service drive system and construction of additional parking facilities needed to serve the more intensive retailing, office and other functions described more fully in previous chapters of this report. These parking facilities are intended for location on the service drives and in adjoining blocks to the East and West. However, much more detailed studies are required to determine sources of financing and other requirements of these facilities.

353. It is felt that substantial assistance could be secured from the Federal urban beautification program, particularly for mall improvements such as special paving and lighting, street furniture and fountains, tree planting and the like. An official city beautification program would be required as would definitive studies of the mall layout, designs, etc.

354. Finally, it would be incumbent upon the merchants themselves to initiate improvements of their facilities. Acting under the organizing influence of a group such as the Chamber of Commerce, the merchants would, on ground level space, extend store fronts to the benefit of their display and retailing areas. Again unity of design in these private improvements would be essential to the achievement of design excellence.

b. The City-County Complex

i. Purpose

355. Plans for a governmental center are already in process of implementation. Recent actions taken by the City of Columbia and Richland County have resulted in the appointment of a committee to study space needs for City and County Government. In addition to space needs analyses, the committee is also studying possible locations for the Complex.

356. The Central City Plan proposes a specific location for this important facility. As explained in Chapter E use of air rights over the present bed of Main Street, between Laurel and Blanding Streets, will aid in accomplishing visual and functional objectives of the Plan. The Main Street site helps greatly in uniting presently dispersed and obsolete municipal offices. Equally important, this location enables the Main Street mall to terminate in an effective focal point, itself part of the governmental area including the Federal Court and City Hall structures on Laurel Street.

ii. Implementation

357. Assuming that the City and County will agree to the site proposed by the Central City Plan, closure of Main Street at Blanding Street should be accomplished in conjunction with phased installation of the Main Street mall, discussed above. Air rights development will permit Main Street to function normally until adjacent areas are strengthened sufficiently to permit extension of the mall to the north.

358. Development of the City-County Complex is regarded as a function of normal governmental spending. While beautification program assistance would probably be available for plazas and public spaces in the Complex, this report cannot provide specific funding proposals for this facility. It is noted, however, that the proposed air rights site would entail a considerable saving in land costs for the governmental units.

c. Riverfront redevelopment

i. Purpose

359. As described more fully in Chapter F of this report, proposals for Riverfront redevelopment constitute a major thrust of plans for the Central City. The Riverfront represents opportunity for return of this natural asset to a more human use, opportunity for a major housing community, and opportunity for unrivaled support to the commercial core.

ii. Implementation

360. It is believed that the entire site can easily be made available within 30 years. Approximately 20 percent of the site is either vacant or is sparsely developed. Hopefully, the State Penitentiary located between Hampton and Blanding Streets will be phased out in favor of a new location in the near future. And a four-block area including the Howard Elementary School immediately adjacent to the Penitentiary is ripe for treatment, probably in the form of urban renewal.

361. It is unlikely that any other device can accomplish the reversal of trends needed to combat years of neglect. As a result, the four-block portion bounded by Huger, Laurel, Blanding and Williams Streets is proposed as a redevelopment project for residential re-use. This area exhibits severe blighting conditions which very probably would qualify for renewal assistance. Legislature authority of renewal for such private purposes would be prerequisite to this aspect of Riverfront implementation.

362. Implementation of urban renewal and relocation of the Penitentiary appear capable of coordinated timing. Such coordination would open up the prospect of an eight-to nine-block area being offered for development as a unit. The size of the offering would allow necessary protection from remaining blighting conditions and would appear marketable. Given the usual limitations in terms of such undertakings, it would seem reasonable to suppose that the first offering could be made in four years, with building occupancy taking, perhaps, another two years.

363. To supplement the housing recommended for the Riverfront it is proposed that a park be developed along the Congaree River between Blossom Street and the Interstate 126 Connector. Such a project would appear to be eminently eligible for the Federal Open Space Land Program, which offers matching grants for up to 50 percent of acquisition cost. There is every good reason to support acquisition of this site as an early priority, one which would engender developer confidence in the renewal of the Riverfront.

364. Results will not be brought overnight, both because of their scope and because of present physical conditions. Substantial numbers of residents will not be attracted to the Riverfront nor will developers invest in housing unless and until present blight is removed and the environment vastly improved. Experience derived from similar undertakings in other cities provides strong evidence that developers in such situations tend to rely heavily upon the strength of the public commitment to change. Most simply put, the question becomes, "Does the city support with actions, not only words, the renewal of this area?" As noted earlier, official public approval of this Plan is an important first step toward establishing what may be termed "developer confidence".

d. The Civic-Cultural Center

i. Purpose

365. The intent of proposals for the Civic-Cultural Center is to relate the new Coliseum and adjacent parking facilities to auditorium and display space, all of which would enable the Central City to have a major activity center for conventions, displays and the like.

ii. Implementation

366. Development of the Civic-Cultural Center as proposed in Chapter F will be a major responsibility of local government. Since portions of the property in question are presently in public ownership, in an urban renewal project, efforts should be made to initiate planning and design studies immediately. Funds for preliminary planning could be made available through the Federal Advances for Public Works Planning Program.

e. The Transportation Center

i. Purpose

367. The Transportation Center as proposed will expeditiously accommodate the daily commuter migration into, within, and out of the Central City area. Automobile parking is separated from the public transport facilities within the terminal to provide separation of these travel modes. However, these are interconnected through vertical transportation such as elevators and escalators. In summary, the facility is located to intercept travel and combine the high-capacity features of mass transit with convenience through more efficient handling of the daily peak-hour suburbs-to-Central City commuter movement.

ii. Implementation

368. Since this facility is a public use, it is conceivable that urban renewal funds can be made available to help defray costs. It must be emphasized, however, that local matching funds would have to be provided in order to undertake the project. Further, since the Transportation Center would incorporate private facilities such as bus stations, offices, etc., it appears only reasonable that the facility be jointly developed with public and private funds.

f. The Capitol Complex

i. Purpose

369. The Capitol Complex is a facility well along in planning. Its purpose is to provide expansion of existing governmental offices to accord with the requirements of the year 2000.

ii. Implementation

370. Since this facility is a function of State government's plans for the future, no proposals are presented herein for funding the project. However, implementation of this project should be accomplished in close coordination with other public facilities and, indeed, with all development occurring under the auspices of this Plan. The need for such overall coordination is implicit throughout all of the proposals for the Central City. Consequently, a special section is devoted to this subject at the conclusion of this Chapter.

g. Historic Areas

i. Purpose

371. Columbia's historic areas present an excellent opportunity for the Central City to become the guardian of the area's heritage. The purpose of action in the Historic Areas would be to preserve the past in an environment of beauty.

ii. Implementation

372. The Columbia Historic Foundation should encourage private groups and individuals to construct new facilities as well as oversee preservation of existing historic buildings adjacent to and within the areas presently zoned for historic uses. The Tricentennial Center--Robert Mills Historic House Area currently under development, should be completed as soon as possible in order to encourage new development toward Benedict College and Allen University and west toward the commercial core and City-County Complex.

373. State and local governments along with the Columbia Historic Foundation should also actively support the development of the Governor's Mansion Area. Again, private groups and individuals must commit themselves to the goal of upgrading this area to preserve some of the State's heritage as well as recent financial investments.

374. Present projects in these areas are but the seed of renewal activities. As noted above, the continued sponsorship of the Historic Foundation is considered an essential part of the implementation process. So, indeed, is the instigation of a concentrated rehabilitation program for both areas. Opportunities for assistance are available in the form of 50 percent Federal grants for historic preservation, open space grants for plaza and park development and urban beautification funds for related amenities such as tree planting and street furniture.

2. General Development Activities

375. The development activities listed below are of the general nature applying either to the entire Study Area or to proposals which are less specific in nature than those listed above. In the main, these activities will require a longer period of time in which to develop.

a. Housing Proposals

i. Purpose

376. In order for this Plan to achieve its full measure of success, it will be necessary to improve and expand the Central City housing stock. Earlier portions of this report have emphasized:

- a. The obsolescence and frequency of blight in Central City housing areas,
- b. The lack of housing opportunity, i.e., the absence of a full range of housing choice in the Study Area, and
- c. The failure to site housing more appropriately.

377. These present-day deficiencies may be taken as the objectives of tomorrow. A full range of dwelling units must be provided to house the forecast Central City population to support and frame the strengthened commercial core and to provide attractive, modern units for all levels of income.

ii. Implementation

378. A summary of some housing techniques is contained in an Appendix II to this report. No specific sites are designated for such housing since this is entirely premature, given the need for more detailed market and location studies. However, it is obvious that the spread of blight and blighting conditions in residential portions of Central City has created an intolerable living situation for which drastic solutions are indicated, long before the year 2000, the target date of the Central City Plan.

379. One vehicle for corrective action would be the urban renewal program. Based on area-wide analyses conducted in an earlier phase of Central City studies, it appears likely that several portions of the Study Area would qualify for renewal treatment, which could assemble sites for housing.

380. Since present state enabling legislation (more fully described in Appendix II) does not allow urban renewal for private uses (public housing is a permitted re-use), a key facet of Plan effectuation rests directly upon the revision of state law to permit carefully planned renewal projects. Quantities of public and private housing would be major re-uses of such projects.

381. Obviously, satisfaction of the need for a full range of housing choice should not depend on renewal actions alone. Other opportunities for assisted housing can occur in presently underdeveloped portions of the Central City in conjunction with private redevelopment. The point must remain, however, that choice in housing corresponds exactly to one facet of the desire for a more suitable Central City environment. While the need for such units cannot be quantified within the context of a Plan for the year 2000, those families now in need of new housing units can be clearly shown in terms of the pressing need, identified in earlier portions of this Study, to replace obsolete structures and to provide Central City's share of the present area-wide shortage of low- and moderate-income housing units.

382. An earlier portion of this Study indicated the need for improving deteriorated areas along the Congaree River and for taking advantage of a potentially prime site for the construction of a major housing development. The Riverfront Redevelopment Project is designed to return the Congaree River front to a better environmental status by removing industrial and other blight and to make this area a buttress to the redevelopment of the Central City.

b. University of South Carolina Expansion

i. Purpose

383. The University of South Carolina is a vital part of the Central City and perhaps the most dynamic force in the City. In addition to being the major educational institution in South Carolina and making a significant cultural contribution to Metropolitan Columbia, the University provides employment opportunities for many persons. In view of the outlook for continued, rapid growth of the educational community, the University becomes very important with respect to Central City revitalization.

384. This outlook is evidenced by the fact that the University experienced considerable growth during the 60's and anticipates accelerated growth during the upcoming decade. Campus growth has occurred primarily on the east of the main campus to Barnwell Street and on the south side of Blossom Street.

ii. Implementation

385. While a Plan was developed by the University in the early 1960's to guide future campus development through 1985, it is now essential to create a new plan to give development during the next 30 years. The need for so definitive a plan cannot be minimized. Land within the university area is limited and will become more limited. Thus, steps are being taken by university officials to Plan for future needs and to establish a land acquisition program.

386. Also of importance are considerations relating to Central City and to the basic trends of planning. The present study is based upon recognition of the growth of the Central Area, including the University. To harness this growth and to enjoy the cost and other advantages which accrue from anticipating growth, it is necessary to perceive, as clearly as possible, what the University might become or, indeed, what South Carolina desires the University to become. Thus, while additional land may be a pressing need for the University, a new campus plan should be directed to existing facilities, traffic and parking, future enrollments and the like, as well as to the policies which must underlie these considerations.

c. Industrial Expansion

i. Purpose

387. With the redevelopment and expansion of retail and service functions within the Central City Area, it becomes necessary to provide for a light industrial area to supplement and support major Central City activities. Keeping in mind that the Central City should be devoted primarily to retail, housing, service and cultural activities, it is not only desirable, but essential, to develop an industrial area which does not counter these traditional assets of the Central City.

388. In previous chapters, it was recommended that heavy industrial uses be relocated beyond Columbia's main business district to outlying land within the city and the Metropolitan Area. Likewise, it was proposed that research oriented firms, non-noxious industries and some wholesale uses be located within the Central City.

389. For these purposes, it is believed that the area bounded generally by the North-South Freeway and by Senate, Lincoln and Green Streets was most appropriate. The area is in close proximity to the University of South Carolina, which is expanding its undergraduate and graduate programs in engineering and the physical sciences, thereby creating opportunities for industrial research groups which can work in association with university personnel. Private organizations in the fields of electronics research, communications systems and engineering are representative of firms which might prefer a Central City location near the University and City and State government offices.

390. In addition to such firms, space should be available for companies involved in film processing, printing, precision instrument manufacture and other non-noxious industries.

391. With office retail, service and light industrial uses in the Central City, there is also a need for warehousing and storage areas. The area designated by the Plan for industrial and research uses is serviced by the North-South Freeway and adjacent rail services, thereby providing good access for small warehouses in the industrial park area. This area is also adjacent to the proposed Transportation Center.

ii. Implementation

392. Redevelopment of a planned industrial area includes the assembly of land, preparation of a flexible master plan, establishment of land use standards and installation of streets and utilities. Since the participation and close cooperation of several agencies will be necessary to guide development of this industrial park, it is proposed that the Greater Columbia Chamber of Commerce take the lead in implementing its development. It is felt that the Chamber, through its Industrial Department, is in an excellent position to encourage industrial organizations to locate within the Central City Area. Because of a continuing interest in the area of industrial growth, the Chamber has a professional staff which works with numerous public and private agencies in encouraging the industrial growth of the Columbia Metropolitan Area.

393. The railroads now owning and occupying a large portion of the area described will have an important role to play if the purposes cited above are to be met. The development would obviously be to the benefit of the railroads, and their organizational and marketing instruments could be put to good use in this effort.

d. Convention - Hotel Center

i. Purpose

394. The recent opening of a new motor hotel containing 150 rooms, with another 100 units under design, directly across Assembly Street from the Coliseum is an excellent beginning for a Convention Center geared to the Civic-Cultural Center described earlier. Such a Center would strengthen related functions such as the Civic-Cultural and Transportation Centers.

ii. Implementation

395. Private enterprise would have to carry the bulk of effectuation activities. The existence of a market for hotels and motels would be a prerequisite to such activities. Further studies of the market would take place over the development periods of related facilities.

e. Office Expansion

i. Purpose

396. As Columbia continues to grow, and especially in light of State and local governmental growth, there will be an increased demand for new, quality private office space in the commercial core. For this reason the Consultants proposed that the area near the Tricennial Center - Robert Mills Historic House Area be developed primarily for office uses.

397. The proposed office expansion area will surround a rehabilitated area along Pickens and Marion Streets adjacent to the Tricentennial Block. Portions of the office area will be adjacent to the proposed City-County complex and other Federal offices and should provide space for attorneys, insurance firms and the like, who need to be near governmental offices.

ii. Implementation

398. Office development will be entirely a private market function. Thus, no implementation assistance is noted in this report. It is recommended however that the Historic Foundation support this private activity since the properties in question are in immediate proximity to the Robert Mills Historic House and Gardens and the Tricentennial Block.

f. Transportation and Parking Facilities

i. Purpose

399. Transportation and parking facilities to serve the expanding Central City area have been planned as an integral part of the development plan. These facilities incorporate freeways, arterial improvements, traffic control system, people mover system, pedestrian circulation, transportation center, and off-street parking facilities.

ii. Implementation

400. Various methods are available for providing funds to develop these transportation facilities. The development of freeways and arterials within the Central City area can be made with grants from the Department of Transportation supplemented by state highway funds. Local governments will be called upon to provide funds to offset a portion of the necessary rights-of-way for development of the facilities within the Central City.

401. The proposed Transportation Center can be planned and constructed through grants from the Department of Transportation and the issuance of bonds. Space for various modes of transportation such as private and rental cars, air lines, and bus transit will be provided in addition to other leased space. Receipts from these rentals will be available to support revenue bonds for the development of this facility. Additional funds can be supplied through the pledging of general obligation bonds.

402. The people mover system can be planned and developed through the issuance of revenue bonds and grants from the Urban Mass Transportation Administration, Department of Transportation. Receipts derived from patronage of this facility can be applied in support of the revenue issue.

403. The system of interconnected traffic signals can be developed through the TOPICS program. This program, Traffic Operations Program to Increase Capacity and Safety, is a Bureau of Public Roads, Federal Highway Administration program which provides 50 percent of the funds for implementation of the proposal. The remain will be the responsibility of local government and could be included as part of a general obligation bond issue.

404. Pedestrian separations will be primarily the responsibility of the municipal and private segments of Columbia. However, funds from the TOPICS program will also be available for the implementation of these recommendations.

405. Parking facilities will be a major responsibility of the private sector of Columbia. It has been seen within recent years that development of off-street parking facilities by the private segment has received significant response with parking garages such as the garage contiguous to the Baker Building, the parking facility within the Jefferson Square Building, and the parking garage for the Belk-Davidson complex being proposed or developed.

406. However, the municipal government should be responsive to the development of public parking garages to provide necessary requirements for the public demand. The development of these garages should be conducted through revenue bonds issue.

407. To supplement the requirements for these revenue issues, the city can pledge meter receipts and develop a system of facilities in order that projects which need financial support receive this support from parking facilities which have revenues in excess of requirements for their development.

3. Local Resources

a. Zoning

408. The City of Columbia has powers of planning and zoning and certain administrative powers for development programs. Zoning will be an important tool in encouraging new investment and eliminating undesirable uses. Zoning and other codes and ordinances will be used to control use, type and size of development, materials, signs, building conditions, and utilities. The proper and conscientious enforcement of local codes will be a major step in effectuating the Plan, particularly in areas where the use of urban renewal is limited. However, a simple suggestion that the existing zoning in the Study Area be changed would fall short of achieving real change.

409. Changes to be effected in the zoning of the Study Area should be organized in such manner as to permit the combination of uses in the Plan, and achieve the proposed character of the many subareas - core retail, secondary commercial, office, etc. One way to achieve these goals is to redelineate the Central City zoning districts. The new districts could specify the location and orientation of primary and subsidiary uses.

410. Though zoning is an important tool for the effectuation of the proposed Plan, if the concept is to be sustained it is felt that additional legislation is needed for special development districts. New regulations for each Special District should be geared to specific and positive ends designed to meet the needs of the design aspects of the special projects. Maximum and minimum heights, maximum and minimum setbacks, land coverages, and densities should be specified. These regulations should continue wherever necessary outside the boundaries of the Special District in order to achieve desired design objectives.

411. At present, it is difficult to elaborate on the form of such regulations due to the lack of information on the special projects for which studies would be prepared. It is felt that special studies of each development proposal would be necessary in order to delineate specific zoning regulations. However, such regulations should provide for Planned Unit Development in order to facilitate redevelopment of the Riverfront. Most simply, P.U.D. regulations provide for integrated development, using open space as a design element along with subsidiary commercial and semipublic functions.

b. Public Agencies

412. Perhaps the greatest force in attaining the Plan's objective will be that generated by public agencies in pursuit of the Plan's designated public facilities. Certainly, the construction of an Auditorium and Exhibit Hall, Transportation and Government Centers, and other indicated public facilities will have a major impetus on the effectuation of the Central City Plan for the year 2000. Of course, there remains the possibility that many parts of these public construction activities can be aided by Federal grants.

c. School Board

413. In all probability, the single most important ingredient of the Central City Plan is its provision for housing of all types and for all families--low, middle and high income. Since a major area--the Riverfront Area--is suggested for various housing types, it becomes absolutely essential to have adequate public educational facilities to serve the Central City population. Richland County School District One is responsible for providing school facilities for the City of Columbia, and thus, should be involved in implementing the Central City Plan because schools must be an integral part of the proposed Central City residential areas. Since it is beyond the scope of this study to identify specific sites, it will be necessary for the School Board to be directly involved in implementing the Central City Plan, especially the residential proposals.

d. Planning Commission

414. Organized in the early 1950's, the Columbia Planning Commission was charged with the responsibility of developing plans to guide the orderly development of the Columbia area. The Commission has technical assistance provided presently by the Central Midlands Regional Planning Council and is probably the only public agency now in a position to encourage the construction of public facilities to complement private development.

e. Columbia Housing Authority

415. The main purpose of the Housing Authority is to provide standard housing for low-income families. In addition to this important responsibility, the Authority also administers all urban renewal programs for the City of Columbia. Since these two programs will have a direct bearing on the implementation of the Central City Plan, the Columbia Housing Authority will become an increasingly important agency. While now handling administration for urban renewal programs, assuming that the South Carolina Constitution is amended to permit private redevelopment, the Authority might well expand its activities in renewal and housing.

416. The Central City Plan for the year 2000 is predicated on several assumptions, including an expanding economy and the assumption that all families to be relocated for new highways, private and public redevelopment will be able to move into new or standard housing. Thus, the Housing Authority along with other public agencies will have major responsibility in implementing Columbia's Central City Plans.

4. Organization for Implementation

417. Implementation of the development proposals cited in this report will, of necessity, involve the maximum degree of interdependence among public, semi-public and private groups and development organizations. It is evident, for example, that the City of Columbia, including all operating agencies; the State of South Carolina, particularly with regard to the Capitol and highway functions; the University of South Carolina, the Study Area's major landholder; Benedict College and Allen University, on the eastern fringe of the area; the Veterans Administration, Federal Courts and other Federal facilities -- all will be involved in Study Area revitalization.

418. As a result, the Study Team strongly recommends that all "project" activities be coordinated by an office functioning directly for this purpose. Such a coordinative effort has occurred in other cities in similar undertakings and has worked in much the same way as has this study itself - by drawing together interrelated yet dissimilar activities and their implementing agencies.

419. There are several methods by which such an agency can be instituted. However, any agency established for Study Area implementation should meet the following criteria:

- a. Be broadly representative of the Study Area.
- b. Be empowered to make plans and analyses and to carry out plans involving contractual and other obligations.
- c. Be unrelated to existing agencies having specific functions to perform.

420. Several types of agencies might be discussed at length, however, it is the Study Team's recommendation that a special agency be created for the development role. Such an agency would have the advantage, cited above, of fulfilling a specific purpose within a specific geographic area, i.e., the Central City area. It is believed that such an agency should be a private one, receiving support from the Chamber of Commerce and other groups. Also, the creation of another public agency would tend to disperse responsibility for public management. Finally, advantages of this arrangement lie also in the direct and exclusive relationship which could occur between Study Area occupants and a single private agency.

H. CONCLUSIONS AND RECOMMENDATIONS

421. The discussion in the foregoing chapters has revealed and documented the extent of problems in the Central City and the need for action to reverse its course and guide its growth according to specific goals and objectives.

422. While this Study will stimulate the interest and might stir the imagination of the community, no step forward will be made unless this step is towards implementation.

423. The decision to adopt official policy cannot be taken lightly by either the city and country administration or by the citizens in general. There can be no retreat to inaction because such a course can only encourage the development and growth of problems which will become even more difficult to solve with every year of delay.

424. In light of the considerations presented in the course of this Study the following action is recommended.

- a. Consideration and approval of the Central City Master Plan by the appropriate public agencies as the blueprint for guiding the area's future growth and development.
- b. Creation of an agency to guide all Study Area implementation activities.
- c. Establishment through this agency or any other interim body of lines of continual communication and coordination with government organizations as well as with citizen groups.
- d. Invitation of community-wide participation to provide the understanding and support necessary to insure success.
- e. Upon drawing up a priorities' program, initiation of economic feasibility studies and design of various development projects.

A P P E N D I C E S

ALLOCATION OF FLOOR AREA BY USE,
F.A.R.s AND PARKING ESTIMATES FOR THE CENTRAL CITY

LAND USE	ALLOCATION ZONE	ALLOCATED AREA (Acres)	Gross Floor Area	FAR	Parking Spaces, per 1,000 Sq.Ft.	Number of Parking Spaces
<u>CATEGORY</u>						
Retail	Primary Commercial	40	2,100,000	1.20	3.5	7,350
	General Commercial	60	520,000	0.20	3.25	1,690
	Private Office	72	620,000	0.20	3.9	2,414
	Residential	302	<u>390,000</u> 3,630,000	0.03	1.00	<u>390</u> 11,844
Private Office	Private Office	72	1,700,000	0.55	1.65	2,800
	Primary Commercial	40	960,000	0.55	1.55	1,500
	General Commercial	34	<u>300,000</u> 2,960,000	0.20	1.62	<u>500</u> 4,800
Gov. Office	Government Office	64	<u>2,530,000</u> 2,530,000	0.90	0.8	<u>2,000</u> 2,000
Services	Primary Commercial	40	350,000	0.20	1.42	500
	General Commercial	60	780,000	0.30	1.65	1,300
	Private Office	72	310,000	0.10	1.62	500
	Residential	302	<u>130,000</u> 1,570,000	0.01	1.52	<u>200</u> 2,500
Hotel/Motel	Hotel-Motel Areas	28	950,000	0.80	1.80	1,700
	Primary Commercial	40	<u>260,000</u> 1,210,000	0.15	1.15	<u>300</u> 2,000
Wholesale, Storage, Research and Non-Noxious Industry	Industrial Park	76	1,660,000	0.50	0.67	1,110
	General Commercial	60	<u>520,000</u> 2,180,000	0.20	0.78	<u>405</u> 1,515
University of S.C.	University of S.C.	132	<u>5,460,000</u> 5,460,000	0.85	0.9	<u>5,000</u> 5,000
Public and Semi-Public	New Institute	16	-----	0.85	----	-----
	Coliseum Civic Center	16	450,000	0.65	2.67	1,200
	Churches and Schools	44	400,000	0.20	0.75	300
	Hospitals and Clinics	6	100,000	0.40	4.00	400
	Historic	24	<u>50,000</u> 1,000,000	0.05	2.00	<u>100</u> 2,000
Riverfront Park	Open Space	102	<u>-----</u> 0	0	0	<u>0</u> 0
Residential	Residential: 6 dw/net acre	236	1,130,000 ⁽¹⁾	0.10	1.4/dwelling unit	2,000
	Low Density, 8 dw/net acre	22	300,000 ⁽²⁾	0.30	2/dw	350
	Medium Density, 15 dw/net acre	92	1,370,000 ⁽³⁾	0.35	1.25/dw	1,700
	High Density, 28 dw/net acre	302	<u>8,500,000</u> ⁽⁴⁾ 11,300,000	0.65	1/dw	<u>8,500</u> 12,550
Transport Center and Parking	Transportation Center	8	96,000 ⁽⁵⁾			300
	Parking Lots	16				
Highway and Railroad	Right of Way	256			0	0
All Local and Arterial Streets	Right of Way	580			0	0
TOTAL		1,980	31,936,000 ⁽⁶⁾			44,509

- Notes
1. 1,420 dw x 800 sq.ft.
 2. 180 dw x 1,700 sq.ft.
 3. 1,370 dw x 1,000 sq.ft.
 4. 8,500 dw x 1,000 sq.ft.
11,470 dw
3.5 persons per family (average)
40,000 population
 5. Parking structure not included
 6. Does not include parking floor area.

A P P E N D I X I IIMPLEMENTATION TECHNIQUES

1. The activities which in the chapter on Implementation were characterized as general are of such nature as to lie well within the realm of policy, legislation, and enforcement. In order to proceed to the task of effectuating various public or private projects, there must be provided workable administrative and legislative tools. In most cities, such tools include urban renewal, the use of air rights, and rezoning. Proposals resulting from the Plan must also be coordinated with ongoing City, County, State, or Federal programs in order to minimize conflict and maximize opportunity.

2. Accordingly, a listing of various Federal assistance programs is provided herein. This listing is not intended to be exhaustive, primarily because such inventories are available elsewhere. Also, it is to Columbia's credit that many applicable programs are already in use in the city. Thus, it is the intent of this section to list only those programs which act as vehicles for relatively large-scale action - urban renewal, code enforcement and the like, most of which are administered by the Department of Housing and Urban Development (HUD).

3. In order to gain approval for such programs, certain prerequisites must be satisfied. The most basic HUD requirement is that which specifies that the community have in existence an approved Workable Program for Community Improvement, i.e., a comprehensive program to prevent blight and guide community-wide improvement. This requirement applies to several Federal assistance programs - public housing, urban renewal, code enforcement, the Community Renewal Program and various other HUD programs, including certain FHA mortgage insurance programs. Columbia's Workable Program is currently approved and in force.

1. Urban Renewal Program

4. Since the urban renewal program is the prime tool by which a community can eliminate blighted conditions of any consequence, a more elaborate description is provided than for assistance programs.

5. At present, Columbia's use of the urban renewal program is limited to projects for public redevelopment. Four such projects are now being undertaken, three of which provide in some fashion for the expansion of the University of South Carolina.

6. In order for Columbia to obtain the broadest use of the urban renewal program, it would be necessary for the General Assembly of South Carolina to amend the State Constitution, with subsequent approval by the voters of the State. This procedure has already been consummated in other cities of the State: in Rock Hill, Florence, Greenville and Spartanburg.

7. Portions of the Study Area are now endangered by blight and blighting conditions. It is conceivable that this deterioration will spread unless checked by massive corrective efforts. For this reason and as a means by which land can be assembled for Plan implementation, it is strongly recommended that Columbia institute legal procedures required for use of the urban renewal program. It should also be noted that use of this program can permit an orderly transition to the year 2000 Plan proposed for the Central City Area. Also of relevance is the fact that renewal can permit those displaced during this transition to be afforded relocation payments and assistance aid which is otherwise not available. Urban renewal programs which are financed in part by the Federal Government on a direct grant basis are:

- a. Rehabilitation: This type of treatment proposes to renew deteriorating areas to a long-term, sound condition, to establish a continuing program of property maintenance and to prevent the recurrence of blight through the rehabilitation of structures. Part of these results can be attained by public action to provide street and other improvements and facilities. The basic prerequisites are that the buildings being rehabilitated be feasible of restoration by being basically sound and the area in which they are located be a desirable location, with physical characteristics which assure the area of long-term sound condition after rehabilitation treatment.
- b. Clearance: Clearance projects, or any sizable portion of a rehabilitation project involving clearance must be fully warranted by the fact that rehabilitation activities would not result in a long-term sound condition and that only clearance treatment can adequately eliminate slums and blight and prevent the recurrence of this condition. Such projects will involve the acquisition of structures and will result in displacement of families, individuals and businesses. In all cases, displaced are afforded assistance in relocating and are given a limited amount of financial help to defray moving and other expenses. Land acquired through the renewal process is resold for uses previously found feasible. Public improvements of all kinds, residential and other uses, all are possible redevelopment activities.
- c. A Combination of Rehabilitation and Clearance.

8. The financial assistance HUD makes available for urban renewal projects consists of advances for planning of projects, loan guarantees for execution activities and grants which are used, together with the local share of project funds, to repay the loans, which are secured on the open bond market.

9. In Columbia's case, the local share would be one-third. Eligible public improvements constructed in an urban renewal area, called non-cash grants-in-aid, can be used to reduce the city's share of project cost.

2. Other HUD Aids

a. Neighborhood Development Program

10. The Neighborhood Development Program is a recent addition to the treatment types listing. Briefly, this program enables a community to undertake urban renewal on an annualized basis rather than on a project basis. The intent of the program is to permit development activities to take place at an early date by means of a staging process. An NDP project may consist of areas which are not contiguous.

11. Financing arrangements are generally like those in the conventional urban renewal project. However, settlement and sharing of costs is accomplished at the end of each project year. Urban renewal grant funds are thus used only to meet yearly needs rather than being reserved for years in advance. In this connection, HUD has no obligation to provide funds for subsequent NDP years.

12. The program may be seriously considered for use in Columbia's case, particularly because it could allow simultaneous execution of parts of several of the major projects now scheduled for staging. The program has not yet been fully funded by HUD, however.

13. In any case, it is entirely reasonable for the program recommendations to include the NDP approach to urban renewal. It may well be desirable to do so provided that the presence of annual funding can be assured to whatever extent is possible. The present study will be useful insofar as it outlines the generalized planning required by the NDP approach.

b. Code Enforcement Grants

14. The Housing Act of 1965 provided a program to aid municipalities in carrying out programs of concentrated code enforcement in deteriorating or deteriorated areas. This code enforcement activity, teamed with the provision of public improvements such as streets, curbs and gutters, can arrest the decline of an area and possibly even upgrade the area.

15. The program has tremendous application to basically sound areas which do not generally need conservation treatment but in which maintenance has become deferred and in which public expenditures are needed for street and other local improvements. Eligibility requirements are less than those required for the urban renewal activities discussed above. Specifically, a code enforcement area must be residential in character, and at least 20 percent of the buildings in the area, equally distributed, must be in violation of local codes. Further, the area must be such that code enforcement and auxiliary treatments will be sufficient to solve the code violations and other problems of the area.

c. The Model Cities Program

16. Title I of the Demonstration Cities and Metropolitan Development Act of 1966 provided for a new program designed to demonstrate how the living environment and the general welfare of people living in slum and blighted neighborhoods can be substantially improved in cities of all sizes and in all parts of the country. It calls for a comprehensive attack on social, economic and physical problems in selected slum and blighted areas through the most effective and economical concentration and coordination of Federal, State, and local public and private efforts. The statute provided financial and technical assistance to enable selected cities to plan, develop and carry out comprehensive local programs containing new and imaginative proposals to develop "model" neighborhoods.

17. It is conceivable that the Model Cities Program might offer some assistance for the Central City, particularly in the form of supplemental grants for such activities as road construction or reconstruction. These supplemental grants may be equal to as much as 80 percent of the non-Federal share of all Federally-assisted activities in the approved Model City Program. It is expected that there will be future appropriations and future selections of cities, on a continuing basis. Efforts should be made to coordinate programmed activities in the hope of enabling use of such assistance.

d. Public Housing Program

18. The public housing program in the U.S. is the father of all subsequent housing and redevelopment programs. Very simply, it provides money by which the community can construct low-rent housing facilities for low-income families. This program has been the major means by which low-income families have been relocated from substandard, dilapidated housing to decent, safe and sanitary housing.

19. Recent outgrowths of this program have been rent subsidies, the turnkey approach, which has the developer building public housing, and the rehabilitation of existing units for public housing. These latter programs provide payments to supplement the rental which a low-income family can pay for private housing on the open market and money for the purchase and renovation of existing housing units for lease to low-income families. Columbia has and will continue to utilize this important program since the Columbia Housing Authority has a large backlog of applications. There are now in existence 1,409 units of Federally-assisted public housing. An additional 200 will be available in January 1970 and 150 units of elderly housing will go under construction in late 1969, with 600 more units authorized.

e. Open Space Land and Urban Beautification Programs

20. The open space program provides grants of up to 50 percent toward the acquisition and development of land for public open space. In some cases grants are available to finance the acquisition, clearance and development of presently-developed land for open space purposes when land cannot otherwise be made available for such uses. Such a program would be of significant benefit in older neighborhoods within the City which are fully developed but are lacking in such amenities as parks and playgrounds. The Riverfront area might also receive open space grants, as discussed in Chapter G of this report.

21. Urban beautification activities can enhance and upgrade otherwise drab areas by tree planting, provision of facilities in public parks, park development and historical preservation. The mall on Main Street and the historical areas would be particularly appropriate for funding under this program. All such activities must be part of a community's official beautification program. In general, 50 percent funding is also the basis for this program though past public beautification expenditures play a role in determining the final grant amount.

f. Demolition Grant Program

22. This program authorizes Federal grants to cities to assist in financing the cost of demolishing structures which have been determined to be unsound or unfit for human habitation. These grants can be used to demolish structures in or outside of an Urban Renewal Area. In the former case, this activity is included in the Title I Urban Renewal Project grant and in grants under the Code Enforcement program.

23. In areas not part of an Urban Renewal of Code Enforcement project, grants are available for demolition on an area or neighborhood basis if there is a plan for code enforcement activities in the area and if the area or neighborhood is basically sound. The demolition program should be needed to protect the area from decline.

24. This program will allow a community to eliminate the isolated substandard structures when all other methods have failed and when the pattern or number of substandard structures does not warrant the establishment of an Urban Renewal Project. Many communities, including Columbia, have such structures in otherwise sound neighborhoods. This program has not been used in Columbia as yet.

g. Rehabilitation Grants and Loans

25. Direct loans may be made by HUD at a 3 percent interest rate with a maximum term of 20 years. These loans can be used in cases of need, to finance repairs and improvements by property owners in urban renewal and concentrated code enforcement areas and in the so-called certified areas.

26. Direct grants may also be made, in amounts not exceeding \$3,000, to low-income owner occupants in urban renewal and concentrated code enforcement areas. The grants are tied to the homeowner's income level; if \$3,000 or less, the full amount is available.

27. There is little question that these programs will have application in development projects defined in this report, especially in the basically sound residential areas wherein relatively few land use changes are proposed.

h. Historic Preservation Grants

28. This program permits 50 percent grants to be made to a public body, subject to limitations of \$100,000 per project per year and of \$25,000 for moving structures. The program is of obvious benefit for Columbia in the historic areas. Coupled with open space and urban beautification programs, it is believed that the Historic Preservation Program could be of great help in preserving key structures in the Historic areas.

i. Neighborhood Facilities Programs

29. The neighborhood facilities program is primarily designed for areas occupied by low and moderate income families. The purpose of this program is to provide grants of up to two-thirds for the construction of youth centers, community centers and other public buildings to provide health, recreation or social services to the community. Such a program can serve as an adjunct to renewal programs, but can also be developed separately. The grants cover all activities from land acquisition to construction.

j. Grants for Basic Utilities

30. Another grant program which might be applicable to Columbia is the program through which the Federal Government contributes up to 50 percent of the cost of providing basic water and sewer facilities where none exist. Such a program would be applicable to undeveloped areas of a community which are not served by these basic facilities and whose development is therefore hindered.

31. The "seed money" planted in the form of basic facilities can open up new areas for residential and open space use and can contribute to the orderly and efficient growth of the community. The only requirements are that the sewage be treated, that the growth of the area being improved take place in the reasonably near future and that the improvements be a part of a coordinated system. This program can be employed by Columbia in needy areas and is a key facet of proposals for development.

k. Federal Housing Administration Programs

32. Several programs of FHA are applicable to community development and redevelopment. FHA mortgage insurance makes financing available at reasonable rates to persons unable to readily attain such financing. The main contribution is in making money available to builders and homebuyers for new construction and, under certain programs, the lowering of interest rates to allow developers to pass on savings to moderate-income buyers and tenants and to make money available to finance rehabilitation and new construction in Urban Renewal Projects. The most important of this type is the 221(d)(3) program (now being replaced by the 236 program). This program has been responsible for at least 300 new units of housing in Columbia and is scheduled to play an important role in future programs.

33. All of FHA's programs enhance the community's redevelopment and improvement resources by making possible additions to relocation resources and by making money available for new housing resources and for renovation of existing basically sound structures.

3. Other Federal Aids

a. Small Business Administration Programs

34. Small Business Administration provides a variety of financial and technical assistance programs, most of which are directed toward the "small business" defined by SBA. These programs extend to areas of economic development, for depressed areas or disadvantaged or low-income persons, and to disaster areas. Financial aid is entirely in the form of loans and loan and lease quarters.

35. For Columbia, the program having most application is that which furnishes rehabilitation loans called Section 312 loans, on non-residential and business properties. Formerly administered by HUD, this program will be of obvious benefit in those areas wherein extensive change is proposed. Terms of the program include a maximum amount of \$50,000, at a 3 percent interest rate, over a maximum 20-year term.

b. Office of Economic Opportunity Programs

36. Instituted by the Economic Opportunity Act of 1964, these programs have constituted the central part of the national anti-poverty effort. They include the Community Action Program, which conducts various neighborhood or city-wide activities such as remedial education, housing, development, youth employment, etc. OEO programs have also included the Job Corps and VISTA (Volunteers in Service to America) programs.

37. In Columbia, anti-poverty programs are operated most recently under the auspices of the Lexington-Richland Counties office of Economic Opportunity. This agency has successfully operated neighborhood programs and Operation Headstart.

c. Planning Assistance Programs

38. There are two sources of Federal planning aid which are readily applicable to Columbia - the so-called "701" or Comprehensive Planning Assistance Program, and the program for advanced planning of public works - both of which are administered by HUD.

39. The first of these is highly significant inasmuch as it will expedite Columbia's updating of its current General Plan. This planning opportunity arises from a 1968 amendment to the basic Housing Act which made eligible (for two-thirds grants) all cities participating, as does Columbia, in metropolitan planning.

40. The second program provides interest-free advances for planning of public works, such as school and other public buildings, recreational projects and utility systems. The applicant must show that construction will begin within a reasonable period of time.

d. Highway Programs

41. The road construction programs administered by the Federal Highway Administration and the State of South Carolina may also offer considerable aid in achieving plan objectives. Since the Plan purposes extensive road revisions, the new facilities can be built with Federal and State funds.

42. Also of significance is the so-called T O P I C S program (Traffic Operations Program to Increase Capacity and Safety). This program, while only recently conceived, is designed to finance eligible physical improvements relating to traffic and circulation plans. It was cited in Chapter G as a possible source of funds for certain aspects of Central City traffic signalization proposals.

