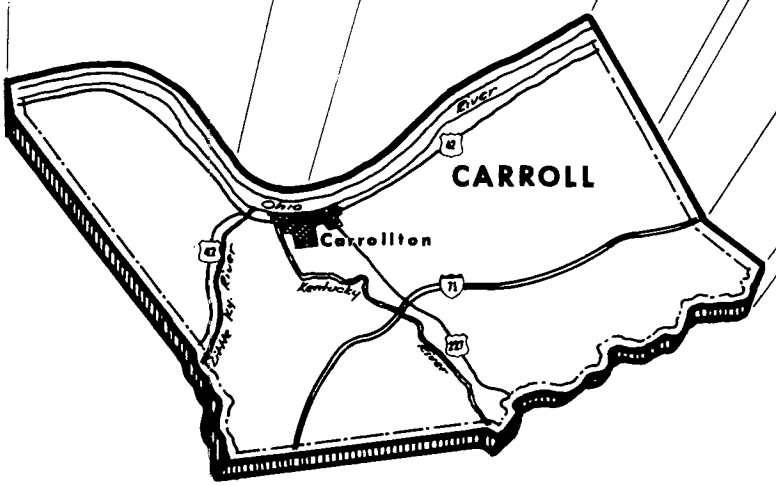
COMPREHENSIVE PLAN

FOR

CARROLL COUNTY, KENTUCKY



WATKINS & ASSOCIATES INC.
LEXINGTON, KENTUCKY
·engineers·architects·planners·

··JUNE 1974··

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ABSTRACT:

The Comprehensive Plan for Carroll County, Kentucky is a single document presenting all elements of the comprehensive plan for the planning area comprising Carroll County and its five cities, including Carrollton, the only urban area and county seat.

Carroll County is located in Northern Kentucky on the Ohio River approximately midway between Louisville, Kentucky and Cincinnati, Ohio. In 1970 the county's population was 8,523 of which 3,884 or 45 percent lived in Carrollton. The density of population is 65.4 persons per square mile. Population has been growing since 1960 and is expected to continue, increasing to 11,300 by the year 2000.

The economy of Carroll County is changing from an agriculture to a manufacturing base. In 1970 farming yielded 15 percent while manufacturing was 45 percent of total earnings. Approximately three out of four males of working age are in the labor force, and the female rate is one-half the male rate. Unemployment has been running between 7 to 10 percent.

Land in Carroll County is sharply cut by streams to form a "knobby" terrain interspersed with many valleys. Tops of the knobs range between 800 to 900 feet above mean-sea-level and the valley floors between 400 to 500 feet above mean-sea-level. A major topographic feature of Carroll County is the confluence of the Ohio, Kentucky and Little Kentucky Rivers at Carrollton. Presently, most of the land is devoted to agriculture or conservation use. By the year 2000, developed land will account for 7.5 percent of the total area.

The Comprehensive Plan for Carroll County comprises a Land Use Plan, Transportation Plan, Community Facilities Plan, Public Improvement Program, and Initial Housing Element. The planning year for all plans is 2000. Forty-four projects are included in the Public Improvement Program at an estimated total cost of $6.2 million.

COMPREHENSIVE PLAN
FOR
CARROLL COUNTY, KENTUCKY

Prepared For

CARROLL COUNTY PLANNING COMMISSION

By

Watkins and Associates, Inc.
Engineers - Architects - Planners
Lexington, Kentucky

UNDER SUPERVISION AND ADMINISTRATION OF

EXECUTIVE DEPARTMENT FOR FINANCE AND ADMINISTRATION

June 1974

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COMPREHENSIVE PLAN
FOR
CARROLL COUNTY, KENTUCKY

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FOREWORD

"PROGRESS IS CONTAGIOUS; WE HAVE AN EPIDEMIC!"

This was the slogan utilized by the City of Carrollton in presentations to the Kentucky Chamber of Commerce which resulted in Carrollton being designated an "All Kentucky City" in 1973. All Carroll County residents can take pride in this accomplishment. The area has taken giant strides in past years in attracting industry, meeting required public services, and in general coping with the problems associated with progress.

The local officials now wish to plan for the future to assure that the "Epidemic" continues. This Carroll County Comprehensive Plan refines goals and objectives, reviews past trends, establishes priorities for public improvements; presents plans for community facilities, transportation facilities and housing; and suggests a capital improvement budget geared toward meeting the priorities established by the Carroll County Planning Commission.

This comprehensive plan establishes guidelines for future growth in Carroll County. Implementation of the recommendations herein will assure that Carroll County remains a preferred area in which to live, work and rear a family. It is anticipated that the slogan may then be changed to:

"PROGRESS IS CONTAGIOUS;
WE HAVE AN EPIDEMIC THAT WILL CONTINUE FOR MANY YEARS TO COME."

CHAPTER I

INTRODUCTION

The Comprehensive Plan for Carroll County was developed to provide the city and county officials with a body of information concerning the past and present status of Carroll County and to furnish criteria to guide the formation of sound decisions regarding the future of Carroll County and all its citizens. Details within the plan cover the physical, social, and economic growth and development of the County's five cities and rural areas. The following report presents the overall County planning and development policy; goals and objectives as formed by the local planning participants; future population; future economic growth potential; a future land use plan; a future transportation plan, proposed community facilities of various types; and goals and ways of achieving the goals for local housing.

THE SETTING

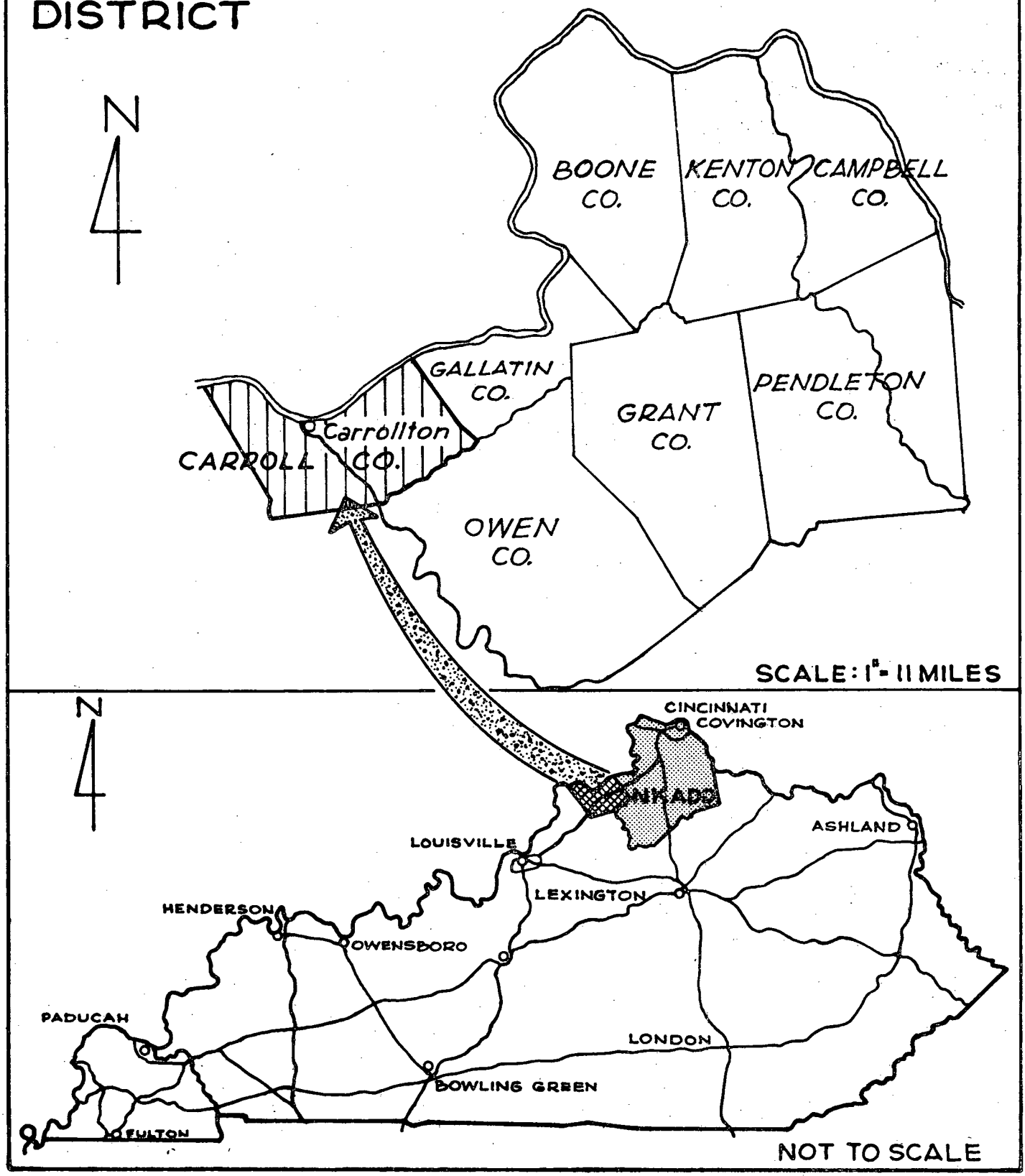
The area covered in the plan includes all of Carroll County and the five cities of Carrollton, Ghent, Prestonville, Sanders and Worthville. Carroll County is located in north-central Kentucky on the Ohio River midway between Covington and Louisville. It is in the Northern Kentucky Area Development District which includes seven other counties of northern Kentucky. Both Louisville and Covington are approximately 48 miles away and Lexington is 73 miles to the southeast. Figure No. 1 shows the location of the County in respect to Kentucky.

Carroll County is the third smallest county in land area in the Commonwealth. Only neighboring Gallatin County and Robertson County are smaller. Total land area is 83,200 acres or 130 square miles.

The 1970 population of Carroll County was 8523 which ranks it 97th in size

PREPARATION OF THIS MAP WAS FINANCED IN PART THROUGH A COMPREHENSIVE PLANNING GRANT FROM THE DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

NORTHERN KENTUCKY AREA DEVELOPMENT DISTRICT



LOCATION MAP
CARROLL COUNTY PLANNING AREA

FIGURE NO. 1

of population among the 120 counties in Kentucky. Population density at the time of the last census was 65 persons per square mile. There is only one urban place in the county with a population exceeding 2500 and that is the city of Carrollton which had 3884 people in 1970.

Carroll County was formed in 1838 from the western section of Gallatin County. Earlier Port William (now Carrollton) was the county seat of Gallatin County. The county was named for Charles Carroll of Maryland, one of the signers of the Declaration of Independence. Port William was renamed Carrollton after Carroll's home in Maryland and became county seat of Carroll County.

Being located at the confluence of two major navigable streams, the Ohio River and the Kentucky River, Carroll County's economy was initially oriented toward river traffic and transportation. Three of the five cities in the county, Carrollton, Ghent and Prestonville are on the Ohio River and Worthville is on the Kentucky River. Sanders is inland, on the railroad that runs up the Eagle Creek Valley.

The topography is "knobby" except for the alluvial deposits along the floors of the river valleys, where it is level. Numerous small streams drain into Eagle Creek, the south boundary of Carroll County, into the Little Kentucky River and Kentucky River in the west and into the Ohio River which is the northern boundary.

Carroll County is in the Outer Blue Grass physiographic region. Only a limited amount of soil is suitable for agricultural crops with hay, tobacco and corn being the principal crops. Livestock production is also an important part of the county's agricultural economy but the number of farms involved in livestock production has declined in the last few years.

The primary natural resources in Carroll County are sand and gravel deposits that occur along the Ohio River. At present these are being exploited in the western part of the County. There is also a limited amount of limestone available. Some 26,000 acres of commercial forest land exist containing stands of white oak, hickory, red oak, ash, maple, cedar and walnut. There are large parcels of land that would be suitable for the development of recreational facilities.

The major economic force in Carroll County today is manufacturing. There are 16 manufacturers that employ approximately 1000 workers. Products include metal fabrication, wooden furniture, and chemicals as well as a number of other items. In addition the county has a large number of tobacco warehouses and is one of the largest burley tobacco markets in the world.

PROCEDURE

The planning document presented in this report contains elements of the Comprehensive Plan for Carroll County. Included are data, analyses, and discussions pertaining to the following:

Goals and Objectives for Carroll County
Present and projected population characteristics
Status of the local economy
Characteristics of the future economy
Existing and future land use
Housing conditions
Transportation facilities and services
Community facilities in the county
Implementation of plans

The data were collected by actual observation wherever practical or taken from available reliable records if direct observation was not feasible. From these data the following plans were developed, each of which are elements of the Comprehensive Plan for Carroll County, Kentucky:

Land-Use Plan
Transportation Plan
Community Facilities and Public Improvements Plan
Initial Housing Element

The target date for these plans is the year 2000. Existing data were projected forward to form an estimate of conditions to exist in the target year in the principal segments of the social and economic communities of Carroll County. Plans were prepared to guide development in the county to overcome deficiencies to be encountered by 2000.

CHAPTER II

GOALS AND OBJECTIVES

The plan reviews the goals and objectives of the present citizens of Carroll County, measures the extent that they are currently being fulfilled, then develops a program of action leading to fulfillment of the goals and objectives in the future. Goals and objectives then become an intrinsic part of the Comprehensive Plan. Goals set a direction for future development. They establish qualitative standards to guide and regulate our efforts to improve living conditions. Objectives, on the other hand, determine how much is to be done over a specified period of time. They are quantitative standards set to control the expenditure of available resources used to achieve the present goals.

At the State level the Kentucky Program Development Office[1] established this goal - to design and implement a delivery system for the total development of Kentucky's social, economic and physical resources.

(a) To utilize resources on all levels of government and the private section in a concerted attack to improve the conditions of life and the quality of the environment in Kentucky.

(b) To aid in strengthening the State Government's ability to deal effectively with statewide needs.

(c) To aid in strengthening the Area Development District's ability to deal effectively with District needs.

(d) To aid in strengthening the local government's ability to deal effectively with local needs.

The Northern Kentucky Area Development District, of which Carroll County is a part, has further refined the goals to be - The Northern Kentucky Area Development District[2] seeks to achieve a quality life style for the people of

[1] Currently known as the Office for Local Government.

[2] Annual Report, NKADD, Fiscal Year 1971-1972

Boone, Campbell, Carroll, Gallatin, Grant, Kenton, Owen and Pendleton Counties by coordinating and assisting each level of government in the mobilization of resources essential to the total development process. To this end the basic goals of the District may be stated as follows:

(a) To achieve total development through the results of competent, rational planning processes which are predicated upon a partnership between local, regional, State and Federal governments.

(b) To encourage cooperation and coordination among all existing agencies involved in problem solving.

(c) To assist local governments in their individualized planning and development efforts and work necessary to assure continuity of effort.

(d) To establish public confidence in the planning process by insisting that plans and programs be developed as a response to the needs and aspirations of all of the region's citizens.

GOALS FOR CARROLL COUNTY

In due consideration of the State level and the Development District level goals, the Carroll County Planning Commission has determined and set forth the goals for Carroll County. In the formulation of the goals, the Joint Planning Commission has sought to bring to a sharp focus in the County the goals developed for the State and Development District:

(a) Utilize the Carroll County location resources of being on the Ohio River, Kentucky River, Little Kentucky River and Eagle Creek.

(b) Stimulate growth in western Carroll County and gear rural development to accommodate growth.

(c) Improve solid waste collection and disposal in Carroll County.

(d) Upgrade the storm drainage systems serving the county's inhabitants.

(e) Implement the Northern Kentucky Area Development District Comprehensive Water-Sewer Plan to furnish adequate water and sanitary sewerage systems for all Carroll County residents.

f. Initiate implementation of recommendations for improving housing in Carroll County as documented in the Northern Kentucky Area Development District's Initial Housing Element.

g. Increase utilization of state revenue sharing monies in Carroll County.

h. Upgrade recreational facilities in Carroll County.

i. Improve the Carroll County transportation system.

j. Increase cultural opportunities for Carroll County citizens.

k. Land allocation in the land use plan should maintain adequate agriculture land, particularly along the river bottoms, while meeting the needs for competing land uses.

l. Revitalize downtown Carrollton.

m. Make full use of the potential of U. S. 42 now that I-71 has taken off much of the heavy traffic.

OBJECTIVES FOR CARROLL COUNTY

To facilitate reaching the goals set for Carroll County and the City of Carrollton, the Planning Commission adopted the specific objectives listed below:

1. Promote the development of compatible recreation, residential, and industrial activities along the shore lines of the waterways in the County.

2. Provide adequate public utilities and services to western Carroll County.

3. Provide an acceptable solid waste collection and disposal system for all of Carroll County.

4. Provide adequate storm drainage within Carrollton and adjacent areas subject to be annexed.

5. Upgrade the Carrollton Water Treatment Plan to a capacity of 1,000,000 gallons per day.

6. Extend sanitary sewage collection lines and water lines at Carrollton.

7. Extend the Carroll County Water District lines to improve flows in the existing system at Sanders and Eagle Station and serve the I-71 rest area.

8. Construction of West Carroll County Water District.

9. Construction of a secondary sewage treatment plant at Carrollton.

10. Provide sewage treatment facilities for Prestonville.

11. Provide sewage treatment facilities for Ghent and the area between Ghent and Carrollton.

12. Provide sewage treatment facilities for Sanders.

13. Provide sewage treatment facilities for Worthville.

14. Develop approximately 260 new homes in Carroll County by 1977.

15. Construct a future park complex with a swimming pool, Little League baseball park, adult programs and other uses as required.

16. Locate mini-parks throughout the county in accordance with the NKADD recreation plan.

17. Construct a new Lock Road, a new Hillside Road and resurface existing roads and streets as required.

18. Provide a new library in Carroll County.

19. Rekindle interest in a community college in the county.

20. Develop Carrollton's water front area for a "Dock and Shop" program directed toward boat traffic.

21. Beautify commercial property and river front area in Carrollton.

22. Investigate the possibility of making a bicycle trail along U.S. 42 with a "Stop and Rest" facility in Carroll County.

CHAPTER III

POPULATION STUDY

PRESENT POPULATION

In 1970, at the time of the latest decennial census, the population of Carroll County was 8,523. Of the total County population, 3884, or 45 percent, was in the City of Carrollton which is the only urban area in Carroll County.

With a land area of 130.3 square miles the population density of Carroll County was 65.4 persons per square mile in 1970. In Carrollton, which has a land area of 2.0 square miles, there were 1942 persons per square mile. The latest data has revealed a significant growth in population for both the City and the County since 1960. This growth trend is a continuation of the record of increasing population for the City of Carrollton and an upswing in the County's population following a decline between the years 1950 and 1960.

The high point of Carroll County's population (9825) was reached in 1900, while every census since that time has registered a lower population. Four of the seven 10-year periods since 1900 have exhibited a declining rate of growth; while three of the decades, 1910-1920, 1930-1940, and 1960-1970, were periods of increasing population. The City of Carrollton has grown in population between censuses since 1890 except in the 1900-1910 decade. The rural-farm population, first recorded in Carroll County in 1930, showed a substantial decline at each census up to and including the latest one. The four towns in Carroll County have remained essentially stable in population during this time. Table No. 1 on the following page presents the population trend for Carrollton and Carroll County since

TABLE NO. 1

Population Trend of Carrollton and Carroll County, Kentucky

1890 - 1970

Year	City of Carrollton		Carroll County
	No.	% of County	
1890	1720	18.56	9266
1900	2205	22.44	9825
1910	1906	23.50	8110
1920	2281	27.33	8346
1930	2409	29.54	8155
1940	2910	33.61	8657
1950	3226	37.88	8517
1960	3218	40.34	7978
1970	3884	45.47	8523

SOURCE: U. S. Bureau of Census

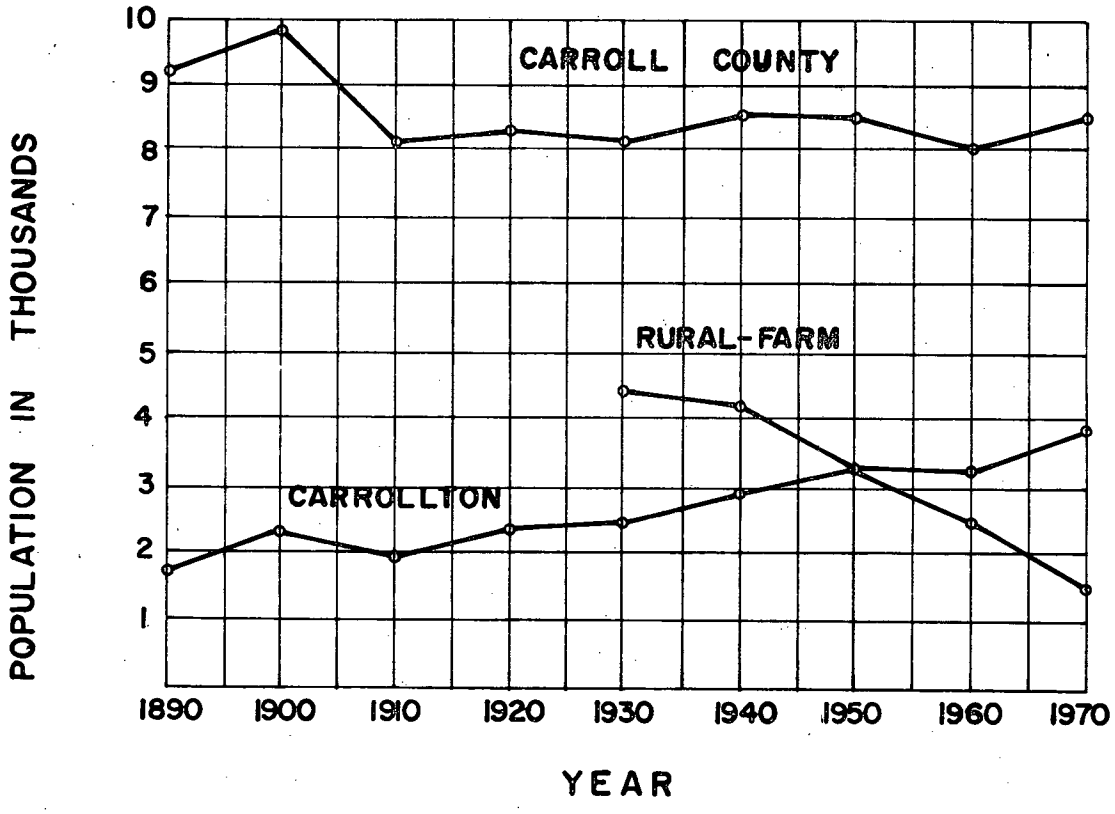
TABLE NO. 2

Population Trend of the Towns in Carroll County, Kentucky

1890 - 1970

Year	Town			
	Ghent	Prestonville	Sanders	Worthville
1890				
1900				
1910	421	162	250	326
1920	438	131	291	315
1930	383	163	286	297
1940	414	296	278	333
1950	368	166	206	308
1960	342	211	203	247
1970	385	252	268	258

SOURCE: U. S. Bureau of Census



POPULATION TRENDS
CARROLL COUNTY
1890 – 1970

FIGURE NO 2

1890; while Table No. 2 shows population trends for the towns. Figure No. 2 exhibits the county, urban and rural population trends for the same period.

The non-white population of Carroll County has always been a relatively small part of the total County population. Since 1900 it has declined from 804 to 213 in 1970. As a percentage of total county population, non-white population was 2.50 percent in 1970. Table No. 3 contains the data on non-white population in Carroll County since 1890.

The rural-farm element of the population was first determined in the 1930 census when more than on-half of the County's people were in that category. This ratio has declined to less than one-out-of-five living on a farm in 1970. Some of the explanation for this trend comes from the fact that prior to 1940 the population of Carrollton was less than 2,500 and thus classed as rural. Also, there has been a shift in population from rural to urban areas. See Table No. 4.

The age and sex distribution of the Carrollton and Carroll County population in 1970 is presented in Table No. 5. In Carrollton the median age for both male and female is higher than it is in the County, particularly for the females. Also, in Carrollton there are significantly fewer males than females, while in the County the difference is very small.

The proportion of males less than 18 and 65 and older is practically identical in Carrollton and Carroll County. However, this is not true in the female category where Carrollton has a lower percentage of females less than 18 and a higher percentage more than 65 years of age.

A summary of general population characteristics for Carroll County and the State of Kentucky for 1960 and 1970 is contained in Table No. 6.

In Figure No. 3 Carroll County's age distribution is compared to that of Kentucky's. For both male and female sexes there are relatively fewer

TABLE NO. 3

Non-White Population in Carroll County, Kentucky

1890 - 1970

Year	Non-White Population	
	No.	Percent of County
1890	757	8.17
1900	804	8.18
1910	530	6.54
1920	401	4.80
1930	385	4.72
1940	309	3.57
1950	265	3.11
1960	235	2.95
1970	213	2.50

SOURCE: U. S. Bureau of Census

TABLE NO. 4

Rural-Farm Population in Carroll County, Kentucky

1930* - 1970

Year	Rural-Farm Population	
	No.	Percent of County
1930	4397	53.92
1940	4160	48.05
1950	3269	38.38
1960	2484	31.14
1970	1500	17.60

*Rural-Farm population not available before 1930.

SOURCE: U. S. Bureau of Census

TABLE NO. 5

1970 Population Distribution by Age and Sex - Carrollton and Carroll County, Kentucky

Age	Sex			
	Male		Female	
	Carrollton	Carroll County	Carrollton	Carroll County
Under 5	173	393	147	348
5 - 9	169	419	174	406
10-14	188	466	154	385
15-19	153	340	150	360
20-24	125	276	149	329
25-29	109	295	128	283
30-34	106	226	101	208
35-39	95	214	112	225
40-44	101	222	134	261
45-49	106	239	117	249
50-54	94	216	129	257
55-59	117	245	119	225
60-64	89	216	112	208
65-69	61	153	102	183
70-74	46	115	108	159
75 & Older	85	177	131	225
Total Population	1,817	4,212	2,067	4,311
Median Age	29.6	28.6	36.4	31.1
Under 18	629	1,508	574	1,375
Percent	34.6	35.8	27.8	31.9
65 & Older	192	445	341	567
Percent	10.6	10.6	16.5	13.2

SOURCE: U. S. Bureau of Census

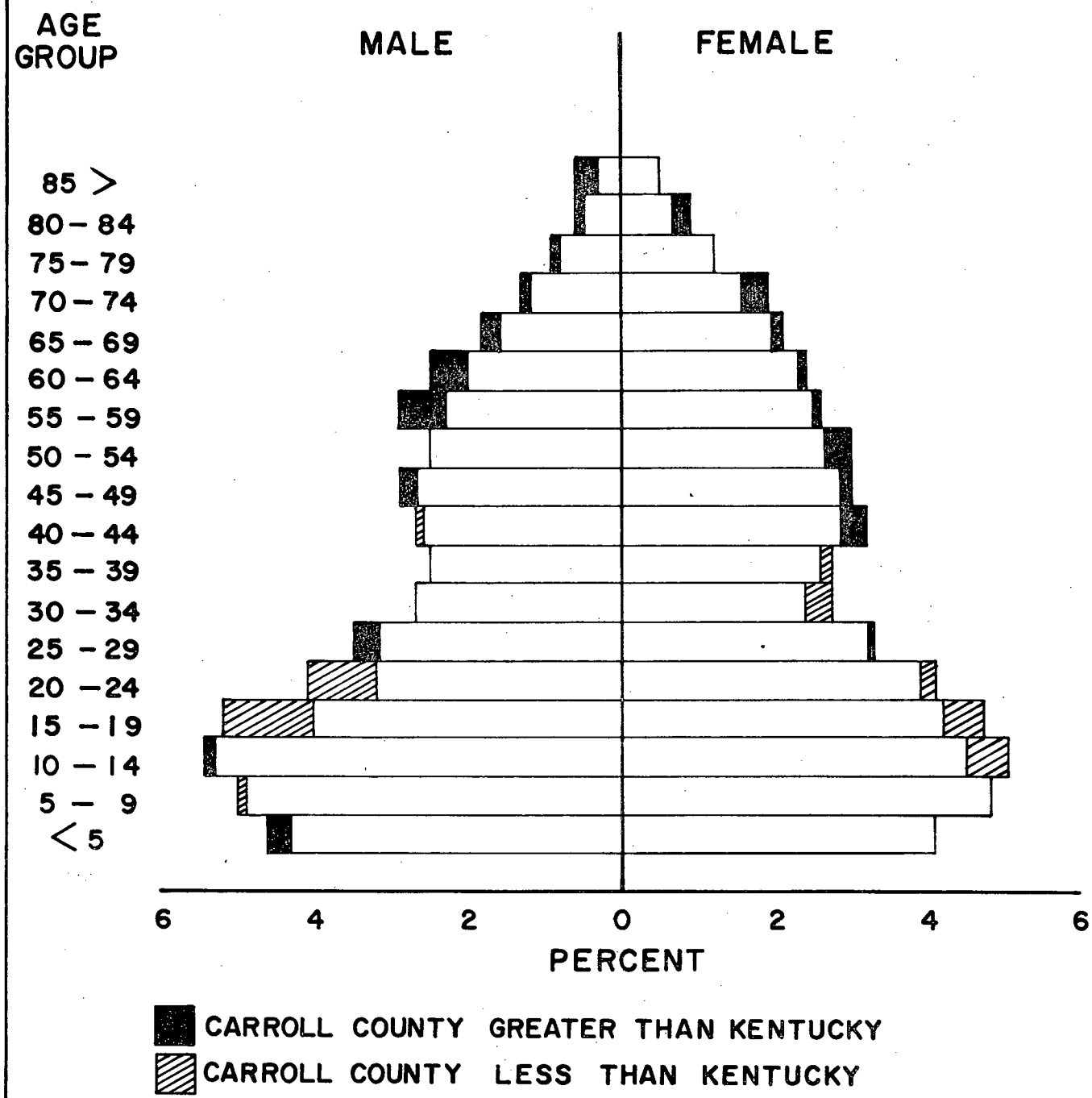
TABLE NO. 6

General Population Characteristics
Carroll County, Kentucky
1960 and 1970

	1960		1970	
	Carroll Co.	Kentucky	Carroll Co.	Kentucky
Population	7978	3,038,156	8523	3,218,706
Percent Non-White	2.9	7.2	2.6	7.4
Percent Male	49.9	49.7	49.4	49.1
School Enrollment 3 (5) - 34 yrs. old*	1803	732,743	1898	849,246
Median Years of School Completed	8.6	8.6	8.1	9.5
Labor Force 16 yrs. or older*	2821	1,034,489	3244	1,190,344
Percent Male in Labor Force	73.1	71.8	64.5	65.0
Persons per Household	3.85	3.47	3.69	3.17

*14 years or older in 1960

SOURCE: U. S. Bureau of Census



POPULATION AGE DISTRIBUTION BY SEX
CARROLL COUNTY AND KENTUCKY
1970

SOURCE: US. BUREAU OF CENSUS

COMPARISON BY PERCENTAGE

FIGURE NO. 3

people in the below 40 age bracket in Carroll County and more in the above 40 age bracket than are found in Kentucky as a whole. This is particularly true in the 15 to 19 and 20 to 24 male age groups.

To increase the understanding of the current population of Carroll County and the population history that led up to it, the Carroll County population was converted to a percentage of the Northern Kentucky Area Development District population and the Kentucky population. These data for each census since 1890 are shown in Table No. 7. It is evident that the Carroll County population has not grown at the same rate the Northern Kentucky Area Development District and the State populations have, since Carroll County's population as a percent of these two larger units has decreased with each census. When compared to 1890 population as the base year, the population trends for the County, Northern Kentucky Area Development District and State clearly illustrate that population growth in Carroll County has lagged behind growth in the two larger units of government (see Figure No. 4).

Birth and death rates for Carroll County for 1960 and 1970 are shown in Table No. 8. Both the birth and death rates declined from 1960 to 1970; however, the birth rate dropped more than did the death rate. Since the birth rate exceeded the death rate there was a net increase in population of 461 persons between 1960 and 1970. The actual increase in population for the 1-year period was 545 persons which indicates a net in-migration of 84 persons. This is a rate of in-migration of 10.5 per thousand population.

FUTURE POPULATION

Planning for the future in Carroll County will depend greatly upon the anticipated population to be served in the future. The step, then, of projecting past population history forward to determine future population is

TABLE NO. 7

Carroll County Population Compared to NKADD and Kentucky Population 1890 - 1970

Year	Carroll Co. as a % of NKADD Population	Carroll Co. as a % of Kentucky Population
1890	5.4	0.5
1900	5.2	0.5
1910	4.3	0.4
1920	4.3	0.3
1930	3.7	0.3
1940	3.9	0.3
1950	3.6	0.3
1960	3.0	0.3
1970	2.9	0.3

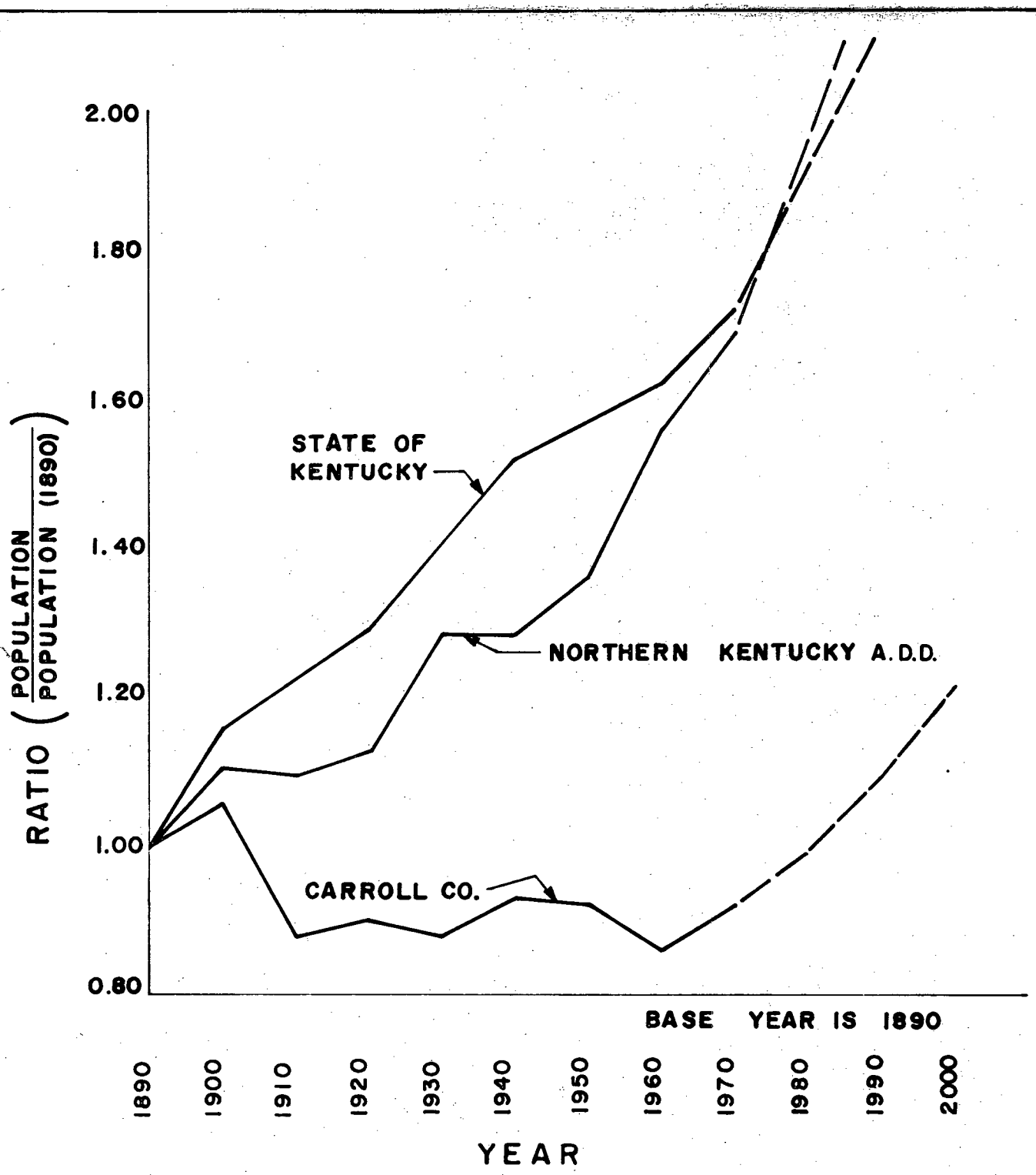
SOURCE: Compiled from U.S. Bureau of Census data.

TABLE NO. 8

Birth and Death Rates - Carroll County, Kentucky 1960 and 1970

	1960	1970
Live Births (Number)	167	142
(Rate per 1000 Pop.)	21.0	16.7
Deaths (number)	125	114
(Rate per 1000 Pop.)	15.7	13.4
Net Change in Population, 1960 to 1970, due to births and deaths	-	+461

SOURCE: Kentucky Department of Health



POPULATION GROWTH PATTERN FOR CARROLL COUNTY NKADD AND STATE OF KENTUCKY (1890-2000)

FIGURE NO. 4

an important part of the planning process. There are many factors involved in the creation of a population projection and the interactions between factors cause an infinite number of effects on population. It is the purpose of the art of population projecting to recognize and apply the proper factors and interactions to develop a reliable estimate of future population.

We are fortunate to have available a soundly prepared population projection made for the Kentucky Program Development Office[1] and reviewed by the Kentucky Social Sciences Advisory Committee. This projection has also been widely accepted and applied and is therefore more suitable for use than an independent projection by the consultant.

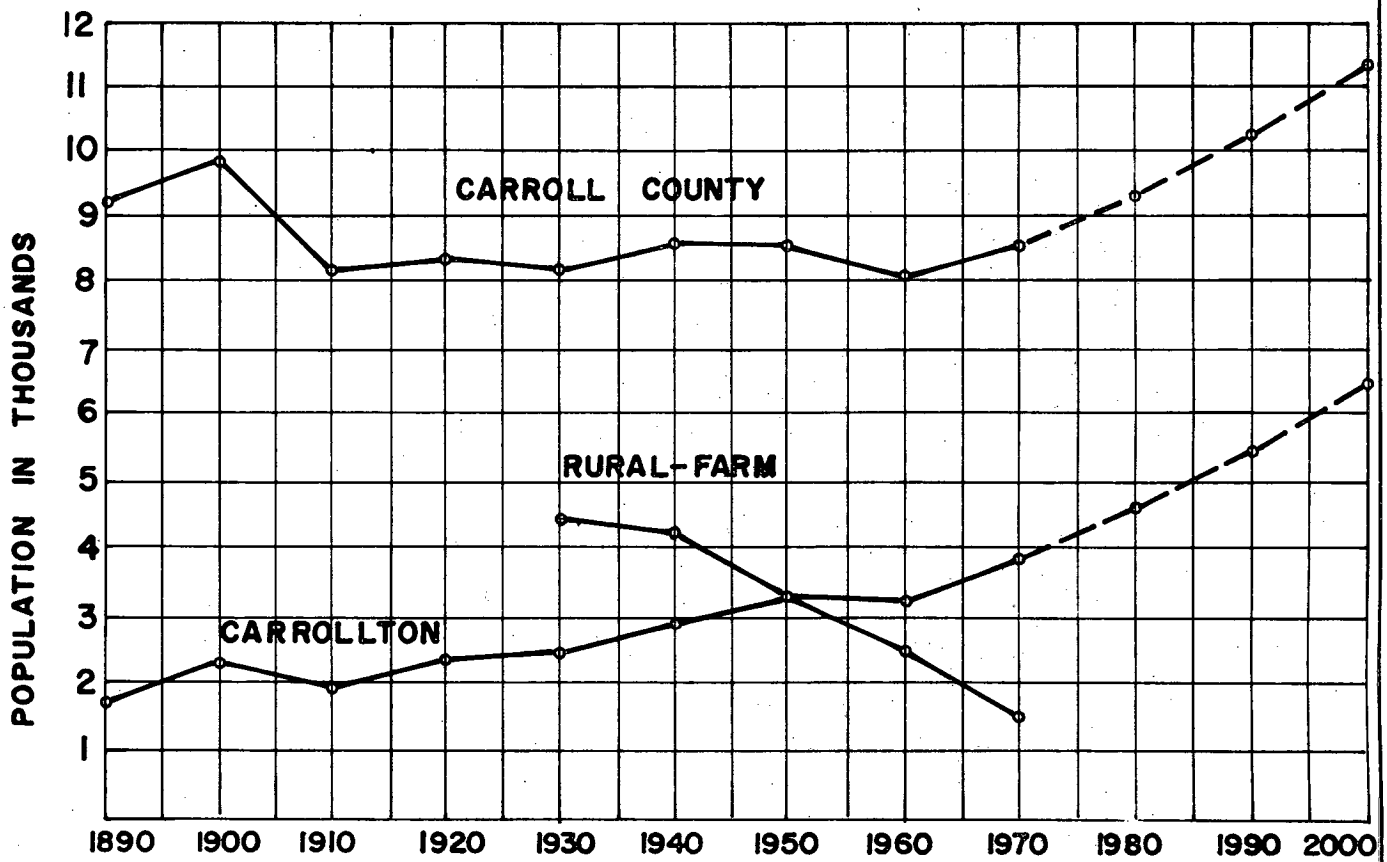
The Kentucky Program Development Office[1] projection is based on the cohort-survival method with migration, in one-year cycles. The method consists of first dividing the population into cohorts by such factors as age and sex. Then the cohorts are aged by applying birth and death rates. Net migration is projected and allocated to each cohort. This process is repeated each year up to the required projection year.

The application of this procedure to the Carroll County population produced the future populations for Carroll County shown in Table No. 9. A steady growth in population is predicted through the year 2,000. The projection is shown graphically in Figure No. 5.

The future population male-female ratio will remain unchanged with females slightly outnumbering the males. In the school age bracket (5-17 years) the number of persons will decline until 1980, then rise again. During the next two decades school age children will be from 100 to 230 fewer than the 1970 school age population.

The working age group (16-62 years) will increase in the future. By the year 2,000 there will be 2,100 more people of working age in the County

[1]Currently known as Office for Local Government



— — — — PROJECTED POPULATION

POPULATION PROJECTION
CARROLL COUNTY
1890 — 2000

FIGURE NO. 5

than there were in 1970. This implies that new job opportunities will have to be found in the future to maintain the projected population growth.

Median age will also increase in the future which indicates that the proportion of older persons in the population will increase.

The percent of the County's population residing in urban areas will continue to increase. Since Carrollton is the only urban area in Carroll County this means that the population of Carrollton will continue to rise in the future. By the year 2,000 the urban population is estimated to be 57.3 percent of the total population. On this basis, Carrollton will have a population of 6,470 at that time.

A summary of the characteristics of the projected population of Carroll County is presented in Table No. 10.

TABLE NO. 9

Projected Population for Carroll County, Kentucky

Year	Population
1980	9,262
1990	10,220
2000	11,294

SOURCE: Kentucky Population Projection 1975 - 2020, Kentucky Program Development Office.

TABLE NO. 10

Characteristics of the Projected Population to 2000

Carroll County
Kentucky

Characteristics	Year				
	1970	1975	1980	1990	2000
Total Population	8523	8863	9262	10220	11294
% Male	49.4	49.4	49.5	49.6	49.9
% Female	50.6	50.6	50.5	50.4	50.1
% Non-White	2.6	2.7	2.6	2.4	2.4
School Age (5-17 yrs.)	2024	1915	1793	1959	2242
% Male	53.8	52.7	52.3	52.3	52.3
% Female	46.2	47.3	47.7	47.7	47.7
Working Age (16-62 yrs.)	4743	5054	5465	6060	6889
% Male	49.2	48.8	49.4	50.0	50.5
% Female	50.8	51.2	50.6	50.0	49.5
Median Age	29.7	30.7	30.7	31.9	33.0
Percent Urban	45.6	47.5	49.5	53.4	57.3

SOURCE: Kentucky Population Projection 1975 - 2020, Kentucky Program Development Office

CHAPTER IV

ECONOMIC SURVEY

PRESENT ECONOMY

The economy of Carroll County traditionally has been rooted in agriculture, yet it is presently in the process of shifting to a non-agriculture base. This shifting process is not new nor is it unique to Carroll County. Over the past three decades Carroll County along with the state and nation has been involved in the relative decline of agriculture and the increase of manufacturing as the bulwark of the economy.

Total earnings by the people of Carroll County for the years 1966 through 1970 are listed by source in Table No. 11. Farm earnings account for approximately 15 percent of total earnings while manufacturing produces from 29 to 45 percent of total earnings. This clearly illustrates the relative position of the two predominant elements of Carroll County's economy. Wholesale and retail trade is the third largest source of earnings, accounting for approximately 10 percent of the earnings.

The make-up of the Carroll County work force also indicates that manufacturing is the main source of jobs in the County. In 1972, one-third of the civilian work force was employed in manufacturing activities while agriculture and government each provided about 12 percent of the jobs. In 1972 the unemployment rate rose to 8.8 percent which is an increase over that rate for the three previous years. See Table No. 12 for a presentation of annual average employment data.

In 1970 the Carroll County labor force, persons 16 years old and older who are actively seeking work, totaled 3244 of which 1581 or 49 percent lived in Carrollton. The Carrollton population participates in the labor force at a rate of slightly greater than the City's share of the population. 45.6 percent of the total population of the County resides in Carrollton. Approximately three out of every four males of working age are in the

TABLE NO. 11
Total Earnings by Source - Carroll County, Kentucky
1966 - 1970
(Thousands of Dollars)

Source of Earnings	Total Earnings by Year				
	1966	1967	1968	1969	1970
Farm Earnings	2654	2501	2652	2885	2717
Total Non-Farm Earnings	14642	15406	15471	16092	17483
Government Earnings	1704	1923	2205	2361	2579
Total Federal	431	459	488	456	392
Federal Civilian	341	360	388	350	277
Military	90	99	100	106	115
State and Local	1309	1464	1717	1905	2187
Private Non-Farm Earnings	12902	13483	13266	13731	14904
Manufacturing	5094	5974	7408	8017	9040
Mining	5	8	179	177	32
Contract Construction	2991	2170	1123	708	801
Transportation, Communication, and Public Utilities	593	608	783	828	925
Wholesale and Retail Trade	2696	3134	2139	2186	2194
Finance, Insurance, and Real Estate	311	301	332	353	388
Services	1176	1257	1271	1422	1489
Other	36	31	31	40	35
Total Earnings	17296	17907	18123	18977	20200

SOURCE: Regional Economics Information System
Bureau of Economic Analysis

TABLE NO. 12

Carroll County Work Force, Employment and Unemployment
Annual Averages 1969 - 1972

Year	Civilian Work Force	Type of Employment			Total[1] Employment	Total[1] Unemployment	Rate
		Agri.	Manu.	Govt.			
1969	3500	500	1300	400	3400	100	1.8
1970	3500	500	1200	400	3400	100	4.4
1971	3500	470	1050	420	3270	230	7.6
1972	3570	440	1060	440	3280	290	8.8

[1] The employment and unemployment figures have been rounded. The unemployment rates are computed from unrounded figures.

SOURCE: Kentucky Department of Economic Security

labor force while the female rate of participation in the labor force is about one-half of the male rate. There appears to be no significant difference between Carrollton and Carroll County rates.

At the time of the 1970 census data collection unemployment ranged from 7.1 percent for females in Carrollton up to 9.6 percent for females in Carroll County. The male unemployment rate was 8.0 percent and 7.2 percent respectively in Carrollton and Carroll County. Unemployment rates, however, vary widely throughout the year along with the local economic activity and even though some 7 percent to 8 percent of the labor force were not employed; in the previous year, 1969, everyone in the labor force worked some time during the year.

According to Department for Human Resources figures distributed by the Bureau for Manpower Services, 22 percent of the unemployed have less than an eighth-grade education, 49 percent have an eighth-grade to eleventh-grade education and 29 percent have a twelfth-grade or over education. They also report that the median number of school years completed by those age 25 and over is 8.8 for males and 10.0 for females. Carrollton and Carroll County labor force date are presented in Table No. 13.

The occupations of those persons who were employed in 1970 are shown in Table No. 14. In Carrollton a large majority of the jobs are distributed nearly evenly between six occupational categories. There are four predominant occupational categories in Carroll County that account for most of the jobs. The major occupations in the City and in the County are listed below:

Carrollton	Carroll County
Service Workers (except pvt. homes)	Operatives (except transportation)
Operatives (except transportation)	Craftsmen
Clerical	Clerical
Craftsmen	Service Workers (except pvt. homes)
Manager (except farm)	
Professional & Technical	

TABLE NO. 13

Carrollton and Carroll County Labor Force
(Age 16 years and older - 1970)

	Carrollton		Carroll County	
	Male	Female	Male	Female
Number of Persons 16 years and older	1243	1558	2838	3080
Number in the Labor Force	961	620	2091	1153
Percent Participation	77.3	39.8	73.7	37.4
Number Employed	884	576	1940	1042
Percent Unemployed	8.0	7.1	7.2	9.6
Number who worked sometime in 1969	1020	768	2332	1451

SOURCE: U. S. Bureau of Census

TABLE NO. 14

Occupations of Employed Persons in Carrollton and Carroll County, Kentucky
(Age 16 years and older - 1970)

Occupation	Number Employed			
	Carrollton		Carroll County	
	Number	Percent	Number	Percent
Professional & Technical	164	11.2	250	8.4
Manager (except farm)	179	12.3	295	9.9
Farmer, Farm Manager	11	0.8	206	6.9
Clerical	209	14.3	345	11.6
Craftsman	201	13.8	455	15.3
Operatives (except transportation)	215	14.7	499	16.6
Transportation	75	5.1	149	5.0
Laborers (except farm)	85	5.8	152	5.1
Farm Laborers	10	0.7	108	3.6
Salesworker	74	5.1	130	4.4
Service Worker (except pvt. household)	218	14.9	342	11.5
Private Household Worker	19	1.3	51	1.7
Total Employed	1460	100.0	2982	100.0

SOURCE: U. S. Bureau of Census

TABLE NO. 15

Employment by Type of Industry - Carroll County, Kentucky
1960 and 1970

Industry	Employment 1960	Employment 1970	Percent Change 1960 - 1970
Agriculture, Forestry and Fisheries	674	348	- 48
Mining	20	3	- 85
Construction	224	202	- 10
Manufacturing	376	926	+146
Railroads	27	29	+ 7
Trucking Service	26	92	+254
Other Transportation	25	46	+ 84
Communication	17	11	- 35
Utilities and Sanitary Service	16	36	+125
Retail Sales	283	293	+ 4
Wholesale Trade	39	54	+ 38
Food, Bakery and Dairy	95	96	+ 1
Eating and Drinking Places	87	93	+ 7
Banking and Credit	N/A	30	-
Insurance, Real Estate and Finance	40	28	- 30
Public Administration	114	215	+ 89
Welfare, Religious & Non-Profit Org.	22	31	+ 41
Hospitals	25	66	+164
Schools	76	132	+ 74
Entertainment and Recreation	16	7	- 56
Health Services	N/A	42	-
Professional Services	36	28	+ 22
Private Household Service	75	51	- 32
Business and Repair Service	33	51	+ 55
Other Personal Service	66	72	+ 9
Not Reported	84	-	-
Total Employment	2496	2982	+ 19

SOURCE: U. S. Bureau of Census

Table No. 14 shows jobs to be more uniformly distributed over the occupational categories in the County than in the City. It also is revealed that the farmer-farm manager and farm laborer groups together account for only 10 percent of the jobs in Carroll County while manufacturing based occupations directly account for 32 percent of the jobs.

A more detailed listing of Carroll County employment by type of industry for 1970 and a comparison with 1960 data is contained in Table No. 15. Total jobs between 1960 and 1970 increased 19 percent. The most significant change was in the manufacturing industry which rose from 376 to 926 jobs. Agriculture, forestry and fisheries declined nearly 50 percent from 674 to 348 jobs. Trucking service, hospitals, public administration, and schools were other major industries for which substantial gains in jobs were recorded.

There are 16 manufacturers listed by the Kentucky Department of Commerce in Carroll County in 1973. Together these firms employ 998 people, of which 27 percent are females. The five largest employers; M & T Chemical, Kawneer, Teledyne Wirz, Consolidated Aluminum and Dow-Corning collectively employ 80 percent of the manufacturing labor force. A complete listing of manufacturers in Carroll County is contained in Table No. 16.

Retail trade, wholesale trade and services also contribute significantly to the Carroll County economy. Data pertaining to these elements of the economy are presented in Table No. 17. Retail trade establishments have risen in Carrollton in the recent past while in the County as a whole they have decreased in number. Sales have also increased sharply in the City but less sharply in the County, revealing that County retail activity is being concentrated in Carrollton. Wholesale trade increased also in the County between 1963 - 1967. The increase in sales was about 25 percent while the number of establishments rose 10 percent. However,

TABLE NO. 16

Carroll County, Kentucky Manufacturers - 1973

Name	Product	Employees Male	Female	Total
Butler Furniture Ind.	Wooden Chairs	20	20	40
Carrollton Cabinet Co.	Wooden Furniture	20	25	45
Carrollton Redrying Co.	Tobacco Redrying	18	2	20
Consolidated Aluminum Corp.	Extrusions	120	2	122
Coo Par	Ready Mix Concrete	13	-	13
Dow-Corning	Silicones	96	8	104
Hills Dairy	Milk and Cheese	3	-	3
Kawneer	Appliance Trim	110	90	200
M & T Chemical, Inc.	Tin Coatings	230	11	241
Marvel Industries	Disc Brakes	-	-	-
Moore Woodcraft, Inc.	Juvenile Furniture	5	6	11
News-Democrat	Newspaper	2	2	4
Ohio Valley Paving Co.	Asphaltic Concrete	3	-	3
Reinbeau Printing Co.	Job Printing	-	-	5
Rich Ladder Company	Wooden Ladders	50	3	53
Teledyne Wirz	Metal Collapsible Tubes	34	100	134
	TOTAL	724	269	998

SOURCE: Kentucky Department of Commerce

TABLE NO. 17

Commercial Establishments and Volume of Sales (Receipts), 1963 and 1967 for Carrollton and Carroll County, Kentucky

Retail Trade

	Carrollton		Carroll County	
	1963	1967	1963	1967
Number of Establishments	77	95	122	118
Sales ($1,000)	5328	8502	8014	9419

Wholesale Trade

	Carrollton		Carroll County	
	1963	1967	1963	1967
Number of Establishments	N/A	N/A	20	22
Sales ($1,000)	N/A	N/A	20935	25515

Selected Services

	Carrollton		Carroll County	
	1963	1967	1963	1967
Number of Establishments	38	32	52	49
Receipts ($1,000)	499	360	731	480

SOURCE: U.S. Bureau of Census

TABLE NO. 18

Farm Income and Sales - Carroll County, Kentucky - 1964 & 1969

	1964	1969
Sales of		
$40,000 or more (number of farms)	5	5
$20,000 to $40,000 (number of farms)	16	20
$10,000 to $20,000 (number of farms	56	58
$5,000 to $10,000 (number of farms)	120	109
$2,500 to $5,000 (number of farms	132	143
$ Less than $2,500 (number of farms)	56	22
Part-time farming (number of farms)	111	128
Total market value of farm produce ($)	3,009,750	3,244,992
Average value of farm ($)	6,068	6,690
Value of crops harvested ($)	2,156,446	2,216,613
Value of forest products harvested ($)	3,596	14,705
Value of livestock produced ($)	849,463	1,013,674

SOURCE: U.S.Bureau of Census

TABLE NO. 19

Characteristics of Agricultural Land - Carroll County, Kentucky
1959, 1964, 1969

	Year		
Characteristic	1959	1964	1969
Number of farms	651	496	485
Land in farms (acres)	73,588	75,835	64,931
Average size of farms (acres)	113.0	152.9	133.8
Percent of county land in farms	87.8	91.1	77.9
Value of land and buildings ($)	N/A	N/A	16,395,972
Average value per farm ($)	13,622	19,624	33,086
Average per farm acre ($)	120.93	128.87	252.51
Total cropland farms	633	494	447
Total acres in cropland	35,129	32,542	33,423
Harvested cropland (farms)	613	481	431
Harvested cropland (acres)	13,550	12,058	9,348
Grazed cropland (farms)	398	247	276
Grazed cropland (acres)	16,968	15,345	19,599
All other cropland (farms)	55	N/A	165
All other cropland (acres)	1,971	5,139	4,476
Total woodland farms	429	357	248
Total acres in woodland	24,863	27,945	17,907
Irrigated land (farms)	23	91	78
Irrigated land (acres)	170	464	317
All other land (farms	200	N/A	365
All other land (acres)	15,567	15,305	13,601

SOURCE: U.S.Bureau of Census

selected services declined in number of establishments and in receipts. The decline in dollar volume of receipts in 1967 was 34 percent of the 1963 receipts in the County and 28 percent in Carrollton. The location of service establishments is also oriented toward locations in Carrollton but not to the degree that retail trade establishments are.

Data on the agricultural segment of the economy is presented in Table No. 18. Farm income and sales of farm products rose in value between 1964 and 1969 but the rate of increase was below the rate experienced in manufacturing. As shown in Table No. 19 farming activity is declining in Carroll County by most measurements. The production of livestock and the amount of grazing land seems to be on the rise.

Personal income for Carroll County families is presented in Table No. 20 for the year 1970. Wages and salaries are the major source of income and also provide the largest mean annual income. Approximately 22 percent of the families receive Social Security income with a mean annual income from that source of $1,348 per family. Five percent of the families receive public assistance amounting to an average of $835 per family per year. The median income of all families in Carroll County on 1970 was $6,888 and per capita income was $2,311.

The distribution of family income over annual income categories is contained in Table No. 21. Fifty-two families have an annual income below $1,000. This is slightly more than two percent of all families in the county. On the other hand, only 39 families, or less than two percent, have an annual income in excess of $25,000. With a median annual income of $6,888, there are a significant number of families that can be classed in the economically deprived category even though they may not be considered below the poverty level.

Seventeen percent of all families in the county have incomes below

the poverty level. The mean family income per year for this group is $2,213 or $1,271 below the poverty level. About one out of five of these families receive public assistance. Twenty percent of the county population is in the below-the-poverty level families. These data are shown in Table No. 22.

Total personal income for selected years 1962 through 1970 is listed in Table No. 23. Since 1962 it has increased by 82 percent to a level of $24.4 million in 1970. Per capita income from all sources has also increased in that period by 67 percent. However, the county has fallen behind the Kentucky per capita income and has dropped two places from 22nd to 24th in state ranking. While the growth in personal income has been good in the county in the recent past it has not kept pace with income growth in the State. These latter statistics are shown in Table No. 24.

FUTURE ECONOMY

The economic future of Carroll County is going to be oriented toward manufacturing in continuance of the trends that have been established in the recent past. Agriculture will continue to be an important segment of the County's economy but to a lesser extent than it is today. And, while this shift in economic bases is well underway, it has not occurred in Carroll County as it has in the State as a whole. To improve the County's economic position in the State, it will be necessary to continue to attract new industry to the area and to expand job opportunities in existing plants.

The completion of I-71 through Carroll County connecting Louisville and Cincinnati will have a long-range beneficial effect on the County's economy. It will give access to Carroll County from these two large centers of population and employment. The abundant land in the area suitable for development for either residential or recreational purposes

could be a source of economic growth in the future because of the access improvements.

Retail trade, wholesale trade and services will continue to be an important source of economic activity and job opportunities in the future. Volume of trade and number of establishments will increase, primarily in and near Carrollton. The other three cities - Ghent, Sanders and Worthville - will register a more modest growth in this sector of the economy.

There will continue to be an adequate supply of both male and female labor that is ready and willing to work. Adequate land and services will also be available to support additional industry. An increase in personal income is needed in Carroll County and it will be industry and manufacturing from which it must come. The many advantages of the area are a potential source of economic wealth that will be increasingly applied in the future. A period of substantial increase in jobs and personal income is anticipated for Carroll County between now and the year 2000.

TABLE NO. 20

Type of Income of Carroll County, Kentucky Families
1970 - 2,307 Families

Type of Income	No. of Families	Mean Annual Income
Wage or Salary	1970	$7,064
Non-farm, self-employment	242	5,847
Farm, self-employment	451	2,592
Social Security income	504	1,348
Public Assistance - Public Welfare	120	835
Other	502	1,108

SOURCE: U.S. Bureau of Census

TABLE NO. 21

Distribution of Family Income in Carroll County, Kentucky - 1970
(2,307 Families)

Annual Income	Number of Families	Percent of All Families
Less than $1,000	52	2.25
$1,000 - $1,999	138	5.98
$2,000 - $2,999	177	7.67
$3,000 - $3,999	195	8.45
$4,000 - $4,999	193	8.37
$5,000 - $5,999	213	9.23
$6,000 - $6,999	209	9.06
$7,000 - $7,999	155	6.72
$8,000 - $8,999	176	7.63
$9,000 - $9,999	189	8.19
$10,000 - $11,999	278	12.06
$12,000 - $14,999	179	7.76
$15,000 - $24,999	114	4.94
$25,000 - $49,999	34	1.47
$50,000 or more	5	0.22
		100.00

Median income of all families = $6,888
Per capita income = $2,311

SOURCE: U.S. Bureau of Census

TABLE NO. 22

Characteristics of Carroll County, Kentucky Families with Income Below the Poverty Level - 1970

Characteristics	
No. of families	392
Percent of all families	17.0
Persons in families (number)	1,751
Percent of all persons	20.8
Mean family income ($)	2,213
Mean income deficit ($)	1,271
Receiving public assistance (%)	19.6
Mean size of family (persons)	3.89
With related children under 18 (families)	225
Mean number of related children under 18	2.85
Families with female head	71
Families with male head under 65	203
Income less than 75% of poverty level (families)	224
(persons)	1,009
Income less than 125% of poverty level (families	599
(persons)	2,446

SOURCE: U.S. Bureau of Census

TABLE NO. 23

Total Personal Income - Carroll County, Kentucky
Selected Years 1962 - 1970
(Thousands of Dollars)

Year	Total Personal Income
1962	$13,437
1966	20,253
1967	21,104
1968	21,980
1969	22,620
1970	24,390

SOURCE: Office of Business Development and Government Services, University of Kentucky

TABLE NO. 24

Per Capita Income - Carroll County and Kentucky
1966 - 1970

	Per Capita Income		Carroll County
Year	Carroll County	State of Kentucky	Rank in State
1962	$1,778	$1,751	22
1966	2,702	2,254	11
1967	2,795	2,409	11
1968	2,851	2,630	15
1969	2,840	2,847	24
1970	2,974	3,096	24

SOURCE: Office of Business Development and Government Services, University of Kentucky

CHAPTER V

LAND USE

The land in Carroll County was created out of the elevated ocean floor sharply cut by streams to form a "knobby" terrain intersperced with numerous streams and valleys. Tops of the knobs range between 800 to 900 feet above mean-sea-level. Valley floors generally range between 400 to 500 feet above mean-sea-level. Highest point in the county of 922 feet above mean-sea-level occurs at Mt. Hermon Church on Kings Ridge in the western part of the county. Low point of 420 feet above mean-sea-level is the normal pool of the Ohio River. A major topographic feature of Carroll County is the confluence of three major rivers in the county. The Ohio River flows along the northern boundary of the county and the Kentucky River and the Little Kentucky River join the Ohio River at Carrollton and Prestonville, respectively.

The climate is normal for the east-central part of the country. Mid-summer high temperatures average about 87° F. while mid-winter temperatures average just below 32° F. The growing season stretches from mid-April to late October and averages about 190 days in length.

Precipitation is predominantly frontal in origin with thunderstorms occurring throughout the spring and summer months. Mean average precipitation is approximately 44 inches. An average of 134 days a year have precipitation. Snowfall averages around 18 inches per year.

Carroll County is in the Outer Blue Grass sub-region of the Blue Grass Physiographic Region. Bedrock is Ordovician in age and composed of limestone. Sand and gravel deposits occur along the Ohio River and to a less extent along the Kentucky River. There are no known vein minerals, oil or gas deposits in Carroll County.

The topography of Carroll County is shown in Figure No. 6 along with the drainage basins. Types of soil found in Carroll County are located graphically in Figure No. 7. Each soil association's natural characteristics and its use capabilities are discussed in detail below.

DESCRIPTION OF SOILS FOUND IN CARROLL COUNTY

1. Wheeling-Huntington-Alluvial Land Association:

This association is the stream terraces and narrow flood plains along the Ohio River. The terraces are mostly fairly broad and nearly level with moderate-to-steep slopes along the breaks between the terraces and in locally dissected areas. The flood plains are fairly narrow and partially covered with backwater. This soil association lies along the entire northern border of Carroll County and constitutes about 10 percent of the land in the county. Wheeling soils make up approximately 60 percent of this association, Huntington about 12 percent, alluvial land about 9 percent, with minor soils accounting for the remaining 19 percent.

Wheeling soils are mostly on the stream terraces. The slopes are primarily level but some are moderately steep along the breaks between terraces. The soils are deep and well-drained with loamy-textured subsoils.

Huntington soils are nearly level. They also are deep, well-drained soils with loamy-textured subsoils.

Alluvial land is mainly located on the steep breaks between terraces and in the flood plains along the Ohio River bank.

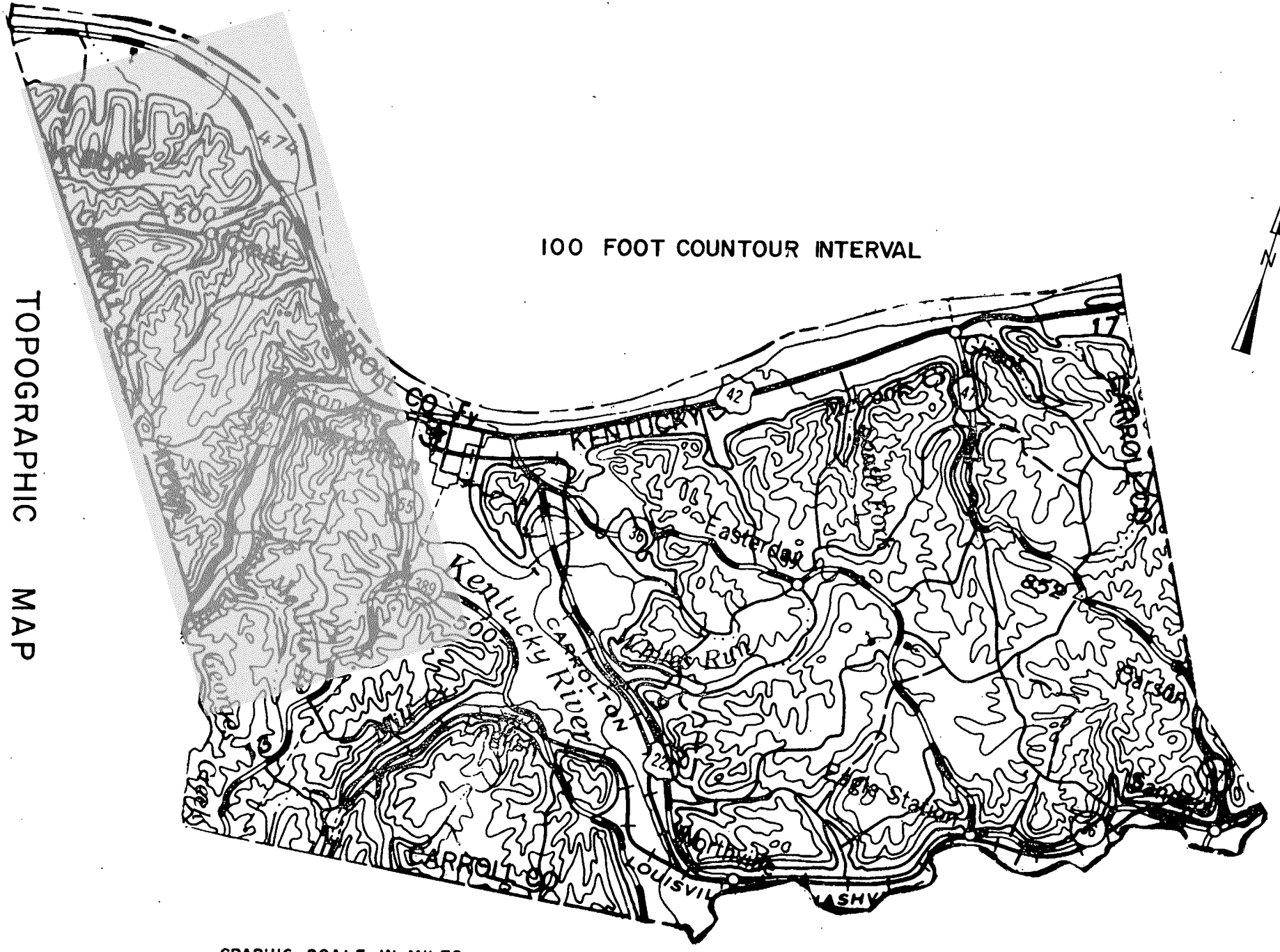
Much of the land in this association has been used for industrial and residential purposes. The towns of Carrollton, Ghent and Prestonville and several new factories are located on these soils. The soils are also well suited for agriculture and horticulture. Some areas are now used for gardens, commercial vegetables, corn, fruit trees and ornamental trees or flowers.

Gravel and sand is quarried in a few large quarries west of the Little Kentucky River.

2. Otwell-Nolin-Markland Association:

This soil association lies in the stream terraces and flood plains along the Kentucky River, Little Kentucky River and Eagle Creek. Terraces are narrow and gently sloping except for some steep slopes in locally dissected areas. Near the mouth of the Kentucky River, however, the terraces are broad and nearly level. These soils are in the central part of Carroll County and make up about 12 percent of the county's land area. Otwell soils are 24 percent of this association, Nolin soils are 20 percent, Markland is 13 percent, and various minor soils account for the remaining 43 percent.

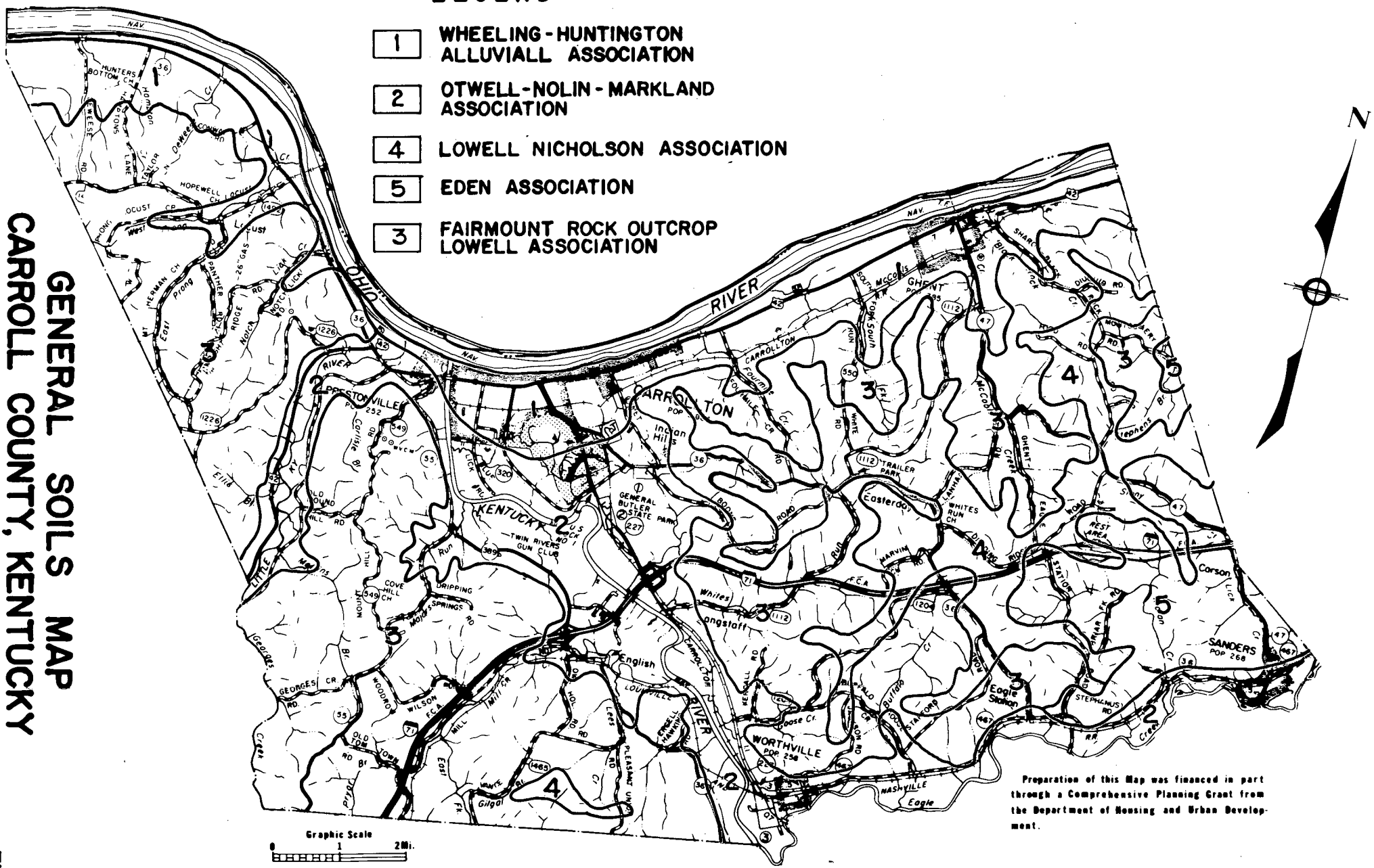
TOPOGRAPHIC MAP
CARROLL COUNTY, KENTUCKY



Preparation of this Map was financed in part through a Comprehensive Planning Grant from the Department of Housing and Urban Development.

FIGURE NO. 6

GENERAL SOILS MAP
CARROLL COUNTY, KENTUCKY



Preparation of this Map was financed in part through a Comprehensive Planning Grant from the Department of Housing and Urban Development.

FIGURE NO. 7

Otwell soils are nearly level-to-sloping soils on stream terraces. They are deep, moderately well drained with a fragipan.

Nolin soils are nearly level soils on the flood plains. They are deep, well drained soils with loamy-textured subsoils.

Markland soils are gently-to-steeply sloping soils on stream terraces. They too are deep, moderately-to-well drained soils with clayey-textured subsoils.

Most of the land in this association is suitable for general farming and is now being used for that purpose. Much of the farmed land is in grass but many areas are used for production of corn and tobacco. Large acreage, especially in the steeper locations is in deciduous trees or brush. General Butler State Park and several private recreation parks are located in this association.

3. Fairmount-Rock-Outcrop-Lowell Association:

This association is composed of gentle-to-steeply sloping soils having clayey-textured subsoils. They occur on hillsides and narrow ridges. The highly dissected uplands have narrow ridge tops and bottoms. Underlying the soils are thin beds of limestone and soft, calcareous shales. About 63 percent of Carroll County contains this soil association. Fairmount constitutes 48 percent of the association, Rock outcrop 29 percent, Lowell makes up 11 percent and 12 percent are minor soils.

Fairmount soils have moderate-steep to steep slopes and are shallow with a flaggy, clayey subsoil. The soil tends to be droughty with rapid runoff. Rock outcrops occur in many areas on the steeper slopes.

Lowell soils are gently to moderate-steep sloping soils on upper hillsides and ridgetops. They are deep, well drained soils with a clayey textured lower subsoil.

Most of the land in this association is in low quality trees or brush. The narrow areas on the ridge tops are in grass or tobacco. Very little corn is grown in these soils and some farms are now idle. The hillsides are usually too steep for farming and natural fertility is only moderate except on the ridge tops. Much of the farming is by part-time farmers who work off the farm. There is a low potential for either forestry or agriculture.

4. Lowell-Nicholson Association:

These are gently to moderately-steep sloping soils having a loamy, clayey-textured subsoil. They occur on upper hillsides and on fairly broad ridges. The soils are underlain by limestone, calcareous shales and beds of siltstone.

Only about 9 percent of Carroll County contains Lowell-Nicholson Association soils. Lowell is 65 percent, Nicholson 24 percent and minor soils are 11 percent of this Association.

Lowell soils are moderately steep on hillsides and gently-sloping-to sloping on the ridge tops. The soils are deep and well drained with a clayey-textured lower subsoil.

Nicholson soils are gently sloping soils on broad ridge tops. They are also deep, moderately-well-to-well drained with a fragipan.

Most of this association is in farms. Grass is primarily grown but on the more level land, corn and tobacco are produced. The soils are generally suitable to several types of farming.

5. Eden Association:

Eden Association soils lie moderately steep to steep on hillsides and narrow ridges in highly dissected uplands. They have clayey-textured subsoils underlain by soft calcarious shale with thin layers of limestone and beds of siltstone.

About 6 percent of Carroll County has Eden Association soils which are composed of 90 percent Eden soils and 10 percent minor soils.

Eden soils are deep and somewhat droughty with rapid runoff. Approximately two-thirds of the land in this soil association is in grass which is used for hay or pasture. The other one-third is in trees or brush. Slopes are generally too steep for row crops, however, there are some small gardens and tobacco crops. There is a potential for range-type grazing but farms currently are small. Tobacco is the main cash crop.

GROUND AND SURFACE WATER

The predominant feature of water resources in Carroll County is the Ohio River. At this point the river has a drainage area of over 83,000 square miles, which is 2.3 percent of the total area of the United States, and a maximum flow of 320,000 cubic-feet-per-second. In addition is the Kentucky River with a drainage area of nearly 6200 square miles and a peak discharge of 123,000 cubic-feet-per-second. The Little Kentucky River adds a substantial drainage area and flow of water to the surface water runoff in Carroll County. In the east part of the county the surface water drains into the Ohio River by way of several small streams.

Excellent supplies of ground water are available adjacent to the Ohio River where wells will yield up to 500 gallons per minute of good quality water. Along the Kentucky River and Eagle Creek wells will yield up to 5 gallons per minute. Along creek bottoms wells will yield up to 500 gallons per day. All ground water in Carroll County is hard or very hard. At depths below 100 feet the water may contain salt or hydrogen sulfide.

PRESENT LAND USE

The principal land use on an acreage basis in Carroll County is agriculture. In 1970 the county's land was inventoried by type of land use. Total land area and the inventory acreage is presented in Table 25 below.

TABLE NO. 25

TOTAL LAND AREA IN CARROLL COUNTY, KENTUCKY

Type of Land Use	Acres	Percent
Other	3616	4.3
Forest	26600	32.0
Pasture	28968	34.8
Cropland	20272	24.4
Small Water Areas	297	0.4
Urban and Built-up	3447	4.1
Total Land Area	83200	100.0

Source: Kentucky Soil and Water Conservation Needs Inventory, 1970.

Inventoried land was divided into the four categories of cropland, pasture and range, forest and other. Total acreage in each of these groups are shown by sub-groups in Table 26, below.

TABLE NO. 26

TOTAL LAND IN AGRICULTURE IN CARROLL COUNTY, KENTUCKY, 1970

Type of Land Use	Acres	Percent
Cropland	20272	
Row Crops	5270	6.6
Close Grown Crops	648	0.8
Hay and Pasture Rotation	2283	2.9
Hayland	9612	12.1
Conservation Cropland	2359	3.0
Idle Cropland	0	0
Orchards, Vineyards	0	0
Open Land (Formerly Cropped)	100	0.1
Pasture and Range	28968	
Pasture	28968	36.5
Range	0	0
Forest	26600	
Commercial	25764	32.4
Non-commercial	836	1.0
Other Land in Farms	2759	3.5
Other Land Not in Farms	857	1.1
	79456	

Source: Kentucky Soil and Water Needs Inventory, 1970

Agricultural land has been rated by capability for agricultural uses. Eight capability classes were established in the inventory. These classes are described in Table No. 27 and acreage and percentage for each class are shown.

TABLE NO. 27

AGRICULTURE LAND BY LAND CAPABILITY CLASS
CARROLL COUNTY, KENTUCKY

Class	Class Capability Description	Acres	Percent of Total
I	Few limitations that restrict soil for agricultural use.	9103	11.4
II	Soils have some limitations that reduce the choice of plants or require moderate conservation practices.	8234	10.4
III	Soils in this class have severe limitations that reduce the choice of plants and or require special conservation practices.	13628	17.1
IV	Soils in this class have very severe limitations that restrict the choice of plants and/or require very careful management.	7194	9.1
V	Limited largely to use as pasture, woodland, or wildlife food and cover.	0	0
VI	Generally unsuitable for cultivation, with use limited to pasture, woodland, or wildlife cover.	17319	21.8
VII	Very severe limitations, with the land being suitable only for grazing, woodland, or wildlife cover.	23978	30.2
VIII	Limitations preclude the land being used for commercial plant production, being restricted primarily to recreation, wildlife, or aesthetic purposes.	0	0
		79456	100.0

SOURCE: Kentucky Soil and Water Conservation Needs Inventory 1970.

The uses to which the land in each of the land capability classes has been put is presented in the following table. Total land in agricultural use is broken down by the four categories established in the inventory.

TABLE NO. 28

TOTAL LAND IN AGRICULTURE BY LAND USE AND CAPABILITY CLASS
CARROLL COUNTY, KENTUCKY

Land Capability Class	Total Cropland	Pasture	Forest	Other Land	Total
I	6357	1319	0	1427	9103
IIE	4386	1547	51	381	6365
IIIE	3650	6138	129	238	10155
IVE	1378	4457	549	333	6717
VIE	428	9640	7061	190	17319
VIIE	48	4548	18268	190	23054
IIW	1030	227	154	48	1459
IIIW	2248	955	32	238	3473
IVW	477	0	0	0	477
IIS	174	137	51	48	410
VIIS	96	0	305	523	924
Total	20272	28968	26600	3616	79456

Subclass E - Susceptible to erosion
Subclass W - Excessive water in soil
Subclass S - Rootzone limitations, shallow and stony

SOURCE: Kentucky Soil and Water Conservation Needs Inventory 1970.

The Carroll County Soil Survey has classified soil by agriculture suitability that is analogous to the land capability classes. Soil Association 1, the Wheeling-Huntington-Alluvial land association has a "high" potential for cropland. Soil Association 2, the Otwell-Nolin-Markland Association has a "good" potential for cropland. Soil Association 3, the Fairmont-Rock Outcrop-Lowell Association, has a "good" potential for woodland. Soil Association 4, the Lowell-Nicholson Association has "fair" potential for cropland. And Soil Association 5, the Eden Association, has

"good" potential for pasture land. These suitability ratings are shown in Figure No. 8 and summarized in Table No. 29.

TABLE NO. 29
CARROLL COUNTY, KENTUCKY
AGRICULTURE LAND BY SUITABILITY CLASS

Suitability Class	Capability Class *	Suitability Description	Acres	Percent of Total
1	I	High potential-cropland	10,870	13.1
2	II	Good potential-cropland	14,770	17.7
3	VI, VII	Good potential-woodland	42,570	51.2
4	III, IV	Fair potential-cropland	9,680	11.6
5	VI, VII	Good potential-pastureland	5,310	6.4
			83,200	100.0

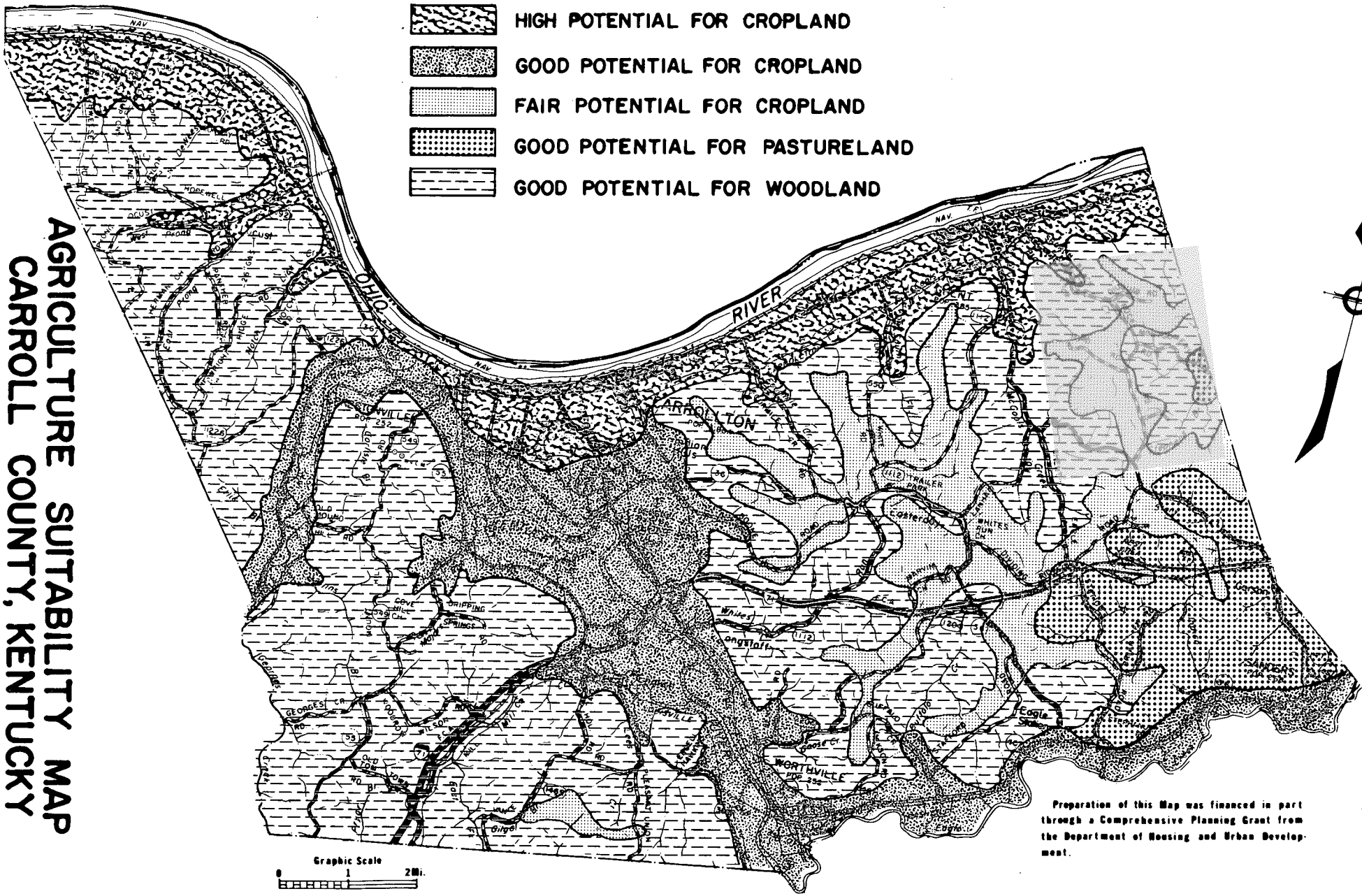
*See table No. 27 for Capability Class Description

Source: Interim Soil Survey Report of Carroll-Gallatin-Owen Counties
U.S.D.A. Soil Conservation Service

While agriculture is the predominant land use on an acreage basis, most of the activity generated by land use in Carroll County takes place on the urban and built-up lands. Even though land in this category accounts for only 4.1 percent of all land in the county, the intensity of activity on these lands make them the most important lands. The built-up portion is distributed over the developed areas outside the boundaries of the five incorporated cities in the county and is graphically presented in Figure No. 9, the Existing Land Use Map for Carroll County, Kentucky. The urban portion of this category was inventoried in depth to further breakdown the land into urban use classes. Urban land uses for each of the incorporated areas in the county are shown in Figure No. 10. (Figures No. 9 and 10 may be found inside the rear cover of this report.)

A tabular summary of the present day distribution of urban land use is set forth in Table No. 30 that follows.

AGRICULTURE SUITABILITY MAP
CARROLL COUNTY, KENTUCKY



Preparation of this Map was financed in part through a Comprehensive Planning Grant from the Department of Housing and Urban Development.

FIGURE NO.8

TABLE NO. 30

SUMMARY OF URBAN LAND USE IN CARROLL COUNTY, KENTUCKY

(Acres)
1973

City	Single-Family Residential	Multi-Family Residential	Mobile Homes	Commercial	Public and Semi-Public	Industrial	Warehousing	Streets, Alleys and Railroads	Vacant and Agriculture	Total developed Land	Total Land
Carrollton	297.4	11.8	4.3	52.2	98.9	58.2	44.8	152.4	581.0	720.0	1301.0
Ghent	48.4	0	0.4	1.7	13.5	1.6	1.0	35.6	356.1	102.2	458.3
Prestonville	16.8	0	0.9	4.4	0.9	6.2	0	11.0	110.6	40.2	150.8
Sanders	26.1	0	3.3	1.2	2.5	0	6.3	24.0	109.8	63.4	173.2
Worthville	19.7	0	0.4	1.5	2.0	0	0	24.8	120.6	48.4	169.0
Total	408.4	11.8	9.3	61.0	117.8	66.0	52.1	247.8	1278.1	974.2	2252.3

Source: Watkins and Associates, Inc.

Developed urban land in each of the cities has been broken down into the various categories of land use mentioned above on a percentage basis to facilitate comparison between cities in Carroll County. These data are shown below in Table No. 31.

TABLE NO. 31

LAND USE AS A PERCENTAGE OF DEVELOPED URBAN LAND IN CARROLL COUNTY, KENTUCKY 1973

City	Single-Family Residential	Multi-Family Residential	Mobile Homes	Commercial	Public and Semi-Public	Industrial	Warehousing	Streets, Alleys and Railroads	Total Developed Land
Carrollton	41.3	1.6	0.6	7.3	13.7	8.1	6.2	21.2	100.0
Ghent	47.4	0	0.4	1.6	13.2	1.5	1.0	34.9	100.0
Prestonville	41.8	0	2.1	10.9	2.2	15.5	0	27.5	100.0
Sanders	41.3	0	5.1	1.9	3.9	0	9.9	37.9	100.0
Worthville	40.6	0	0.9	3.1	4.1	0	0	51.3	100.0
Total	41.9	1.2	0.9	6.3	12.1	6.8	5.4	25.4	100.0

Source: Watkins and Associates, Inc.

LAND USE ANALYSIS

The topography and physiography of the land in Carroll County and the climatic conditions in which it exists have combined to shape the economic potentiality of the land. Certain advantages and some disadvantages have been built into the land that must be properly understood and utilized in the development of future land use plans. This following analysis of present land use will attempt to bring to light these characteristics that have largely shaped the potential of Carroll County's land.

Due to the "knobby" terrain the only level land in Carroll County lies in the valleys and along side the streams flowing there. Level land is almost exclusively confined to the Ohio River valley and to the Kentucky River valley

in the county. Approximately 14,000 acres, or 17 percent of the land is level. Nearly 2300 acres of the level land is already developed as part of the present urban land.

The same natural forces that created the level land in the midst of the knobs also caused this land to be the most productive agricultural land. A majority of the 17,000 acres of the best agricultural land, in land capability classes I and II, lies along the stream valleys where the land is level. Thus, most of the level land referred to above is also prime agriculture land.

Moreover, the level land in the stream valleys is alluvium washed down from higher elevations by stream action. This has created extensive deposits of sand and gravel, particularly adjacent to the Ohio River. These deposits constitute the only commercially exploitable minerals in Carroll County. Presently, sand and gravel is being extracted in the western part of the county.

The fact that the level land is also desirable for agricultural use as well as for the development of the sand and gravel deposits contained in them, indicates that future land use plans will center around the proper allocation of the level lands to the various competing land uses. It is extremely important to the future well being of Carroll County that sound procedures be established to guide the development of the level lands.

This is not to say that the remaining 83 percent of the land in Carroll County should not be included in future land use plans. Quite the contrary, these lands are also of great importance to the county's people and should be incorporated into an overall land use plan. However the potential uses of the more hilly terrain tend to be confined to low intensity development that deemphasizes competition between valid uses of these lands.

TABLE NO. 32
DEVELOPMENT LIMITATIONS OF SOILS IN CARROLL COUNTY

Soil Map Number	Soil Series	Type of Development										
		Septic Tank Filter Field	Sewage Lagoon	Sanitary Landfill	Shallow Excavation	Low Building Foundation	Tent and Trailer Camping Areas	Street or Low-cost Road	Playground	Play and Picnic Area	Lawn and Landscaping	Path or Trail
1	Wheeling	Slight to severe: slope	Severe: rapid permeability	Slight to severe: slope	Slight to severe: slope	Slight to severe: slope	Slight to severe: slope	Slight to severe: slope	Slight to severe: slope	Slight to severe: slope	Slight to severe: slope	Slight to moderate: slope
	Huntington	Severe: floods	Severe: floods	Severe: floods	Slight	Severe: floods	Moderate: floods	Severe: floods	Severe: floods	Moderate: floods	Moderate: floods	Moderate: floods
	Alluvial	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope
2	Otwell	Severe: Water Table & perm.	Moderate to Severe: Floods & slope	Severe: Water Table & Floods	Moderate: Slope & Water Table	Moderate to severe: Slope & Water Table	Severe: Floods & perm.	Moderate: slope & Water Table	Severe: Slope & permeability	Slight to moderate: slope	Slight to moderate: slope	Moderate: Water Table
	Nolin	Severe: floods	Severe: floods	Severe: floods	Slight	Severe: floods	Moderate: floods	Severe: floods	Severe: floods	Moderate: floods	Moderate: floods	Moderate: floods
	Markland	Severe: Water Table Perm.	Moderate to severe: slope	Severe: clay subsoil	Severe: Slope & clay subsoil	Severe: High Shrink-Swell	Moderate to severe: Slope & perm.	Severe: High Shrink-Swell	Moderate: slope & perm.	Slight to severe: slope	Slight to severe: slope	Slight to severe: slope
3	Fairmount	Severe: Slope & Bedrock	Severe: Slope & Bedrock	Severe: Slope & Bedrock	Severe: Slope & Bedrock	Severe: Slope & Bedrock	Severe: Slope & Rock	Severe: Slope & Bedrock	Severe: Slope & Bedrock	Severe: Slope & Bedrock	Severe: Slope & Bedrock	Moderate to severe: Slope & rock
	Lowell	Severe: Slope & Permeability	Moderate to severe: slope & Bedrock	Severe: Clay subsoil & slope	Severe: Clay subsoil & slope	Severe: Slope & High Shrink-Swell	Moderate to severe: Slope & Permeability	Severe: High Shrink-Swell	Moderate to severe: slope & Permeability	Slight to severe: slope	Slight to severe: slope	Slight to moderate
4	Lowell	Severe: Slope & Permeability	Moderate to severe: slope & Bedrock	Severe: Clay subsoil & slope	Severe: Clay subsoil & slope	Severe: Slope & High Shrink-Swell	Moderate to severe: Slope & Permeability	Severe: High Shrink-Swell	Moderate to severe: slope & Permeability	Slight to severe: slope	Slight to severe: slope	Slight to moderate
	Nicholson	Severe: Permeability	Severe: floods	Severe: floods	Slight	Severe: floods	Moderate: floods	Severe: floods	Severe: floods	Moderate: floods	Moderate: floods	Moderate: floods
5	Eden	Severe: slope & Perm.	Severe: slope	Severe: slope & Clay Subsoil	Severe: slope & Clay Subsoil	Severe: Slope & High Shrink-Swell	Severe: slope	Severe: slope & High Shrink-Swell	Severe: slope	Severe: slope	Severe: slope	Moderate to severe: slope

Source: Interim Soil Survey Report of Carroll-Gallatin-Owen Counties, U.S.D.A. Soil Conservation Service

While the upland terrain may be short on agricultural capability, mineral resources, and level building sites, it can support a wide variety of beneficial land uses where there is no danger of flooding as there is in the valley floors. At present these lands are primarily used for pastures and forests. In the future this could be expanded to recreational use and small clusters of residences. There should be little future pressure to convert these low intensity lands to high intensity development.

Development limitations of soils in Carroll County as determined by the Soil Conservation Service are summarized in Table No. 32. Limitations for eleven types of development are included, covering a wide range of land uses more intense than agricultural use. The level of limitation varies from slight through moderate to severe. Only the Wheeling, Huntington, Otwell, Nolin and Markland soil series offer developmental possibilities. These soils are located in areas 1 and 2, (see Figure No. 7, the General Soils Map) the flood plains of the rivers in Carroll County, which restricts the acreage that is suitable for development except where the possibility of periodic flooding can be eliminated. This fact indicates that flood plain management will play an important role in the future use of land in Carroll County.

Private land development policies in the Carrollton area have been controlled by the Subdivision and Zoning Ordinances adopted in 1969. In the county, private development has been geared to meet the needs for new facilities as expressed by the needs of the citizens. Public improvements have mainly involved the extension of services to satisfy valid demands for service by developers. The area has been characterized more by a lack of expressed public policy rather than by a clearly stated goal or objective to guide the allocation of land among the various uses desiring to develop the land.

CHAPTER VI

LAND USE PLAN

A land use plan is essentially a scheme to allocate among the several identified types of land use the land in Carroll County including the urban and built-up areas. In accomplishing this purpose the following five concepts come into play: (1) Land should be made available to accommodate the future growth and development predicted for the population and economy of the study area; (2) Up-grading of present agriculture and conservation land to higher intensity uses should be in accordance with natural economic forces and with the awareness that prime agricultural land is a scarce commodity in Carroll County; (3) Guidelines (standards) are necessary to the proper allocation of land between competing land uses; (4) A land use plan is a prerequisite to the development of land use controls, and (5) Development should be controlled in special flood hazard areas to guarantee that flood prone areas are eligible for the Federal flood insurance program.

The land use analysis presented in the last part of the preceding chapter indicates that the implementation of the aforementioned concepts will mainly occur in the level lands in Carroll County, which constitute only 17 percent of the total county land area. Comparing existing land use in the present urban and built-up areas of the county with current and future population and economic indices lead to estimates of future area requirements for the various land uses. This first step in the development of the land use plan is contained in Table No. 33 below. The year 2000 has been determined to be the target year for the future land use plan.

TABLE NO. 33

POPULATION AND ECONOMIC INDICES OF LAND AREA
CARROLL COUNTY, KENTUCKY

Type of Land Use	Acres per 1000 pop.	Acres per 1000 workers[2]	1970 Acres[1]	Min. Acres Required in 2000	
				Pop.	Work
Single-Family Residential	47.9	137.0	408.4	540	594
Multi-Family Residential	1.4	4.0	11.8	16	17
Mobile Homes	1.1	3.1	9.2	12	13
Commercial	7.2	20.5	61.0	81	89
Public and Semi-Public	13.8	39.5	117.7	156	171
Industrial	19.4	55.5	165.5	219	241
Streets and Alleys	23.5	67.3	200.6	265	292
Total Developed Land	114.3	326.7	974.1	1291	1417

[1]Includes railroads and warehouses.

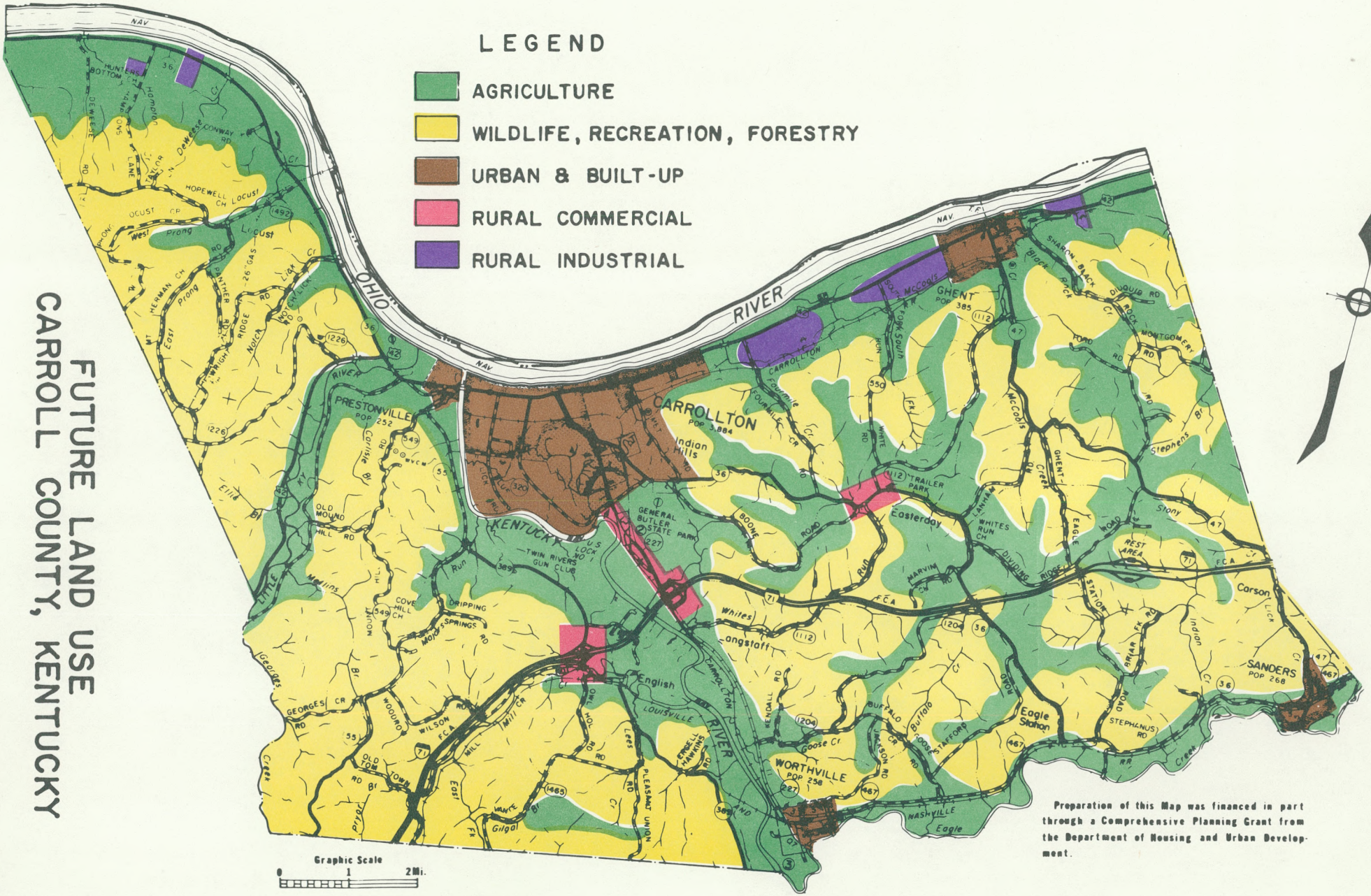
[2]Employed persons aged 16 years and older.

The above data indicates the minimum acres required to accommodate the anticipated population and economy based on projection of the existing land use ratios. For future planning purposes acreage exceeding the minimum requirements for each type of land use will have to be provided to allow potential land developers reasonable choices in the location of future developments.

Particular attention was given to the existing urban and built-up areas in allocating future land uses in Carroll County. It is anticipated that the future population and economy will be concentrated in the Carrollton urban area and the

other three incorporated communities in the county. Since each of these communities lie in the level lands that also have good to high potential for agricultural purposes the taking of additional land adjacent to the communities to satisfy the future land requirements involves the second concept presented earlier; that of up-grading agriculture land to higher intensity uses in accord with prevailing economic forces.

To guide in the application of this concept a county general land use plan was prepared based primarily on the agriculture suitability of the county's land (See Figure No. 8.) Five categories of land use were established: (1) agriculture, (2) conservation, (3) rural industrial, (4) rural commercial, and (5) urban and built-up. Land that has a cropland potential was classified as agriculture land and land with a pasture-woodland potential was classified as conservation land. Rural industrial land was located in areas where rural industry now exists and where major industrial development would be likely in the future, considering the demand for land and the availability of utilities at the sites. Rural commercial land was planned at three locations on the major roads in the county where localized commercial activity is likely. Urban and built-up land area is sufficient to satisfy the land requirements generated by the projected population and economy adjacent to the existing urban and built-up areas. No new built-up areas are anticipated by the year 2000. The Carroll County Future Land Use Map is shown in Figure No. 11 . A summary of the land area allocated to each general use is presented in Table No. 34 following.



FUTURE LAND USE
CARROLL COUNTY, KENTUCKY

Preparation of this Map was financed in part through a Comprehensive Planning Grant from the Department of Housing and Urban Development.

FIGURE NO. II

TABLE NO. 34

Future General Land Use, Year 2000

Carroll County, Kentucky

Type of Land Use	Acres	Percent
Agriculture	27,470	33.0
Conservation	49,472	59.5
Rural Industrial	290	0.3
Rural Commercial	1,002	1.2
Urban and Built-Up	5,016	6.0
Total Land Area	83,200	100.0

Allocation of available land suitable for development to the various land uses that are competing for the use of the land is an essential part of a land use plan, particularly in the urban and built-up areas where the competition is strongest. To guide in the amounts of land to be set aside for each land use in the urban and built-up areas in Carroll County, the following minimum desirable standards of land use density shown in Table No. 35 were applied.

TABLE NO. 35

Minimum Desirable Standards of Land Use Density
for Carroll County, Kentucky

Type of Land Use	Land Use Density
Residential	
Single-Family	67 net acres per 1000 population
Multi-Family	1.3 net acres per 1000 population
Mobile Homes	2.8 net acres per 1000 population
Commercial	10 net acres per 1000 population
Industrial	25 net acres per 1000 workers
Public-Semi-Public	25 net acres per 1000 population
Streets and Alleys	20 to 25 percent of net developed area

Source: Watkins and Associates, Inc.

The land area minimum requirements for each developed land use in the Carroll County urban areas as derived from application of the preceding standards are presented in Table No. 36 that follows.

TABLE NO. 36

Minimum Land Area Required in the Carroll County Urban and Built-Up Areas, 2000

		Minimum Net Acres of Land Required				
	Area	Carroll-ton	Ghent	Preston-ville	Sanders	Worth-ville
Future Population	(1000's)	6.5	0.6	0.4	0.4	0,4
Land Use						
Residential						
Single-Family		436	40	27	27	27
Multi-Family		9	1	0	0	0
Mobile Homes		18	2	1	1	1
Commercial		65	6	4	4	4
Industrial		65	16	8	8	8
Public-Semi-Public		163	15	10	10	10
Total Developed Land		756	80	50	50	50
Streets and Alleys @ 25%		189	20	13	13	13

The above data establishes the minimum amount of land for each category of land use; however, more than the minimum amount should be allocated to provide an excess of land in each category so that future land developers will have a reasonable choice of locations and to take care of any unforeseen demands for land in any of the communities. Since the land use map eventually becomes part of land use controls that may be set up, it is important that the future land use plan have some built-in flexibility. Considering this, and the fact that future development in special flood hazard areas will be severely limited due to the necessity of controlling construction in the flood plain, land in each of Carroll County's communities was allocated to the various land use using the minimum values as a guide. Table No. 37 contains a summary of the acreage in each land use as included in the Future Land Use Plan for the year 2000 for each of the five cities and for the county.

TABLE NO. 37
SUMMARY OF FUTURE LAND USE IN CARROLL COUNTY, KENTUCKY

GHENT LAND USE

TYPE OF LAND USE	Acreage 1970	Acreage 2000	2000 % Developed Land	2000 % Total Land
Single-Family Residential	48.36	156.71	49.78	33.56
Multi-Family Residential	0.00	2.00	0.64	0.43
Mobile Home Park	0.41	3.00	0.94	0.64
Commercial	1.68	7.87	2.50	1.69
Public & Semi-Public	13.47	18.37	5.84	3.93
Industrial (Including RR)	11.48	63.89	20.30	13.68
Warehousing	1.01			
Streets and Alleys	25.71	62.96	20.00	13.48
Total, Developed Land	102.12	314.80	100.00	67.41
Vacant, Agriculture & Conservation	356.15	152.20		32.59
TOTAL LAND	458.27	467.00		100.00
Population	385	590		

PRESTONVILLE LAND USE

TYPE OF LAND USE	Acreage 1970	Acreage 2000	2000 % Developed Land	2000 % Total Land
Single-Family Residential	16.82	58.41	45.44	38.56
Multi-Family Residential	0.00	0.00	0.00	0.00
Mobile Home Park	0.85	1.38	1.07	0.91
Commercial	4.40	15.61	12.14	10.30
Public & Semi-Public	0.87	11.61	9.03	7.66
Industrial	6.23	15.84	12.32	10.45
Warehousing	0.00			
Streets and Alleys	11.05	25.71	20.00	16.97
Total, Developed Land	40.22	128.56	100.00	84.85
Vacant, Agriculture & Conservation	110.61	22.96		15.15
TOTAL LAND	150.83	151.52		100.00
Population	252	370		

SANDERS LAND USE

TYPE OF LAND USE	Acreage 1970	Acreage 2000	2000 % Developed Land	2000 % Total Land
Single-Family Residential	26.15	109.02	64.45	46.97
Multi-Family Residential	0.00	0.00	0.00	0.00
Mobile Home Park	3.26	1.00	0.59	0.43
Commercial	1.22	4.12	2.44	1.78
Public & Semi-Public	2.49	10.05	5.94	4.33
Industrial (Including RR)	13.74	11.13	6.58	4.80
Warehousing	0.00			
Streets and Alleys	16.55	33.83	20.00	14.56
Total, Developed Land	63.41	169.15	100.00	72.87
Vacant, Agriculture & Conservation	109.80	62.96		27.13
TOTAL LAND	173.21	232.11		100.00
Population	268	410		

WORTHVILLE LAND USE

TYPE OF LAND USE	Acreage 1970	Acreage 2000	2000 % Developed Land	2000 % Total Land
Single Family, Residential	19.67	77.78	50.33	27.48
Multi-Family Residential	0.00	0.00	0.00	0.00
Mobile Home Park	0.42	1.00	0.65	0.35
Commercial	1.50	5.44	3.52	1.92
Public & Semi-Public	1.98	11.52	7.46	4.09
Industrial (Including RR)	11.38	20.75	13.43	7.33
Warehousing	0.00			
Streets and Alleys	13.43	38.03	24.61	13.44
Total, Developed Land	48.38	154.52	100.00	54.61
Vacant, Agriculture & Conservation	120.64	128.42		45.39
TOTAL LAND	169.02	282.94		100.00
Population	258	390		

SUMMARY

CARROLL COUNTY FUTURE LAND USE

TYPE OF LAND USE	Acreage 1970	Acreage 2000	2000 % Developed Land	2000 % Total Land
Single-Family Residential	408.39	1316.29	36.34	26.25
Multi-Family Residential	11.75	136.07	3.76	2.72
Mobile Home Park	9.18	73.41	2.03	1.46
Commercial	61.03	125.79	3.47	2.51
Public & Semi-Public **	117.67	836.04	23.09	16.67
Industrial (Including RR)	119.64	455.50	12.58	9.08
Warehousing	45.85	*	*	*
Streets and Alleys	200.58	678.21	18.73	13.52
Total, Developed Land	974.09	3621.31	100.00	72.21
Vacant, Agriculture & Conservation	1278.23	1393.86		27.79
TOTAL LAND	2252.32	5015.17		100.00

* Included in Industrial Land use.
** Includes 672 acres of public land in General Butler State Park.

CARROLLTON LAND USE

TYPE OF LAND USE	Acreage 1970	Acreage 2000	2000 % Developed Land	2000 % Total Land
Single-Family Residential	297.39	916.44	42.00	28.55
Multi-Family Residential	11.75	134.07	6.14	4.18
Mobile Home Park	4.24	67.03	3.07	2.09
Commercial	52.23	92.75	4.25	2.89
Public & Semi-Public *	98.86	110.42	5.06	3.44
Industrial (Including RR)	76.81	343.89	15.76	10.71
Warehousing	44.84			
Streets and Alleys	133.84	517.68	23.72	16.13
Total, Developed Land	719.96	2182.28	100.00	67.99
Vacant, Agriculture & Conservation	581.03	1027.32		32.01
TOTAL LAND	1300.99	3209.60		100.00
Population	3884	6470		

* Does not include General Butler State Park.

The future land use for Carrollton, Ghent, Prestonville, Sanders, and Worthville is also shown graphically in Figures 12A-12D. A discussion of the proposed land use arrangement for each community is presented below:

Carrollton: Between 1970 and 2000 the population of Carrollton is expected to increase by 67 percent. Approximately 800 to 1000 new homes will be required in addition to new homes needed to replace housing that will be removed from service during this period. New residential land areas will be required for the new homes. Since the present developed areas in Carrollton covers substantially all of the available land in the existing corporate limits and expansion is curtailed on the north, west and south, the only solution is to expand to the east. An adequate supply of prime residential land out of the flood hazard area is available east of Kentucky Highway 227 and south of the Carrollton Railroad. Future development will take place in and adjacent to this area and it will be necessary to extend the municipal services and street system eastward to serve the growth area. Particular attention should be devoted to these extensions to ensure that the growth area is functionally tied to the existing City of Carrollton. The present central school campus is located adjacent to the new growth area and the provision of school service should be no problem.

A substantial amount of new industrial land has been planned north of the residential area and next to existing industrial development. New commercial land has also been planned, mainly in the corridor that connects the east side of town with the west side.

Ghent: The population of Ghent is projected to increase from 385 in 1970 to 590 in 2000. There should also be a substantial increase in local economic activity. To support the expected population and economy it will be necessary to realign the existing land use pattern; however, major expansion of the community's boundaries will not be necessary since there is now considerable acreage of vacant or agriculture land that can be converted to residential or industrial use. Thus, the future land use plan proposes only a modest increase in land area of approximately nine acres by expanding eastward a few hundred feet. Residential land is more than tripled in the proposed land use plan. Commercial, industrial, public and street land uses are increased at an even greater ratio. These alterations in the land use pattern take place by elevating presently vacant land to a higher intensity land use so that the amount of vacant land is reduced nearly 60 percent in the future plan. There should not be any problems in expanding community facilities to meet requirements of the proposed land use plan.

Prestonville: All of the Prestonville community lies from 10 feet to 20 feet below the level of the 100-year flood and is thus a special flood hazard area. Future development in the area will probably be severely controlled and limited. Consequently, no increase in land area is proposed for Prestonville in the future land use. It is expected, however, that development controls will be established that will permit construction of some new facilities in the community. To meet the land needs the future land use plans show substantial increases in developed land area accompanied by a 79 percent reduction in vacant and agriculture land. This does not imply that the land should be developed but does provide a plan that accommodates future development if and when it does occur.

LEGEND

- RESIDENTIAL
- COMMERCIAL
- PUBLIC & SEMI-PUBLIC
- INDUSTRIAL
- CONSERVATION AGRICULTURE & VACANT
- LIMITED DEVELOPMENT
- URBAN AREA BOUNDARY

GRAPHIC SCALE IN FEET

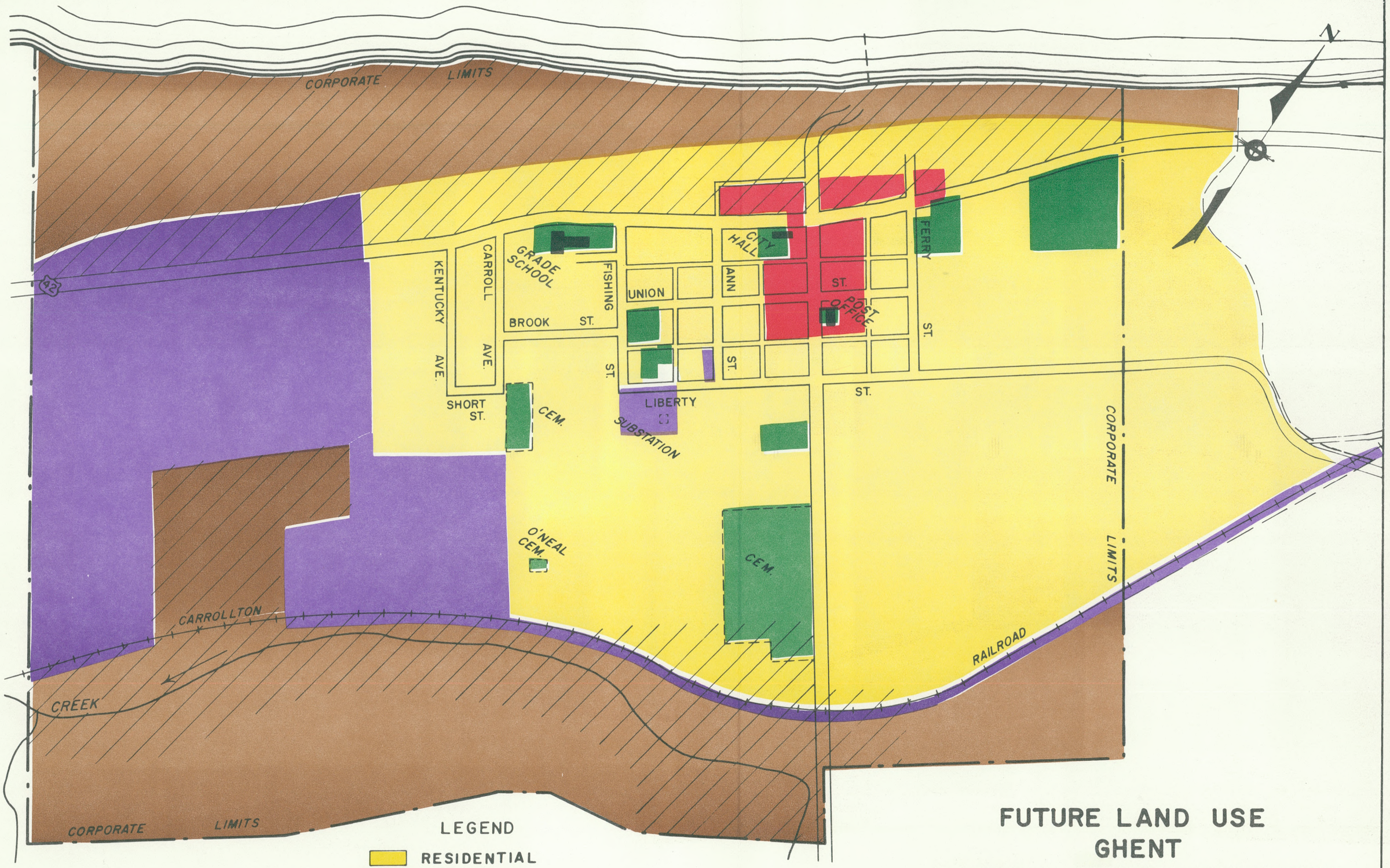
1000 0 1000 2000 3000 FEET

Preparation of this Map was financed in part through a Comprehensive Planning Grant from the Department of Housing and Urban Development.

FUTURE LAND USE
CARROLLTON
INCLUDING PRESTONVILLE
CARROLL COUNTY, KENTUCKY

BY: WATKINS & ASSOCIATES, INC.

FIGURE NO. 12-A



LEGEND

- RESIDENTIAL
- COMMERCIAL
- PUBLIC & SEMI-PUBLIC
- INDUSTRIAL
- CONSERVATION AGRICULTURE & VACANT
- SPECIAL FLOOD HAZARD
- URBAN AREA BOUNDARY

500 0 500 1000 FEET

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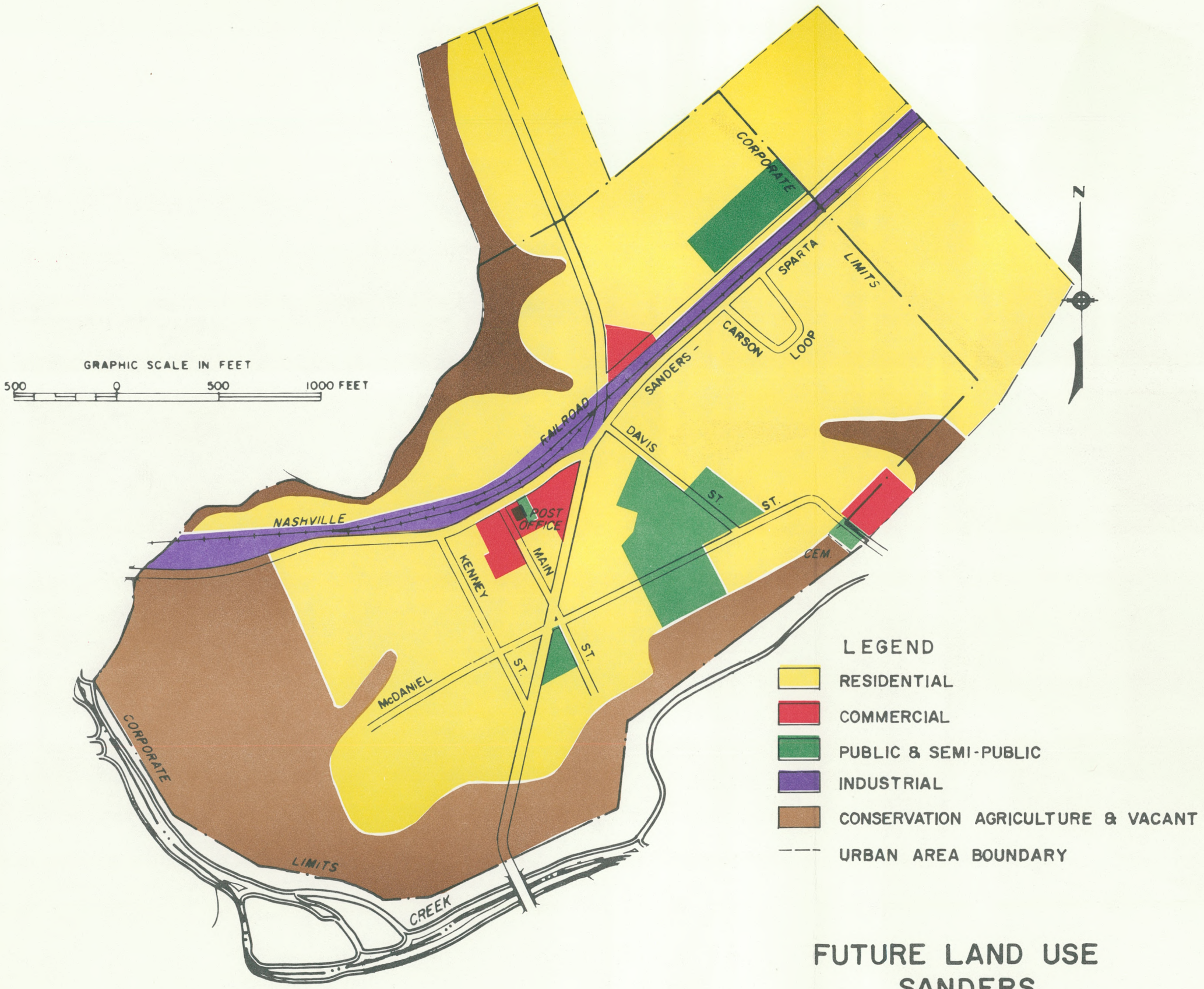
FUTURE LAND USE
GHENT
CARROLL COUNTY, KENTUCKY

BY: WATKINS & ASSOCIATES, INC.

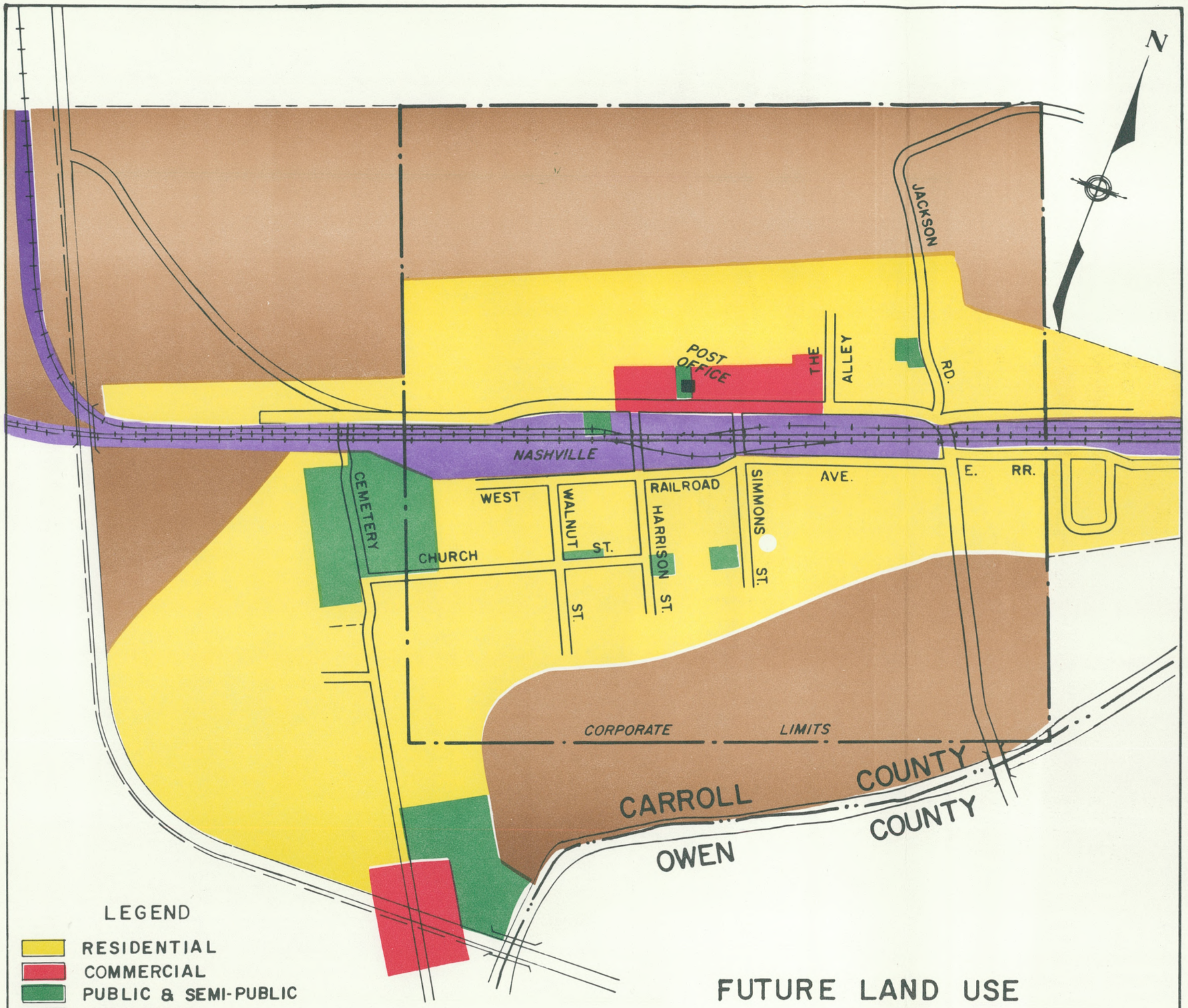
FIGURE NO. 12-B



FUTURE LAND USE
SANDERS
CARROLL COUNTY, KENTUCKY

Preparation of this Map was financed in part through a Comprehensive Planning Grant from the Department of Housing and Urban Development.

FIGURE NO. 12-C



FUTURE LAND USE
WORTHVILLE
CARROLL COUNTY KENTUCKY

GRAPHIC SCALE IN FEET

500 0 500 1000 FEET

BY: WATKINS & ASSOCIATES, INC.

Preparation of this Map was financed in part through a Comprehensive Planning Grant from the Department of Housing and Urban Development.

FIGURE NO. 12-D

Sanders: By the year 2000 it is anticipated that the population of Sanders will increase 53 percent over that of 1970. Existing land use includes some vacant areas that could be developed but much of it is low level near Eagle Creek. To ensure that sufficient flood free land is available in the future, the land use plan provides 34 percent new land on the north and east sides of the presently developed areas. This plus vacant land that could be utilized should be sufficient to the year 2000. The new land use plan calls for 10 acres of public land about 5 acres of which would be in a municipal park and playground. Extension of public services to the area should not present any significant problems.

Worthville: The population of Worthville is anticipated to increase from 258 now to 390 by 2000. To accommodate this population growth the future land use plan increases total land in the community from 169 acres to 283 acres. Most of the increase will be in residential land and the streets and alleys providing access to the residential lots. The new land is on the west and south of the present corporate limits and extends Worthville to the new location of Kentucky Highway 227 which will become a natural boundary for the community. Since the area retains its basically compact shape and is not divided by any natural barriers, the extension of public service to the new land should not be any problem.

CHAPTER VII

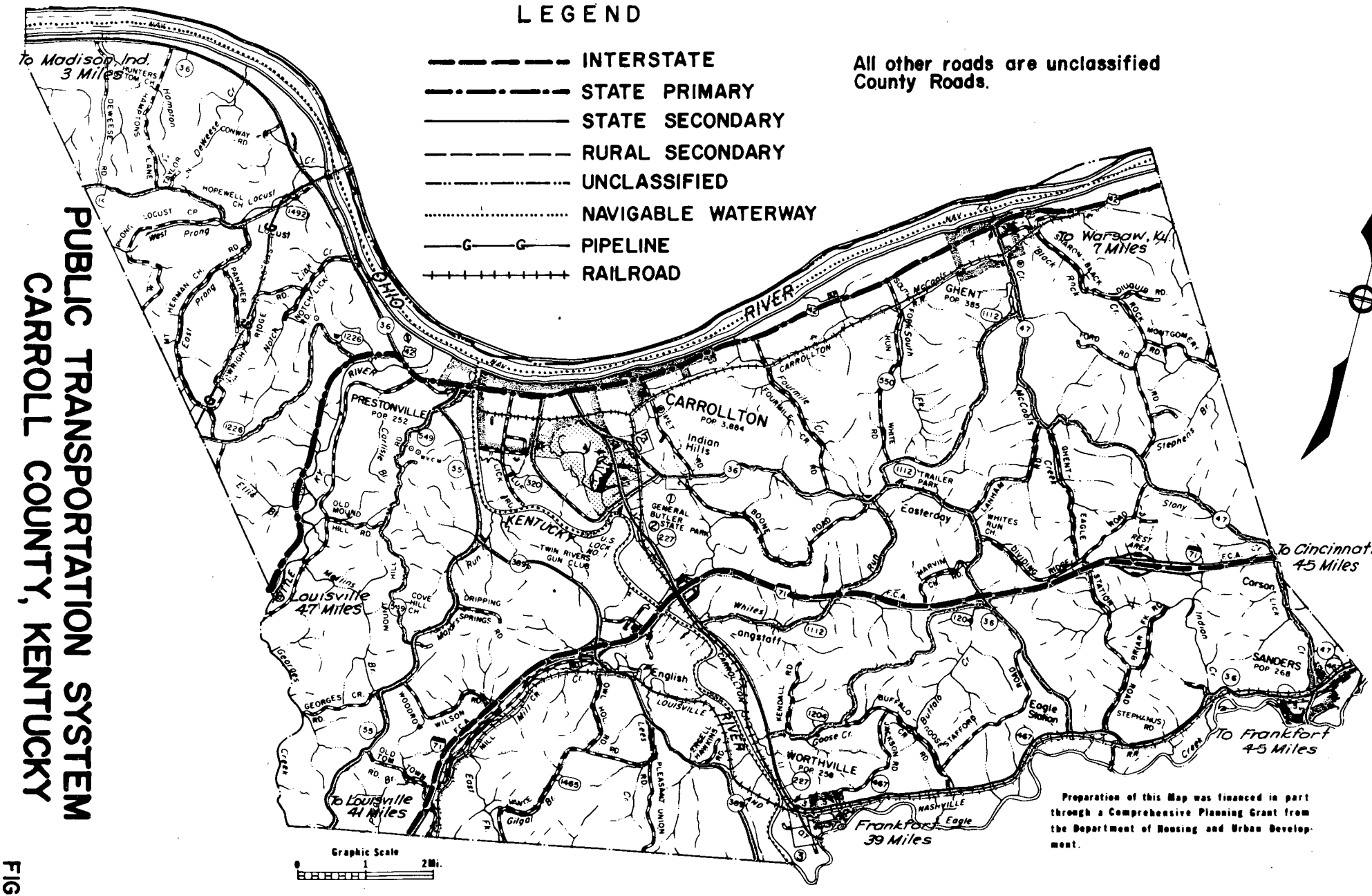
TRANSPORTATION PLAN

The purpose of transportation is to tie Carroll County together internally and to connect the county with surrounding counties, the state and the nation. If internal transportation is not adequate it is difficult for the county to function as a unit and if external connections are insufficient the county becomes isolated from its neighbors. Thus, transportation plans become a most important part of the Comprehensive Plan because transportation directly affects the lives of every one of the county's citizens.

The present public transportation system in Carroll County is shown in the map in Figure No. 13. All of the five basic forms of transportation are in Carroll County. They are shown in Figure No. 13 and discussed below.

1. Pipelines: A high pressure gas transmission line passes through West Carroll County crossing the Ohio River into Indiana at Locust Creek.
2. Railroads: The Louisville and Nashville Railroad main line between Louisville, Kentucky and Cincinnati, Ohio passes over the south part of the County and its subsidiary, the Carrollton Railroad connects Carrollton and Ghent to the Land N line at Worthville.
3. Air: A general aviation airport has been recommended for Carroll County in the Kentucky Airport Systems Plan. An airport master plan is currently being prepared, and it is anticipated that a site will be selected in the near future.
4. Water: Water transportation is available on the Ohio River where a ~~mini~~ nine-foot navigation channel is maintained and on the Kentucky River where a six-foot channel is maintained. The Ohio River is

PUBLIC TRANSPORTATION SYSTEM
CARROLL COUNTY, KENTUCKY



Preparation of this Map was financed in part through a Comprehensive Planning Grant from the Department of Housing and Urban Development.

FIGURE NO.13

a major water way serving the mid-western section of the nation as well as connecting with ocean transportation via the Mississippi River and the Port of New Orleans.

5. Highways and Streets: An extensive highway network serves Carroll County with its main source of transportation. Interstate Highway 71 (I-71) running between Louisville, Kentucky and Cincinnati, Ohio traverse Carroll County as does U.S. Highway 42, the old Louisville-Cincinnati Road. Additional state highways cross the county providing connections with surrounding counties and the State of Indiana. A county road system and city streets serve all parts of the county.

A more detailed discussion of each of the forms of transportation follows along with a presentation of the recommended transportation plan.

PIPELINES

Pipeline transportation is not of direct importance to Carroll County. The only transmission line of any size merely passes through the county. A small 6" line supplies natural gas to the Carrollton Utilities distribution systems in Carrollton and Ghent. Because pipelines only indirectly effect Carroll County, the Planning Commission has made no recommendations concerning them.

RAILROADS

Carroll County has very good rail transportation through the Carrollton Railroad and Louisville and Nashville Railroad.

The L and N Railroad is one of the largest lines in the country. It directly serves the mid-south from the Ohio River to the Gulf of Mexico. Its main line from Louisville to Cincinnati passes through Worthville and

Sanders along Carroll County's southern boundary. Presently there are three fast freight trains per day each way that stop at Worthville where connections are made with Carrollton and Ghent over the Carrollton Railroad.

The Carrollton Railroad runs from Ghent and Carrollton to Worthville once a day, six days a week. It connects the industries in Carrollton and those along the Ohio River between Carrollton and the Gallatin County line with the L and N main line at Worthville. The Carrollton line is a wholely owned subsidiary of the L and N Railroad carrying 1.5 million tons of freight last year. Only carload freight service is available. Passenger service in Carroll County was curtailed some years ago.

The Carrollton line was recently extended beyond Ghent to the new Kentucky Utilities generating plant and the coal processing plant near the Gallatin County line. It is expected that the coal processing plant, where coal will be transferred to barges will become a major distributor of coal along the Ohio River starting in 1977.

Railroad service is sufficient for today and for the foreseeable future; therefore, the Planning Commission has no recommendation to make at this time.

AIR TRANSPORTATION

At the present time there are no public or private air transportation facilities in Carroll County. A general aviation public airport has been approved by the Federal Aviation Administration and the State Department of Aeronautics. It will be designed to handle private and non-scheduled commercial flights. An airport master plan is presently being prepared and final design of the airport will begin as soon as the proposed site has been selected.

The nearest commercial airport is the Greater Cincinnati-Airport in

Boone County, Kentucky about 45 miles from Carrollton. Standiford Field at Louisville is about 50 miles away. Both of these airports are large, modern facilities offering a complete variety of air service and connections. The primary connecting route between Carroll County and these two airports is I-71. By this route either airport can be directly reached on a modern, interstate highway in less than one hour's driving time from Carrollton.

The Carroll County Planning Commission fully endorses the proposed Carroll County Airport and recommends that development of the airport be completed.

WATER TRANSPORTATION

Carroll County's northern border fronts for more than 20 miles on the Ohio River, one of the major navigable waterways in this county. The Kentucky River, also a maintained navigable waterway, bisects the county for 10 miles before entering the Ohio River at Carrollton. A nine-foot deep channel is maintained in the Ohio River and a six-foot channel in the Kentucky River. Stable pools have been created in both waterways by lock and dam systems.

The Kentucky River is navigable 259 miles upstream to Beattyville. It comprises a system of 14 locks and dams, the first five of which were developed by the Commonwealth of Kentucky and ceded to the United States in 1880. The latter nine were developed by the Federal government by 1917. The Kentucky River navigation system is now obsolescent. Still about 680,000 tons of traffic are shipped each year almost all of which are inbound shipments of sand, gravel and crushed rock.

The entire 981 miles of the Ohio River from Pittsburgh, Pennsylvania to Cairo, Illinois has been improved since the first locks were built at Louisville in 1852. Canalization of the river was completed in 1929.

Direct connections for shipments over the inland navigation system as well as the Great Lakes system and the Gulf Intercoastal Waterway are afforded to Carroll County by the Ohio River. More than 130 million tons of freight are shipped on this waterway a year, two-thirds of which are bulk forms of energy, such as coal, crude oil and petroleum products. Each year the amount of freight traffic on the river increases.

These two waterways initially had a very strong influence on the development of Carroll County. With the advent of rail and highway transportation, however, the importance to the county of water transportation has declined. No port facilities have been developed and use of the rivers has been largely limited to sporadic shipments of sand and gravel. By 1977 however, a major coal terminal is scheduled to go into operation on the Ohio River at Ghent where rail shipments of coal will be transferred to barges for shipment to industries along the river.

The Planning Commission recommends that continued attention be devoted to the fulfillment of the great water transportation potential on both the Kentucky River and the Ohio River waterways. Plans should be prepared for the development of a terminal at Carrollton for private recreational boats to "dock and shop" in downtown Carrollton.

HIGHWAYS AND STREETS

By far the most important form of transportation to Carroll County is the automobile, truck and bus traffic on the county's highways and streets. Other modes of transportation are greatly used to connect Carroll County to the outside world but the highways and streets interconnect all parts of the county providing access to every parcel of land in the county as well as linking the county with the outside world.

Commercial truck and bus transportation is available in Carrollton over the highway system. Two trucking companies have terminals located

in Carrollton and several more companies serve the county. Through these truck lines, good service is available to or from all parts of the county. The commercial bus line operates three passenger buses a day through to Cincinnati and four a day through to Louisville. Two buses in each direction carry freight in addition to passengers.

RURAL ROADS

The complete system of public rural roads in Carroll County comprises three subsystems which are tied together to supplement one another: (1) the Kentucky State System of Highways; (2) the Carroll County Road System; and (3) the city street systems in each of the incorporated communities.

The Kentucky State System of Highways is composed of Interstate, State Primary, State Secondary, Rural Secondary and Unclassified roads. The Carroll County Road System includes the remainder of the unclassified rural public roads. Location of the State rural roads and the County roads are shown by type of route in the Public Transportation System Map in Figure No. 13. A breakdown of the mileage in each route category is presented below.

TABLE NO. 38

Public Rural Highway Mileage in Carroll County, Kentucky

Route No.	Type of Route	Length in Miles
36 (part)	Rural Secondary	10.3
36 (part)	State Secondary	11.6
42	State Primary	15.2
47	Rural Secondary	9.0

Table No. 38 (cont.)

Route No.	Type of Route	Length in Miles
55	State Secondary	8.3
71	Interstate	14.7
227	State Secondary	7.7
320	Rural Secondary	2.8
467	State Secondary	8.2
549	Unclassified	4.8
550	Unclassified	2.9
1112	Rural Secondary	8.3
1201	Unclassified	4.8
1226	Rural Secondary	3.9
1465	Unclassified	3.4
1492	Rural Secondary	4.3
County Roads	Unclassified	80.2
		200.4

Summary of Mileages

Interstate System	14.7
State Primary System	15.2
State Secondary System	35.8
Rural Secondary System	38.6
Unclassified State Highways	15.9
Unclassified County Roads	80.2
TOTAL MILES	200.4

Source: Kentucky Bureau of Highways

The rural public highways also have been classified according to the function of the individual road segments. Functional classification is an important step in understanding the relationship between the road, the road network and the service rendered. Five functional classifications have been established for the Carroll County public roads. They are as described below:

Rural Principal Arterials (Including, National Interstate System roads): A continuous route having the following characteristics:

a. Serve statewide or interstate trips

b. Connect all cities over 50,000 population and most that are over 25,000

c. An element in an integrated traffic flow network

Rural Minor Arterials - Interstate and inter-county highways having the following characteristics:

a. Interconnect cities, large towns and other major traffic generators
b. Located spatially so that most developed areas are within a reasonable distance of the highway
c. Provide relatively high overall travel speeds with a minimum of interference to the flow of traffic

Rural Major Collectors - Highways mainly oriented toward serving intra-county travel by providing connections to the arterial system and having the following characteristics:

a. Serve major towns and traffic generators not on the arterial system especially county seats
b. Connect with routes of a higher classification and tie together large towns or cities in the county
c. Serve the important intra-county travel corridors

Rural Minor Collectors - Highways performing collector function but below major collectors with their purpose being to:

a. Put a collector road near all developed areas thus providing access to the arterial systems
b. Serve the smaller towns and communities
c. Link traffic generators and the remote rural areas

Rural Local Service - Roads serving short distance trips within districts in the county and having the following functions:

a. Serve locally oriented traffic
b. Provide direct access to abutting land and to higher order highways
c. Includes all public roads not in one of the higher functional classifications

The functional classifications of the rural public highways in Carroll County are shown in Figure No. 14. A tabular listing of these highway classifications is presented in Table No. 39 below:

TABLE NO. 39

FUNCTIONAL CLASSIFICATION OF THE STATE SYSTEM
OF HIGHWAYS IN CARROLL COUNTY, KENTUCKY

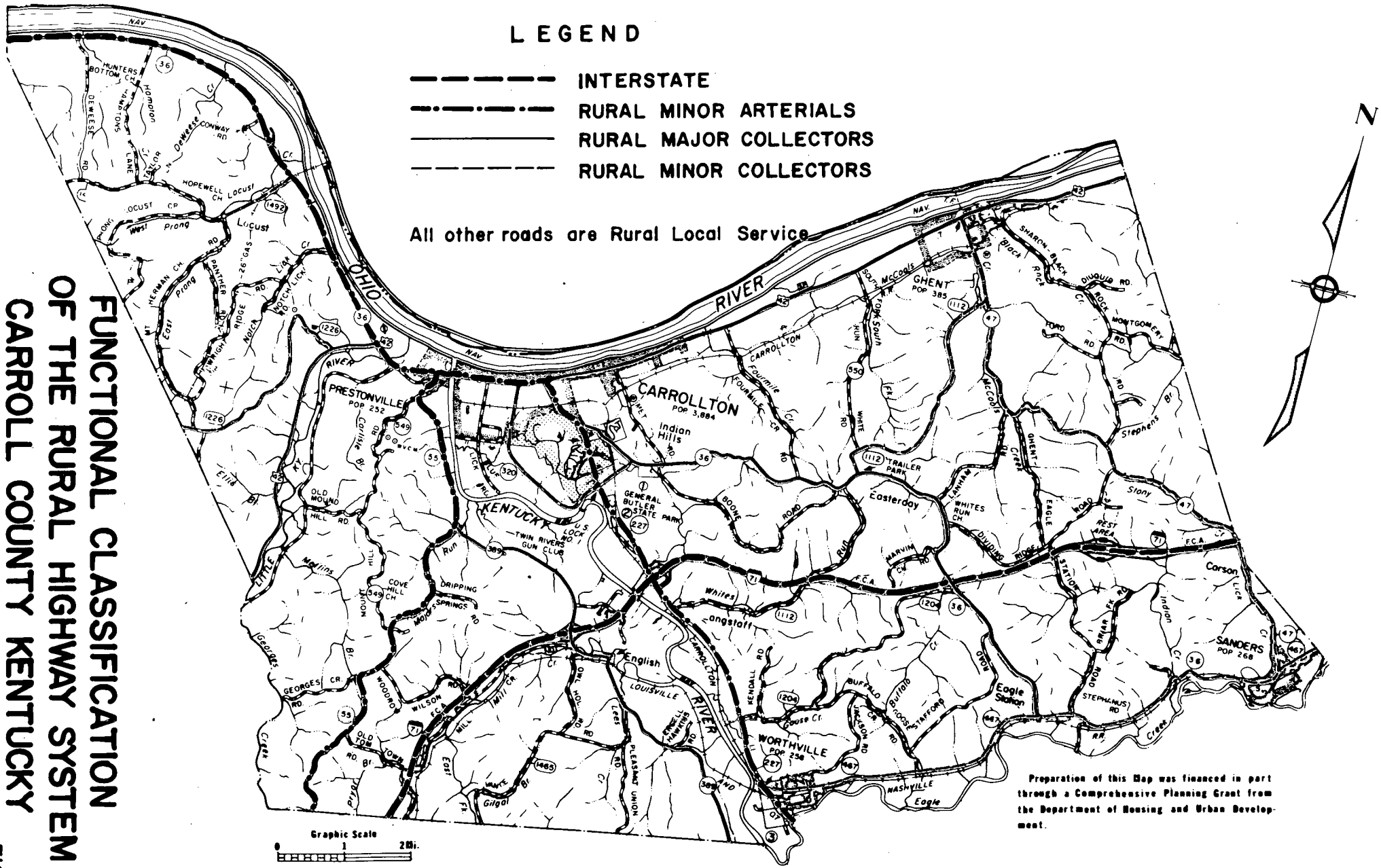
Route & Segment	Length Miles	Functional Classification
36 - Sanders to Easterday	8.8	Rural Minor Collector
36 - Easterday to Ky. 227	5.0	Rural Major Collector
36 - U.S. 42 to Trimble Co.	8.1	Rural Minor Arterial
42	15.2	Rural Major Collector
47	9.0	Rural Minor Collector
55	8.3	Rural Minor Arterial
71	14.7	Principal Arterial (Interstate)
227	7.7	Rural Minor Arterial
320	2.8	Rural Minor Collector
467	8.2	Rural Minor Collector
549	4.8	Local Service
550	2.9	Local Service
1112 - Easterday to Ky. 47	4.0	Rural Minor Collector
1112 - Ky. 227 to Easterday	4.3	Local Service
1204	4.8	Local Service
1226	3.9	Rural Minor Collector
1465	3.4	Local Service
1492 - Ky. 36 to Hopewell Ch.	1.2	Rural Minor Collector
1492 - Hopewell Ch. to Trimble Co.	3.1	Local Service
County Roads	80.2	Local Service
	200.4	

Summary of Mileage

Rural Principal Arterial	14.7
Rural Minor Arterial	24.1
Rural Major Collector	20.2
Rural Minor Collector	37.9
Rural Local Service (State)	23.3
Rural Local Service (County)	80.2
TOTAL MILES	200.4

Source: Kentucky Bureau of Highways

FUNCTIONAL CLASSIFICATION OF THE RURAL HIGHWAY SYSTEM CARROLL COUNTY KENTUCKY



Preparation of this Map was financed in part through a Comprehensive Planning Grant from the Department of Housing and Urban Development.

FIGURE NO.14

CITY STREETS

There are a total of 31.6 miles of streets in the five incorporated communities in Carroll County. This total includes extensions of the rural highway system into the corporate limits of the communities.

The existing city streets have been classified according to function as were the rural highways. City street functions are defined as follows:

Minor Arterials - Arterials carry the major portion of trips entering and leaving the urban area as well as the majority of trips passing through the city. Significant intra-city travel, such as between the central business district and outlying residential areas or between suburban shopping centers is also served by this class of facility. The arterial system provides continuity for all rural arterials which cross the urban boundary.

Major and Minor Collectors - The collector street system differs from the arterial in that facilities on the collector system enter neighborhoods, distributing trips from arterials or other collectors. Conversely, collector streets also gather traffic from local streets in neighborhoods and channel it into the arterial system. In some cases a minor amount of through traffic may be carried on the collector system. Land access and travel within commercial and industrial districts are served by the collector system.

Local Service Streets - Local service streets comprise all facilities not on one of the higher systems. It serves primarily to provide direct access to abutting land and to the collector and arterial systems. The local street system offers the lowest level of mobility to traffic. Service to through traffic movements are deliberately discouraged.

The street functional classifications are depicted in Figures No. 15-A through No. 15-D and summarized in Table No. 40 below:

LEGEND

- ARTERIAL
- MAJOR COLLECTOR
- FUTURE MAJOR COLLECTOR
- MINOR COLLECTOR
- FUTURE MINOR COLLECTOR
- LOCAL SERVICE

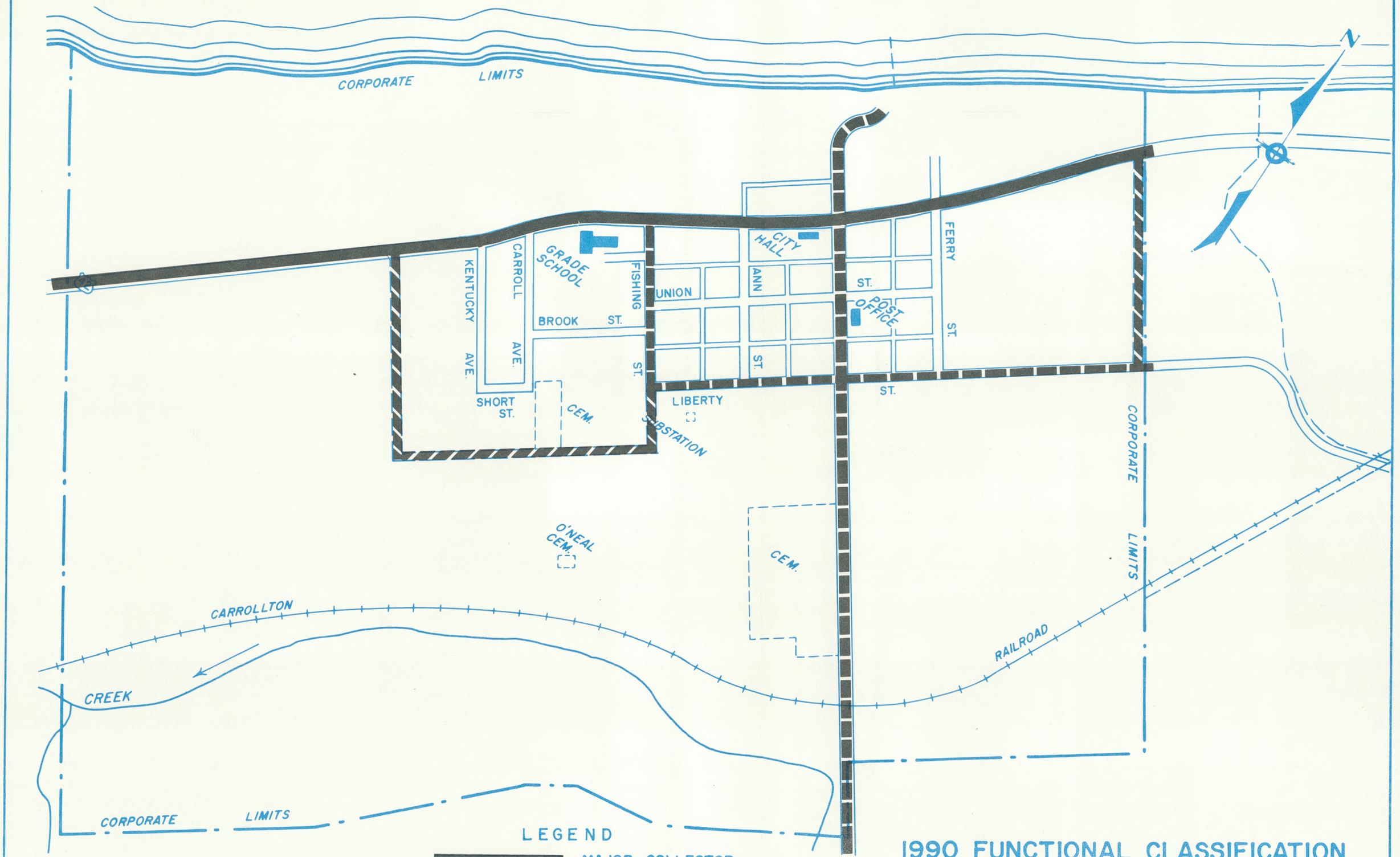
GRAPHIC SCALE IN FEET

1000 0 1000 2000 3000 FEET

Preparation of this Map was financed in part through a Comprehensive Planning Grant from the Department of Housing and Urban Development.

1990 FUNCTIONAL CLASSIFICATION
(WITH 1970 AVERAGE DAILY TRAFFIC)
CARROLLTON-PRESTONVILLE STREETS
CARROLL COUNTY, KENTUCKY

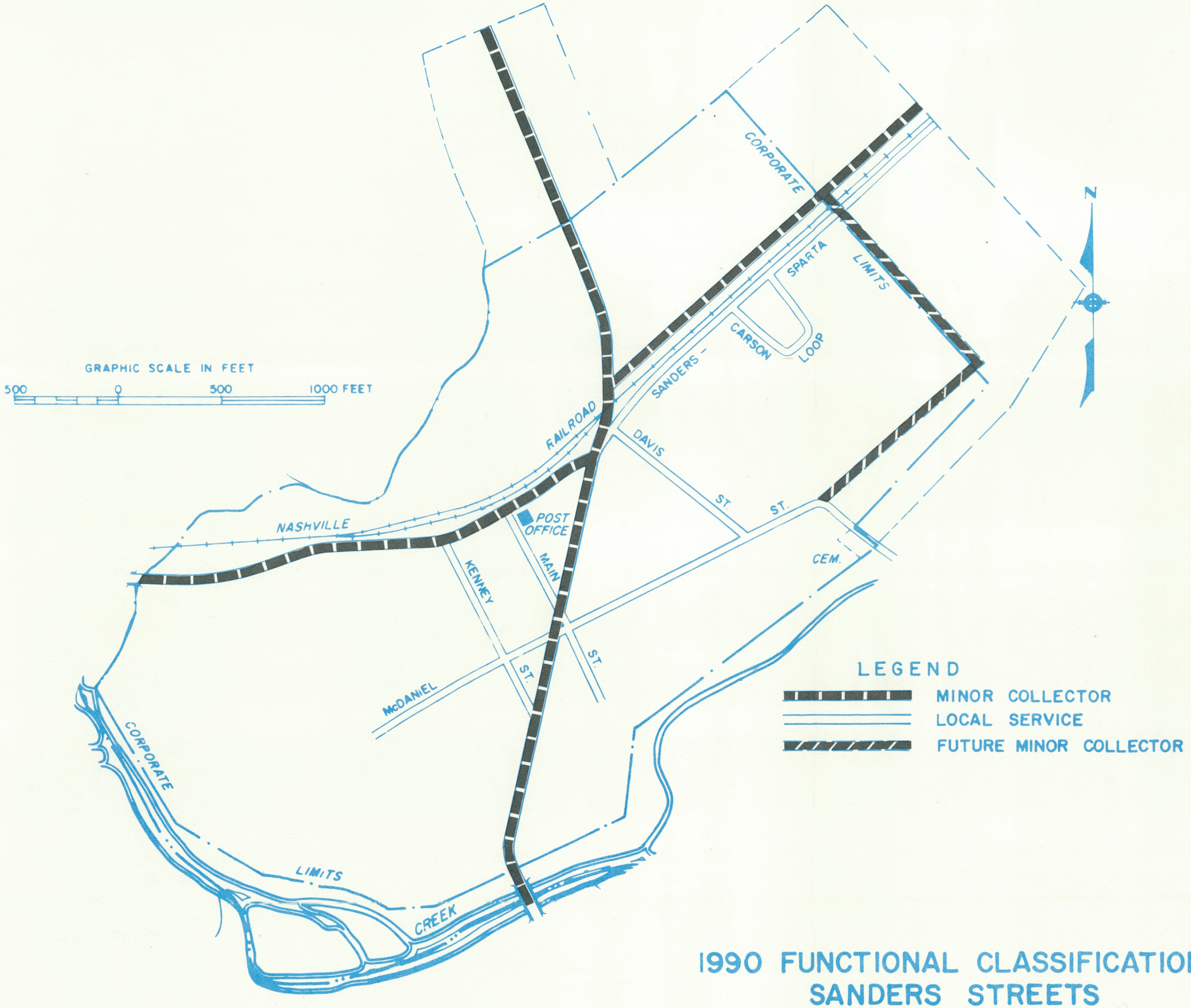
FIGURE NO. 15-A



1990 FUNCTIONAL CLASSIFICATION GHENT STREETS CARROLL COUNTY, KENTUCKY

Preparation of this Map was financed in part through a Comprehensive Planning Grant from the Department of Housing and Urban Development.

FIGURE NO. 15-B



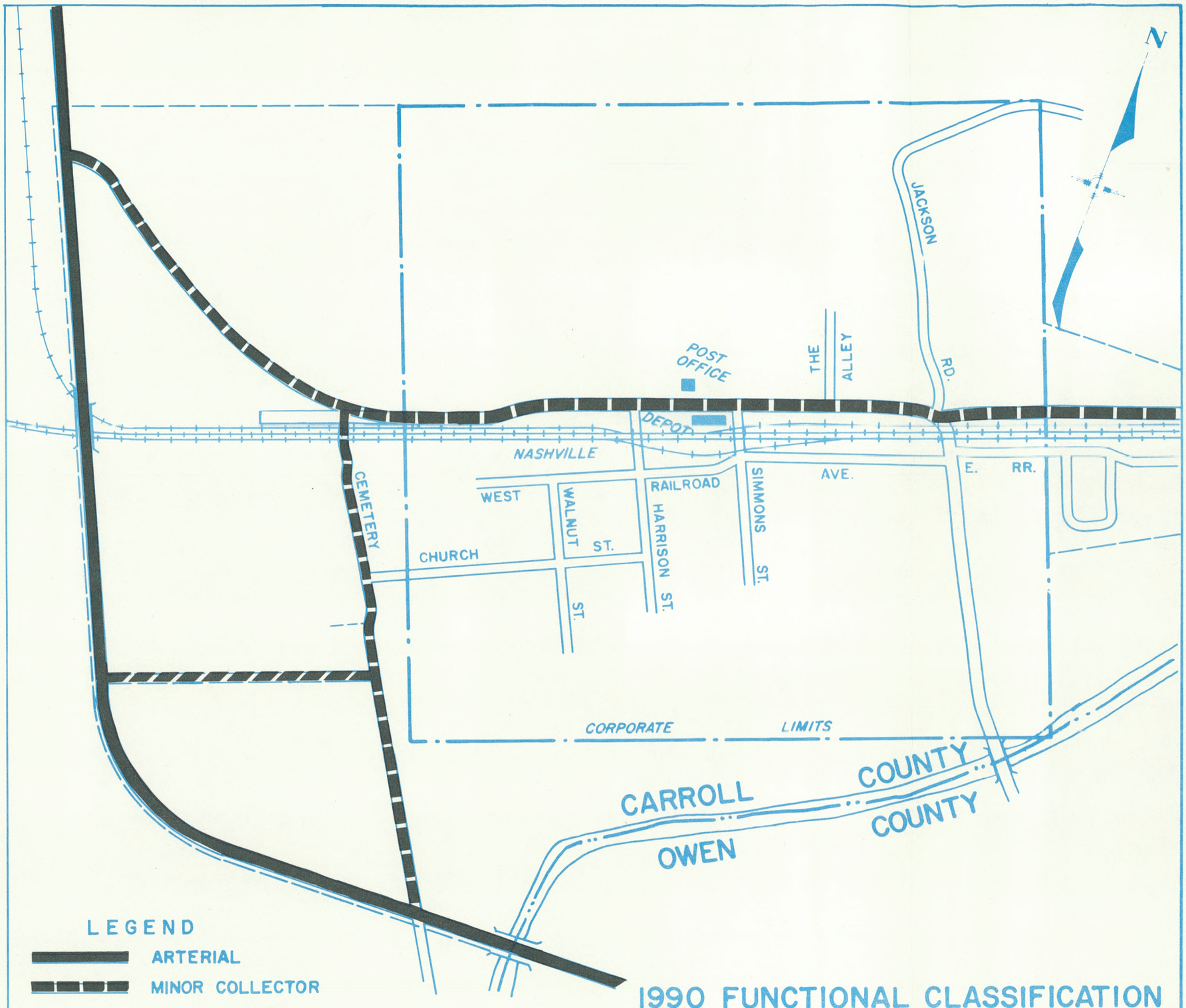
LEGEND

- MINOR COLLECTOR
- LOCAL SERVICE
- FUTURE MINOR COLLECTOR

1990 FUNCTIONAL CLASSIFICATION SANDERS STREETS CARROLL COUNTY, KENTUCKY

Preparation of this Map was financed in part through a Comprehensive Planning Grant from the Department of Housing and Urban Development.

FIGURE NO. 15-C



LEGEND

- ARTERIAL
- MINOR COLLECTOR
- LOCAL SERVICE
- FUTURE MINOR COLLECTOR

1990 FUNCTIONAL CLASSIFICATION WORTHVILLE STREETS CARROLL COUNTY, KENTUCKY

GRAPHIC SCALE IN FEET

500 0 500 1000 FEET

Preparation of this Map was financed in part through a Comprehensive Planning Grant from the Department of Housing and Urban Development.

FIGURE NO. 15-D

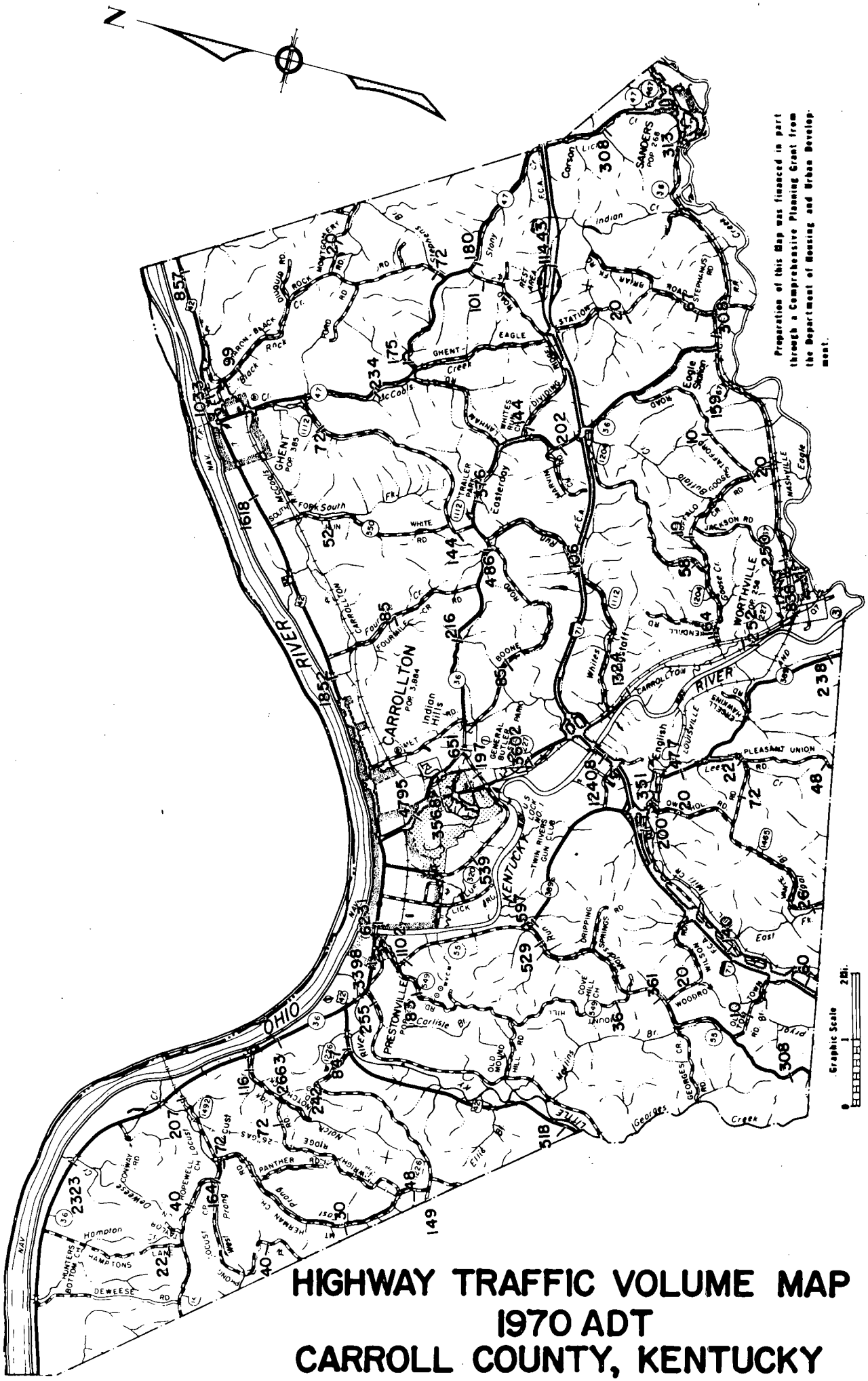
TABLE NO. 40

FUNCTIONAL CLASSIFICATION OF THE EXISTING
CITY STREETS IN CARROLL COUNTY

City	Mileage by Functional Class				Total Mileage
	Arterial	Main Collector	Minor Collector	Local Service	
Carrollton	4.68	2.12	2.35	11.55	20.70
Ghent	--	1.04	0.59	1.85	3.48
Prestonville	0.81	--	--	1.44	2.25
Sanders	--	--	1.30	1.49	2.79
Worthville	--	--	0.54	1.83	2.37
TOTAL	5.49	3.16	4.78	18.16	31.59

Source: Watkins and Associates, Inc.

Traffic volume, as indicated by the number of vehicles using the road on an average day, is an indication of the relative importance of the road to the planning area as well as of the type of facility required. The latest county wide traffic counts available were taken in 1970 by other Kentucky Bureau of Highways. Volume and count locations for these statistics are shown in Figure No. 16. Similar data for the City of Carrollton were developed by adjusting 1967 counts made by the Bureau of Highways to 1970 to match the year of the county-wide average. These data for Carrollton are included in Figure No. 15-A. A tabulation of the 10 highest traffic volumes on the rural highway network is presented in Table No. 41 and on the Carrollton street system in Table No. 42.



HIGHWAY TRAFFIC VOLUME MAP
1970 ADT
CARROLL COUNTY, KENTUCKY

FIGURE NO. 16

TABLE NO. 41

TEN HIGHEST TRAFFIC VOLUMES ON THE
RURAL HIGHWAYS IN CARROLL COUNTY (1970)

Rank	Volume (ADT)	Location
1	12408	I-71 @ Kentucky River
2	11443	I-71 @ Gallatin County Line
3	3602	Ky. 227 - South of Lock Road
4	3568	Ky. 227 @ Carrollton
5	2663	Ky. 36 West of U.S. 42
6	1852	U.S. 42 East of Carrollton
7	1618	U.S. 42 West of Ghent
8	1324	Ky. 227 South of I-71
9	1102	Ky. 55 @ Prestonville
10	1033	U.S. 42 East of Ghent

Source: Kentucky Bureau of Highways

TABLE NO. 42

TEN HIGHEST TRAFFIC VOLUMES ON THE
CITY STREETS IN CARROLLTON (1970)*

Rank	Volume (ADT)	Location
1	9755	Highland Ave. east of 11th Street
2	8769	Highland Ave. west of 11th Street
3	7725	Highland Ave. east of 6th Street
4	6568	Highland Ave. west of 4th Street
5	6231	Highland Ave. at Kentucky River
6	4795	Ky. 227 north of Ky. 36
7	3850	11th Street south of Highland Ave.
8	3398	U.S. 42 in Prestonville
9	3380	6th Street north of Clay Street
10	2470	4th Street north of Highland Avenue

*1967 Traffic Counts Adjusted to 1970

Source: 1967 Traffic counts made by Kentucky Bureau of Highways

RURAL ROAD RECOMMENDATIONS

The rural road system in Carroll County is generally sufficient for the present and future needs of the County. It will, of course, be necessary to periodically review the network to determine changes required by conditions

that may arise in the future.

Maintenance of the rural roads should be routinely carried on to insure that the roads adequately perform their intended function. Roads maintained by the State Bureau of Highways are now receiving adequate maintenance and it is expected that they will continue to receive it in the future. The county maintained roads, however, are suffering from (1) the lack of a Road Supervisor to oversee maintenance and (2) from cluttering of the county road right-of-ways by accumulation of debris and roadside growth.To overcome these two shortcomings the Planning Commission recommends that:

(1) A County Road Supervisor be hired to supervise maintenance of the county road system.

(2) That a program of clearing the county road rights-of-way of trees, bushes and other tall growth or debris be established as part of the county road maintenance work.

CITY STREET RECOMMENDATIONS:

Since most of the growth and change expected in Carroll County in the future will occur in and adjacent to the City of Carrollton most of the new highway transportation requirements will likewise occur in Carrollton. At present, Carrollton's development is confined to the area to the west and north of General Butler State Park. As future growth in residential, commercial and industrial development occurs to the east and southeast of the Park there will be a need to create good street connections between the older and newer parts of Carrollton. U.S. 42, a two-lane road, is presently the only route open between these areas. The Lock Road, Ky. 320, also a two-lane road, is now closed because a section of the roadbed

adjacent to the Kentucky River has collapsed. The State Bureau of Highways intends to begin construction this summer of a new street across the north side of General Butler State Park extending from the end of Hawkins Street at 11th Street to Ky. 227 just south of the Carrollton Railroad crossing. (See Figure No. 15-A.)

To insure that future growth areas in Carrollton are properly connected to the existing downtown area the Planning Commission recommends that:

(1) The proposed new road from the end of Hawkins Street to Ky. 227 be constructed as a two-lane street but on a right of way sufficient for a four-lane street so that the road could be widened in the future.

(2) U.S. 42 be widened to a four-lane street with sidewalks, curbs and gutters between 11th Street and the junction with Ky. 227.

(3) Lock Road, Ky. 320, be repaired and reopened to through traffic as soon as practical.

In addition, to preserve the street functions as indicated in the functional classification in Figure No.15-A , traffic on the more important streets should have right-of-way over lesser streets. Many of the "stop" signs now installed on Carrollton streets do not give right-of-way to the major streets and are, moreover, substandard black-on-yellow signs. Thus the Planning Commission recommends that:

(1) All sub-standard black-on-yellow "stop" signs be replaced with standard white-on-red "stop" signs.

(2) Where each leg of the intersection is controlled by a "stop" sign, a small "4-way" sign should be mounted beneath each "stop" sign at the intersection.

(3) Street right-of-way should be assigned as follows:

(a) Arterial streets should have right-of-way over all other streets

(b) Major collectors should have right-of-way over all streets except Arterial streets and other major collectors.

(c) Minor collectors should have right-of-way over all except Arterial streets, major collector streets and other minor collectors.

(d) "Stop" signs should be installed on both streets at the intersection of two major collectors or two minor collectors.

(e) "Stop" signs should be installed only on the lesser street at each intersection on the Arterial and collector system.

(f) "Stop" signs can be installed on the local service streets as required for traffic safety.

CHAPTER VIII

COMMUNITY FACILITIES AND PUBLIC IMPROVEMENTS PLAN

The Community Facilities and Public Improvements Plan that follows in this chapter will give attention to those elements of community service in Carroll County that bear on the goal of making the total community a better place to live and raise a family.

A basic purpose of any community is to provide a means for the people to collectively improve their way of life. The present facilities and services in Carroll County and its incorporated areas have been examined to see what improvements are desirable and to estimate cost, if any, to the public of making the recommended improvements. A public improvement budget and priority of action has been also prepared for those recommendations involving the expenditure of public funds.

In developing the Community Facilities Plan the Planning Commission used two underlying principles. First, services should be provided in an efficient manner as possible to conserve the County's human and natural resources. Second, the services and facilities should be readily available to as large a part of the County's population as possible to apply the advantages of economy of scale.

A. COMMUNITY FACILITIES PLAN

Schools

The public school system in Carroll County has been consolidated into one high school, one middle school, and two elementary schools. The high school, middle school and one elementary school are located in a single campus in east Carrollton and the remaining elementary school is in central

Carrollton. On the school campus is also located the Carroll County Area Vocational Education Center.

Present school enrollment is 533 in the high school, 529 in the middle school, 558 in one elementary school and 325 in the other, for a total of 1,945 students. There are 85 teachers at the four schools.

Facilities of the Carroll County School System are modern and in good condition. The oldest building was constructed in 1960 and the newest in 1971. A problem has been money for operation.

The current school tax rate is 66.9¢ per $100 of assessed valuation, of which 44.3¢ was levied and 22.6¢ voted, has not produced sufficient funds to adequately support the school program.

Inasmuch as there are no facility improvements called for by the school system, the Planning Commission has no recommendations for the public schools.

Recreational Facilities

A recreational survey taken in 1973 by the County Recreation Committee indicated that a majority of the county's citizens are in favor of improved recreational facilities for Carroll County. This is evidently an expression of awareness on the part of the general public that consolidation of the public school system seriously curtails recreational opportunities in communities other than Carrollton.

From the survey the recreational activities that received the greatest interests were: bicycling, swimming, automobile driving, hiking, fishing, basketball and softball.

The Northern Kentucky Area Development District's interim land-use plan recommends that the stretch of the Ohio River from Carrollton to Warsaw in neighboring Gallatin County, be developed in terms of industry and recreation.

In the NKADD interim Open Space and Recreational Plan this recommendation is repeated; however, no specific sites or facilities are proposed. The impact of these two documents on future recreation for Carroll County is on the need rather than on the location for additional recreational facilities.

In 1972 the Kentucky Program Development Office (now the Office for Local Government) submitted to the Federal Department of Housing and Urban Development (HUD) proposals for two regional parks and one community park in Carroll County for inclusion in the NKADD Open Space Certification of October 1972. One regional park on the Kentucky River called for limited development while the other on the Ohio River is to be an extensive water-based park. Again, the emphasis in the Open Space Certification is to point up the need for additional recreational facilities and that desirable sites exist in Carroll County. Moreover, studies at the State, Regional and County levels indicate that many local citizens are willing to support an expanded recreational program.

Adjacent to Carrollton is General Butler State Resort Park, an 809 acre park containing a 25 acre lake. The park also has a lodge, cottages, a heated swimming pool for lodge guests, a public beach and bathhouse, and other water recreation equipment. Park facilities include miniature and nine-hole golf, shuffleboard, playground, picnic shelters, and a miniature train. In Fiscal Year 1972-73, General Butler State Park attracted over a million visitors to Carroll County not only from the surrounding counties but from nearby states as well. However, since this park serves a multi-state level, it has not been considered as a solution to local recreation needs.

The Planning Commission recommends that efforts be directed toward the development of a junior olympic size public swimming pool in or near Carrollton for an estimated cost of $120,000, and recreational playground areas in Ghent, Sanders and Worthville where softball, basketball and other outdoor games could be played for a cost of $15,000 each. Hiking and bicycling trails should also be developed along the Ohio River.

In accordance with standards endorsed by the American Society of Planning Officials, the Carrollton-Carroll County Planning Commission also recommends the following community recreational services and facilities for Carroll County:

1. Neighborhood playlots - four to be developed in Carrollton and one each in Ghent, Prestonville, Sanders and Worthville. With 5,000 square feet in each and playground equipment for preschool children. Fence around the border.

2. Community playground-playfield. Two to be developed in Carrollton and one each in Ghent, Sanders and Worthville. Five acres in size with playground equipment for school age children. Landscaped and fenced to separate from surrounding area.

3. County recreation center. One to be developed in or near Carrollton. Minimum size five acres to contain facilities for all age groups including swimming pool, gymnasium, arts and crafts classes, meeting rooms, and room for indoor sports.

The Planning Commission also supports the concept of additional regional recreational facilities in Carroll County and specifically recommends that a detailed investigation be made of a water-based recreational area on the Kentucky River in the vicinity of Lock No. 1 as an extension of General Butler State Park. Consideration should be given to a marina and river oriented cabins and campsites connected to the State Park. The study could be conducted for $1,000.

Public Library

The Carroll County Public Library is presently located in downtown Carrollton. It is open 21-1/2 hours a week, normally from 12:30 P.M. to 4:30 P.M., except for one day a week when it is open until 6:00 P.M.

The library was in the State Regional Library Plan but was withdrawn a few years ago. To return to participation in the State Plan it will be necessary to increase library funds and provide a larger building.

It may be possible for the County Library to participate this year in a Federally financed two-year demonstration project that will furnish $90,000 worth of library equipment, books, supplies and salaries for extra library employees during the demonstration. After the first year of the demonstration project, the County will be in a position to decide what type of permanent library program is desirable and what local facilities would be required. An application can then be made for

Federal library construction funds.

The Planning Commission recommends that the Carroll County Library participate in the demonstration project and that steps be taken to determine the type of library program desired in the County and, the facilities and funds necessary to adequately support the library program selected. No estimate of cost can be made until program details are determined.

Electricity and Natural Gas Utilities

Statements regarding water and sewer utilities have been presented elsewhere in this chapter; however, to complete the review of public utilities attention will here be given to electricity and natural gas.

Electricity is provided to Carroll County by one private company and two Rural Electric Cooperative Corporation (RECC's). The private company serves the area along the Ohio River with extensions to Sanders and Worthville. They foresee no problems in continuing serving their area now or in the future. The two RECC's are primarily set up to serve adjacent counties, however, they have extended lines into Carroll County to serve the rural parts of the county that are not served by the private company.

Natural gas service is rendered by Carrollton Utilities, a municipally owned corporation. They serve the Cities of Carrollton and Ghent as well as the area in between. Service could be extended to other parts of the county but the availability of a supply of natural gas for the extended service presently is uncertain due to a national shortage of natural gas.

Carrollton Utilities now does not have a definite policy regarding the extension of utilities beyond the city limits of Carrollton. The establishment of a policy would be helpful in coordinating the future development of service to Carroll County and the Planning Commission recommends that a policy be adopted by Carrollton Utilities. Such action could lead to closer cooperation of all public agencies in Carroll County through a county-wide utility authority.

Water Supply

Water is presently supplied only to that part of Carroll County east of the Kentucky River. Plans have been proposed for supplying water to western Carroll County but have not yet been implemented due to a lack of funding.

Carrollton Utilities furnishes fluoridated, chlorinated and softened water to the City of Carrollton. Average use is about 500,000 gallons per day. The Carroll County Water District supplies chlorinated water to the eastern part of the county including the communities of Worthville, Ghent and Sanders. Approximately 120,000 gallons of water are supplied on an average day.

In 1973 Carrollton Utilities had approximately 1,500 water customers, the Carroll County Water District had about 370, and the proposed West Carroll County Water District another 160 customers for a total of 2,030 customers. With completion of the proposed West Carroll County Water District approximately 70 percent of the County's present population would have a treated supply of water.

A broad study of Carroll County's water needs for the future was made in 1973.[1] The recommended future water plan for Carroll County, as presented in the study, has been endorsed by the Carrollton-Carroll County Planning Commission and is made a part of this Comprehensive Plan as follows:

> "It is, therefore, recommended that the Carrollton Water Treatment Plant be upgraded to initially provide treatment for one million gallons per day, and that the design be accomplished in such a manner that the plant can ultimately treat one and one-half million gallons per day. Carrollton Utilities has previously authorized studies that generally arrive at this same conclusion. It is recommended that a new well be provided in connection with the plant expansion for more supply. The new expansion should consider bulk chemical feeders, additional filter area, new precipitator, new service pump, and sludge disposal at a cost of $536,000. Alternates could include a complete new plant in a different location."

(1) The Comprehensive Regional Water and Sewer Plan and Interim Land Use Plan for the Northern Kentucky Area Development District, Watkins and Associates, Inc., June 1973.

"The Carroll County Water District Commissioners should investigate the present number of potential residential customers who desire water service, and further investigate the contractual possibilities (to serve the I-71 Rest Area) with the Kentucky Department of Highways. Whichever alternate is selected, it is recommended that consideration be given to a line extension to the existing system at either Eagle Station or Sanders to improve flows in the existing mains in that area. The Carroll County Houses per mile plate indicates alternate lines from the rest area down the Ghent-Eagle Station Road to Eagle Station, or through Carson to Sanders have areas of 5 to 10 houses per mile, and could prove economically feasible dependent upon demand of customers and future federal grant assistance programs. This project will cost an estimated $203,000."

Additionally, the Planning Commission supports the efforts of the proposed West Carroll County Water District and recommends that the proposed water service be successfully implemented. The Water District's consultant has determined that the project cost will be $515,000.

Sewage Treatment Facilities

The only sewerage service currently provided in Carroll County is that furnished for the City of Carrollton by Carrollton Utilities. It is estimated that approximately 59 percent of the total land area presently within the city limits is served by sanitary sewers. The existing system was developed over a period of years. In the downtown area some of the sewers carry both storm and sanitary sewage. Lines throughout the system vary in size from eight inches to fifteen inches and are predominantly vitrified clay pipe. Three lift stations are used to pump sewage to the treatment plant.

The existing treatment plant provides primary treatment and the effluent is not chlorinated. The plant has a capacity of 500,000 gallons per day. Plans are being developed to expand the primary treatment capacity to 2,250,000 gallons per day and the addition of a secondary treatment process to handle peak flow of 1,500,000 gallons per day. Separation of the combined sewers is also being considered.

The Planning Commission recommends that Carrollton Utilities proceed with their plans to extend the sewage collection system, expand the existing sewage treatment plant and add secondary treatment facilities by 1974 at an estimated cost of $1,758,920. It is further recommended that the other recommendations for sewage services as proposed in the Regional Water and Sewer Plan [1] for the communities of Prestonville, Ghent, Worthville and Sanders be carried out. These recommendations are presented below.

Prestonville: It is recommended that a sanitary sewage collection system be constructed with a pumping station beneath the U.S. 42 bridge to pump sewage to the Carrollton treatment plant for treatment. The Prestonville system will cost $299,960.

Ghent: Construct a sanitary sewage collection system and a 60,000 gallons per day package treatment plant capable of secondary treatment with chlorination. Effluent would be discharged into the Ohio River. Attention should also be given to an alternate solution of pumping sewage to Carrollton for treatment. The recommended system for Ghent would cost $533,070.

Worthville: A sanitary sewage collection system is recommended for Worthville along with a sewage treatment plant discharging into Eagle Creek and meeting all water quality requirements. The total system is estimated to cost $325,190.

Sanders: A sanitary sewage collection system is also recommended for Sanders. A sewage treatment plant discharging into Eagle Creek and meeting all water quality requirements will be needed here also. The Sanders sewerage system is estimated to cost $288,770.

[1] The Comprehensive Regional Water and Sewer Plan and Interim Land Use Plan for the Northern Kentucky Area Development District, Watkins and Associates, Inc., June 1973.

Hospital

Hospital service for Carroll County is furnished by the Carroll County Memorial Hospital. The facility has a total of 80 beds, 54 for acute illnesses, and 26 for long term care. In addition, the hospital provides physical therapy, respiratory therapy, laboratory, X-ray, electrocardiography, delivery room, operating room, post-operative recovery room and an emergency room.

In the period from July 1, 1972 to June 30, 1973 the hospital had 2,323 admissions with 37 percent coming from outside Carroll County.

A primary problem facing Carroll County as well as other communities is the rising cost of medical service. Health maintenance through a family health center would be a means of reducing costs. Carroll County Memorial Hospital has acquired land adjacent to the hospital that could be for that purpose. It would be desirable to establish a county health planning council to guide development of a family health center.

The Planning Commission recommends that such a council be organized in Carroll County and that the development of a family health center be thoroughly investigated. No estimate of cost can be made until the investigation is completed.

Ambulance Service

Ambulance service to Carroll County is rendered by a group of 25 volunteer emergency medical technicians. They operate out of the Carroll County Memorial Hospital with one fully equipped ambulance. A new ambulance service building is presently being erected adjacent to the hospital at a cost of $21,000. A new ambulance costing $12,000 will be needed by the latter part of 1974. Rescue operations are currently not a part of the ambulance service but it needs to be added to the service and the Planning Commission recommends that a rescue unit be added. The cost of this extra service has not been determined.

Police Protection

Police protection in Carroll County is performed by the Sheriff's Department in cooperation with the Kentucky State Police. The Sheriff's Department is composed of the County Sheriff and two deputy sheriffs. One state policeman is assigned to Carroll County.

In Carrollton, police protection is provided by the Carrollton Police Department composed of the Chief of Police and six policemen. They operate two cruisers in patrolling the city. Dispatching of policemen and the detention of prisoners are operated by the city for both the city and the county.

The primary need in police protection at present is for the development of a regional detention center plan whereby several nearby counties could join together to provide for a detention center. Such a center could give greatly improved facilities and procedure for detaining prisoners and for rehabilitating misdemeanants. It is recommended by the Planning Commission that the Northern Kentucky Area Development District work with the Regional Crime Council to conduct a study of regional criminal detention and rehabilitation needs and to develop a plan to fulfill the needs.

Fire Protection

There are four public fire departments providing fire protection in Carroll County. In addition, the Dow-Corning industrial plant has a 1,000 gallon-per-minute pump truck and a trained fire fighting crew that is available to back up the public departments whenever needed.The public departments are all manned by volunteers. Carrollton has 25 volunteers and a 1,000 gallon-per-minute pump truck along with two other trucks. A new fully equipped 1,500 gpm pump truck has been purchased with delivery scheduled later in this year. Worthville has a 36 man volunteer fire fighting force and one 550 gallon-per-minute pump truck. Prestonville has a 22 man volunteer force and one 550 gallon-per minute pump truck. Ghent (East Carroll County) Fire District has 20

volunteers and they operate three pump trucks and one Jeep for forest fires. The public fire departments serve only the area within the city limits of their community except that the East Carroll County Fire District serves Ghent and Sanders and most of the rural area east of Kentucky Highway 227.

In Carrollton there is a need for a new building to house the fire equipment. The cost of this building has not been set. There is also a need to provide better access to the eastern parts of the city than is now possible with only the Highway 42 route. A new road around the north side of General Butler State Park connecting Lock Road (11th Street) with Kentucky Highway 227 would fill this need. The other fire departments are sufficient for present and projected needs. No recommendations for fire protection are presented by the Planning Commission.

Solid Waste Disposal

Solid waste disposal in Carroll County is presently handled by a private firm that operates both the collection and the disposal facilities. This firm has three trucks with which it collects garbage in the county on a contractual basis. It also has the only State approved landfill in the County for disposal of solid waste. The present landfill will be filled to capacity within two years. By that time it will be necessary to make other arrangements to take care of solid waste.

To adequately provide a long range solution for solid waste disposal it will be necessary that the operation of the facility be under the supervision of the County government either by actual operation with public employees or by a franchise arrangement with a private firm.

The Planning Commission recommends that Carroll County and the City of Carrollton jointly undertake a study of alternate programs of solid waste disposal as a public service. It is further recommended that they explore through the Northern Kentucky Area Development District the possibility of combining

with one or more adjacent counties in a regional or sub-regional approach to the problem. It is important that a solution be found before the present landfill is closed. The estimated cost of solid waste disposal cannot be determined until a future course of action is selected and a detailed study of required facilities is made.

Storm Drainage

Each of the five communities in Carroll County that constitute the urban and built-up areas are located on relatively flat land that has poor natural drainage. To provide adequate storm drainage for the developed areas in each community it is necessary to construct a system of surface ditches and underground pipes to carry off the storm water. At present the required drainage systems have not been constructed except in conjunction with the development of State highways. Consequently, each community suffers from localized flooding and ponding of surface waters deposited during storms. To provide relief from storm water damage the Planning Commission recommends that the problem be thoroughly investigated and a master plan prepared for each community in Carroll County. The plan should delineate the construction required, the cost of construction and priority of implementation of indicated projects. All of the area included in the future land use plan should be studied; however, first consideration in implementation should be devoted to those parts of the area that are already developed and are experiencing storm drainage problems. In Carrollton, the area that drains into the intersection of Sixth Street and Polk Street and along the railroad should receive early study. Also, drainage at the intersection of Eighth Street and Butler Street is a high priority need. The low area between 11th Street and Port William Lane and just south of U.S. 42 generally contains standing storm water runoff. The feasibility of draining this area should be studied as part of the storm drainage problem.

Cost to develop a master plan for all five communities is estimated to be $5,000.

B. PUBLIC IMPROVEMENT PLAN

In the foregoing parts of this report a total of 44 public improvement projects was presented and discussed. The projects ranged in scope from the preparation of regulations and codes to the construction of large-scale sewer and road cost construction projects. In the discussion of the projects it was pointed out that each played an important role in determining the future life-style for the citizens of Carroll County. Indeed, these projects collectively form the heart of the Comprehensive Plan for Carroll County. The overall success of this planning endeavor will largely be determined by the extent to which the 44 projects are carried through to complete development.

To accomplish these public improvement projects requires the expenditure of limited public resources, the most restricted of which are financial resources. A summation of the estimated costs of those projects reveals that completion of the 44 improvements would require the expenditure of more than $6.2 million. Successful accomplishment of all the development work included in these projects, several of which initially call for only the preparation of plans, would cost in excess of $10 million. This is quite a sum for a county the size of Carroll County even though a substantial part of this amount would be furnished by the State and Federal governments through turn-back funds, revenue sharing and grants.

It would not be realistic to assume that all of the 44 recommended projects could be developed in the near future. For not only would this severely strain the county's financial resources, it would also be difficult from the standpoint of availability of time, personnel and material resources.

Accordingly, it was deemed to be in the best interest of the county's citizens to rate the projects and assign priority on the basis of each project's importance to the fulfillment of the county's goals and objectives. The Planning Commission reviewed each project and selected 10 to be included in the highest priority group. By giving first attention to the top ten projects it will be possible to prepare a short-range capital improvement budget covering the next six years that can reasonably be expected to be achieved. Thus, resources can be applied where they are most likely to be effective.

Table No. 43 contains a summary listing of the 44 capital improvement projects including the 10 projects with the highest priority. Cost estimates are also shown for those projects for which cost estimates are available. Development of the top priority projects would entail the expenditure of approximately $3.6 million.

Not all of the funds would have to be raised locally for a substantial portion could come from State and Federal grants. The basis of local funding is taxes on real and personal property and franchise operations. General fund receipts and disbursements over the five most recent years of record, 1968-1972, for Carroll County and its five cities are presented in Table No. 44. To aid in the assessment of the area's ability to finance development of the projects included in the short-range budget, general fund receipts were projected forward on the basis of the trend established over the past five years. The projections indicate that general fund receipts for all of Carroll County will increase 28 percent without a change in the present tax rate. An increase in the rate to the maximum permitted by the State Constitution would raise the general fund receipts to a 133 percent increase over the projection of the present trend. Thus, it appears that additional general fund

TABLE NO. 43

CARROLL COUNTY CAPITAL IMPROVEMENT PROJECTS

Project Name	Project Cost
First Priority Group	
County Recreation Center w/Pool	$ 170,000
City-County Library	288,000
Improve Carrollton Sewer System	1,800,000
Construct Prestonville Sewers	300,000
Purchase New Ambulance	12,000
Study Detention-Rehabilitation Center	2,000
County Sanitary Landfill	60,000
Develop Dock-Shop Terminal in Carrollton	110,000
Remodel New County Courthouse	450,000
Construct W. Carroll County Water District	515,500
Total Cost	$3,707,500
Second Priority Group	
County Swimming Pool	$ 120,000
Playground- Athletic Fields (2 1/2 ac.)	
Carrollton (2)	30,000
Ghent (1)	15,000
Sanders (1)	15,000
Worthville (1)	15,000
Neighborhood Playlots (5000 S.F.)	
Carrollton (4)	12,000
Ghent	3,000
Sanders	3,000
Worthville	3,000
Hiking-Bike Trail along Ohio River	110,000
Marina- Ky. River (Study Only)	1,000
Improve Carrollton Water Plant	$ 560,000
Carroll Co. Water Dist. Extensions	203,000
Construct Prestonville Water System	*
Construct Ghent Sanitary Sewer System	533,070
Construct Sanders Sanitary Sewer System	288,770
Construct Worthville Sanitary Sewer System	325,190
Construct Family Health Center	Not determined
Construct New Municipal Building and Fire Station for Carrollton	Not determined
Prepare Storm Drainage Master Plans	
Carrollton	2,500
Ghent	1,000
Prestonville	1,000
Sanders	1,000
Worthville	1,000
Develop Carroll County Airport	Master Plan Being Prepared
Clear County Road R/W	80,000
Construct New Road Between Ky. 320 & Ky. 227	264,000
Widen U.S. 42 to 4 lanes Between Ky. 320 & Ky. 227	200,000
Repair Lock Road (Ky. 320)	Not determined
Replace Stop Signs in Carrollton	1,000
Study of Present Housing	2,000
Develop Building Codes for Cities	1,500
Develop Sub-division Regulations (Cities)	1,000
Develop Zoning Ordinance (Cities)	1,000
Total Cost	$2,674,030
Grand Total	$6,231,530

*Cost included in West Carroll County Water District Cost

TABLE NO. 44

GENERAL FUND RECEIPTS AND DISBURSEMENTS FOR CARROLL COUNTY AND CITIES IN CARROLL COUNTY, KENTUCKY 1968-1972

City, County	Year 1968	1969	1970	1971	1972
Carrollton					
Receipts	$153,251	$169,231	$188,799	$200,629	$207,794
Disbursements	149,329	162,341	183,125	199,287	195,088
Ghent					
Receipts	5,635	5,851	5,624	6,738	6,685
Disbursements	4,436	6,097	5,335	8,654	5,450
Prestonville					
Receipts		Not Available			
Disbursements					
Sanders					
Receipts		Not Available			
Disbursements					
Worthville					
Receipts	2,508	2,208	2,105	2,626	3,071
Disbursements	1,793	4,877	1,401	2,744	1,367
Carroll County					
Receipts	118,731	Not	137,761	146,524	156,413
Disbursements	109,060	Available	147,110	140,728	144,718

Source: City and County Financial Audits

receipts could be made available to support the proposed projects but it will be necessary to increase the tax rate to do so.

An additional source of revenue would come from the federal government's revenue sharing program. In 1973-74 fiscal year Carroll County and its cities received $216,213 from this source. Between 1974 and the end of the current federal program in mid 1977, it is assumed that about $200,000 will be received annually by Carroll County and its cities. This money could be applied to the capital improvement projects cost.

Capital improvement projects, such as some of those listed in the short-range program, may also be funded by bond issues based either on the general obligation of the county or on revenue produced by the development. General obligation bonds are subject to a limitation of 2 percent of the assessed valuation in the county. In 1972 the limit was $1.40 million, up from $1.06 million in 1968. At this rate of increase, the limit will be $2.24 million by 1980. The summary of bonds outstanding in 1973 is shown in Table No. 45. Presently there are only two bond issues coming under the bonded indebtedness limit, the general obligation hospital bonds issued by Carroll County. The 1953 issue will have been retired in 1974 and the 1970 issue will have a remaining indebtedness of $470,000 by 1980. This means that the county can issue $1.77 million in general obligation bonds by the end of the six-year period covered by the short-range public improvement program. Revenue bonds can of course be issued at any time to the extent of revenue anticipated from the project.

A summary of the projected financial data for Carrollton and Carroll County for the six-year public improvement budget is presented in Table No. 46. General funds, revenue sharing funds and outstanding bonded indebtedness are included in the summary. These data reveal that the general fund residual

TABLE NO. 45

COUNTY CARROLL
SUMMARY OF BONDS OUTSTANDING
BY GOVERNMENTAL UNIT AND TYPE
JUNE 30, 1973

GOVERNMENTAL UNIT PURPOSE AND TYPE	DATE	ORIGINAL ISSUE	RATE OF INTEREST	MATURITY DATES	PRINCIPAL OUTSTANDING EACH RATE	TOTAL
COUNTY BONDS						
HOSPITAL						
GENERAL OBLIGATION	01-01-53	150,000	2.5000	01-74/74	6,000	
ISSUE TOTAL					$6,000*	
HOSPITAL						
GENERAL OBLIGATION	06-01-70	750,000	6.0000	06-74/88	700,000	
ISSUE TOTAL					$700,000*	
TOTAL COUNTY BONDS						$706,000**
CITY OF CARROLLTON						
INDUSTRIAL FACILITY						
INDUSTRIAL REVENUE BONDS	08-01-65	1,860,000	3.8000	02-74/90	1,505,000	
ISSUE TOTAL					$1,505,000*	
INDUSTRIAL FACILITY						
INDUSTRIAL REVENUE BONDS	01-01-73	800,000	.0000	11-73/73	0,000	
			5.0000	11-74/75	50,000	
			5.2500	11-76/77	60,000	
			5.7500	11-78/78	30,000	
			6.0000	11-79/79	35,000	
			6.5000	11-80/81	70,000	
			7.0000	11-82/83	80,000	
			7.2500	11-84/85	80,000	
			7.5000	11-86/92	395,000	
ISSUE TOTAL					$800,000*	
WATER						
REVENUE	07-01-55	375,000	3.0000	07-73/75	40,000	
			3.2500	07-76/85	165,000	
ISSUE TOTAL					$205,000*	
GAS, WATER AND SEWER						
REVENUE	09-01-66	315,000	4.7500	03-74/91	285,000	
ISSUE TOTAL					$285,000*	
SEWER						
REVENUE	03-01-65	675,000	3.2500	03-74/75	40,000	
			3.3000	03-76/76	20,000	
			3.4000	03-77/78	50,000	
			3.5000	03-79/83	135,000	
			3.6000	03-84/86	120,000	
			3.7000	03-87/89	175,000	
ISSUE TOTAL					$540,000*	
GAS, WATER AND SEWER						
REVENUE	12-01-71	400,000	4.5000	03-74/80	95,000	
			5.0000	03-81/84	75,000	
			5.2500	03-85/85	20,000	
			5.3000	03-86/86	25,000	
			5.5000	03-87/87	25,000	
			5.6000	03-88/88	25,000	
			5.7500	03-89/92	125,000	
ISSUE TOTAL					$390,000*	
TOTAL CITY OF CARROLLTON						$1,420,000**
TOTAL INDUSTRIAL REVENUE						$2,305,000**
SPECIAL DISTRICT CARROLL CO. WATER DIST. NO. 1						
WATER						
REVENUE	09-01-65	454,000	5.0000	09-73/04	433,000	
ISSUE TOTAL					$433,000*	
TOTAL SPECIAL DISTRICT CARROLL CO. WATER DIST. NO. 1						$433,000**
SCHOOL DISTRICT CARROLL						
SCHOOLS						
PUBLIC CORPORATION	05-01-60	300,000	4.2500	05-74/85	184,000	
ISSUE TOTAL					$184,000*	
SCHOOLS						
PUBLIC CORPORATION	10-01-62	725,000	3.5000	10-73/77	100,000	
			3.7500	10-78/81	98,000	
			4.0000	10-82/92	381,000	
ISSUE TOTAL					$579,000*	

CONTINUED

Table No. 45 (cont.)

GOVERNMENTAL UNIT PURPOSE AND TYPE	DATE	ORIGINAL ISSUE	RATE OF INTEREST	MATURITY DATES	PRINCIPAL OUTSTANDING EACH RATE	TOTAL
SCHOOLS						
PUBLIC CORPORATION	12-01-67	1,755,000	5.7500	12-73/75	65,000	
			5.8750	12-76/81	175,000	
			6.0000	12-82/97	1,430,000	
ISSUE TOTAL					$1,670,000*	
SCHOOLS						
PUBLIC CORPORATION	11-01-68	385,000	5.0000	11-73/84	225,000	
			5.1000	11-85/85	25,000	
			5.2000	11-86/86	30,000	
			5.3000	11-87/87	30,000	
			5.4000	11-88/88	30,000	
ISSUE TOTAL					$340,000*	
SCHOOLS						
PUBLIC CORPORATION	09-01-70	940,000	6.2500	09-73/83	260,000	
			6.5000	09-84/85	75,000	
			6.8000	09-86/88	130,000	
			7.0000	09-89/89	50,000	
			7.1000	09-90/91	115,000	
			7.2000	09-92/94	200,000	
			6.8000	09-95/95	80,000	
ISSUE TOTAL					$910,000*	
SCHOOLS-ADVANCED REFUNDING						
PUBLIC CORPORATION	03-01-73	790,000	.0000	09-73/80	0,000	
			5.0000	09-81/86	270,000	
			5.1000	09-87/87	55,000	
			5.2000	09-88/89	115,000	
			5.3000	09-90/90	65,000	
			5.4000	09-91/92	140,000	
			5.5000	09-93/94	145,000	
ISSUE TOTAL					$790,000*	
TOTAL SCHOOL DISTRICT CARROLL						$4,473,000**
CARROLL TOTAL BONDS OUTSTANDING EXCLUDING IND. REV.					$7,032,000	
INDUSTRIAL REVENUE TOTAL					$2,305,000	

TABLE NO. 46

CARROLLTON AND CARROLL COUNTY PROJECTED FINANCIAL DATA
1975-1980

	Calendar Year					
	1975	1976	1977	1978	1979	1980
Carrollton:						
General Fund Receipts	$240,520	$251,430	$262,340	$273,250	$284,160	$295,066
General Fund Residual**	7,980	8,340	8,710	9,070	9,430	9,790
Revenue Sharing Receipts	50,000	50,000	25,000	--	--	--
Revenue Bonds*	3,164,490	2,997,750	2,822,850	2,647,940	2,466,040	2,284,140
Carroll County:						
General Fund Receipts	179,020	186,560	194,090	201,630	209,170	216,700
General Fund Residual**	5,700	5,940	6,180	6,420	6,660	6,900
Revenue Sharing Receipts	100,000	100,000	50,000	--	--	--
General Obligation Bonds*	627,500	592,500	555,000	515,000	472,500	427,500
Revenue Bonds*	378,880	365,350	351,810	338,280	324,750	311,221
School District Bonds*	4,266,750	4,168,390	4,069,280	3,966,410	3,863,550	3,760,690

* Previous bond issues that will not mature before 1980
** Residual equals average receipts minus average disbursements

after payment of operating expenses is very small in both the city and the county. Since governmental operating cost will tend to increase as additional public improvement projects are completed, the general fund residual will be applied to offsetting operating cost rises rather than to funding capital improvements. This then implies that the local share of the project's cost must generally be raised from either the revenue sharing receipts, through the issuance of general obligation or revenue bonds, or through loans.

The Public Improvement Plan budget is presented in Table No. 47. Sources of project funding are based on the presently established State and Federal programs that offer financial assistance for capital improvements. To be eligible for State or Federal assistance, the local authorities should apply to the office administering the programs as soon as project preliminary plans are developed so as to be in line when future program funds are obligated.

In any public improvements program, the most logical approach for local government is to explore all possible avenues of Federal assistance in order to make the projects economically feasible. The unranked priority projects and the best potential sources of grant monies are discussed.

1. County Recreation Center Including Swimming Pool

The Bureau of Outdoor Recreation, Department of Interior may provide financial assistance to the states and their political subdivisions for the acquisition and development of outdoor recreation areas and facilities for the general public, to meet current and future needs. This aid may include development of a range of projects including, but not limited to, bicycle trails, swimming pools, picnic areas, tennis courts, and support facilities such as roads, water supply, etc. Grants for 50 percent of the project cost may be obtained and are reflected in the Public Improvements Program.

2. Carrollton-Carroll County Library

The State has a library construction program that makes grants available for the development of public libraries. Funds are currently obligated through Fiscal Year 1976. The grant will pay up to 62 percent of the construction costs with local funding of the remaining cost.

TABLE NO. 47

PUBLIC IMPROVEMENT PLAN BUDGET

	Estimated Cost	Source of Project Funding					Beginning Date	Completion Date
		City	County	State	Federal	Private		
County Recreation Center - with Pool	$170,000	$42,500	$42,500		$185,000		1976	1977
Carrollton - Carroll County Library	288,000	54,720	54,720	$178,560			1975	1975
Carrollton Sewerage System Improvements	1,800,000				1,350,000	$450,000	1977	1979
Construct Prestonville Sewerage System	300,000				225,000	75,000	1977	1979
Purchase New Ambulance	12,000	6,000	6,000				1975	1975
Study Detention - Rehabilitation Center	2,000	1,000	1,000				1980	1980
Develop Sanitary Landfill and Collection System	60,000	30,000	30,000				1976	1977
Develop "Dock & Shop" Terminal in Carrollton								
Ramp and Parking Lot	80,000	40,000			40,000		1979	1980
Dock (Marina)	30,000	15,000			15,000			
Remodel New Courthouse	450,000		450,000				1978	1980
Construct W. Carroll County Water System	515,500				128,000	387,500	1974	1975
Total	$3,707,500	$189,220	$584,220	$178,560	$1,843,000	$912,500		

Application should be made to the State Department of Libraries about midway through the demonstration program that will commence this year.

3 & 4. Carrollton Sewerage System Improvements and Prestonville Sewerage System

The Water Quality Act of 1972 enables the Environmental Protection Agency to grant seventy-five (75) percent of the project cost for the construction of sanitary sewerage systems. This participation is shown in the Public Improvements Program.

5. Ambulance

State employees have indicated that grant monies for Emergency Medical Services may be available in the next few fiscal years. These grants will be administered through the Department for Human Resources. Presently, fifty percent grants are envisioned to fund services recommended in the Statewide Emergency Services Plan. Therefore, a fifty percent state grant is programmed for Carroll County.

6. Detention - Rehabilitation Center Study

The Regional Crime Council could be petitioned to support the conduct of the study, the cost of which could be borne by local funds with Regional Crime Council Assistance.

7. Develop Sanitary Landfill and Collection System

Grant monies are not readily available for development of solid waste disposal systems in rural areas. The Environmental Protection Agency has authority to provide assistance in remedying the solid waste problem, but prime consideration at this time appears to be geared toward recycling. This method of solid waste disposal is obviously only applicable to urban areas. Therefore, the programming of this project is totally at local expense.

8. "Dock and Shop" Terminal in Carrollton

The Corps of Engineers can participate in the construction of a launching ramp and parking lot with a 50 percent grant. Local share of costs can include credit for providing the land. A dock or marina can be funded by the Bureau of Outdoor Recreation or possibly by the Corps of Engineers, also for 50 percent of the cost of construction. Application for these funds should be made for Fiscal Year 1976.

9. Courthouse

The remodeling of the courthouse in Carroll County has been decided by the referendum on the May primary ballot. Grant monies for this type of project are nonexistent. Historically within the past few years, only one courthouse construction project in the Commonwealth received Federal grant assistance and this was through the Public Works Impact Program of the Economic Development Administration. Officials indicate

that this program is not scheduled to receive additional funding. Therefore, this project has been scheduled for total local funding.

10. Construct West Carroll County Water System

This project has already been approved by the Farmers Home Administration for a 25 percent grant and a 75 percent loan. The loan will be repaid out of the Water District revenue. Funds have not yet been allocated to this project.

To keep the short-range Public Improvements Plan current, it will be necessary to review the plan annually. During the review each project already underway should be examined to determine time of completion and final project costs. Proposed projects should be studied to see if any change in project scope and/or funding should be made and to determine the time for beginning the project. Possible projects should be evaluated and new ones added to the short-range Public Improvement Plan as dictated by financial capability and project priority. This review should be conducted by the Planning Commission, calling upon assistance by local, State and Federal officials as required and in cooperation with the Northern Kentucky Area Development District staff.

CHAPTER IX

INITIAL HOUSING ELEMENT

Housing, along with food and clothing, is a basic need of all people. Moreover, the provision of safe, sanitary and decent housing is a fundamental part of any organized effort to improve the environment in which we live. Because of these requirements a discussion of housing problems, needs, goals and plans then becomes an intrinsic element of this comprehensive plan for Carroll County.

This chapter of the report will cover housing needs for all income levels but with particular attention to needs by low-to-moderate income families. Problems and obstacles arising to oppose satisfaction of the housing needs will be discussed. Goals and objectives pertaining to housing will be presented and reviewed. Finally, a plan of action to attain the goals will be set forth.

HOUSING NEEDS

According to the Census of Housing there were 2,973 housing units in Carroll County in 1970. Slightly more than 2,400 of these were single unit homes, while only 356 were in units of two or more. There were approximately 200 mobile homes located in Carroll County in 1970. The urban area in the County contained 1,433, or 48 percent, of the housing units while the remaining 52 percent were in rural areas. Two hundred and twelve (212) of the units were vacant, mainly summer homes not occupied when the Census of Housing was conducted. Population per household in the county was 3.1.

Of the 2,761 housing units that were occupied, 1,724 were occupied by the Owner and 1,037 were occupied by a renter. The median value of owner occupied housing in 1970 was $11,200 per unit, an increase of nearly 48 percent over the 1960 value.

A detailed summary of the 1970 Census of Housing for Carroll County broken

down for West Carroll and East Carroll, the Census County Division (CCD) is presented in Table No. 48.

The need for housing in Carroll County has been determined on the basis of quality as well as quantity criteria. Qualitative need refers to up-grading existing housing that is either overcrowded, more than one person per room, or suffers from a lack of essential plumbing facilities. Quantitative need refers to future housing requirements dictated by population and household change.

The qualitative housing need in 1970 as determined from the Census of Housing data was 966 units. This includes the number of occupied units lacking one or more plumbing facilities and the number of occupied units with all plumbing but with one or more person per room.

Quantitative housing needs stemming from population and household changes over the next 20 years have been determined by applying to the projected Carroll County population an estimate of the number of persons per housing unit in 1994. In 1970 there were 2.87 persons per housing unit. Between 1960-1970 the number of persons per household declined 0.1. It is estimated that the number will drop an additional 0.15 between 1970 and 1994 so that there will then be 2.72 persons per housing unit.[1] Applying this ratio to the projected 1994 population of 10,650 yields an estimated 3,915 units required to house the projected 1994 population. Included in this figure are approximately 330 units estimated to be vacant for various reasons at any given time in 1994.

The number of housing units needed to provide for the 1994 projected population is 942 in excess of the 1970 supply. This does not include an additional number of new housing units required to replace those to be lost over the next 20 years through demolition, fire or structural dilapidation. Between 1960 and

[1] Market Analysis and Housing Distribution Plan, Northern Kentucky ADD, Office for Local Government, 1973, page 25.

TABLE NO. 48

SUMMARY OF CARROLL COUNTY HOUSING DATA BY
CENSUS COUNTY DIVISION (CCD) - 1970
FOR CARROLL COUNTY, KENTUCKY

	Carroll East CCD	Carroll West CCD	Total County
Housing Supply			
Total units	2407	566	2973
Rural	974	566	1540
Urban	1433	--	1433
Owner Occupied	1381	343	1724
Renter Occupied	872	165	1037
Unoccupied Housing			
Total Vacant	154	58	212
For Rent	51	10	61
For Sale	16	3	19
Seasonal Housing	87	36	123
Other	-	9	9
Condition of Owner-Occupied Units			
Overcrowded	66	38	104
Lacking Plumbing	249	122	371
Condition of Renter-Occupied Units			
Overcrowded	126	28	154
Lacking Plumbing	343	106	449
Housing Units by Type			
Single-unit structures	1963	448	2411
Multi-unit structures	332	24	356
Mobile Homes	112	85	197
Total Units	2407	557	2964
Population per Household	3.0	3.5	3.1
Value of Owner-Occupied Units			
Less than $5000	134	35	169
$5000 to $9999	291	35	326
$10,000 to $14,999	287	13	300
$15,000 to $19,999	162	7	169
Over $20,000	163	6	169
Monthly Contract Rent for Renter-Occupied Units			
Less than $40	259	37	296
$40 to $79	291	17	308
$80 to $119	87	1	88
$120 or more	25	3	28
No Cash Rent	67	18	85

1970 a total of 448 housing units were removed from service for various reasons. This is an average of 45 per year. By 1994, at the same rate, a total of 900 housing units will be lost due to demolition, fire or structural dilapidation. This figure, when added to the 942 units required due to population increase, yields a quantitative need of 1,842 housing units by 1994.

Since the lack of essential plumbing and overcrowding in the housing units basically indicates a lack of sufficient income to purchase suitable housing, it can be assumed that substantially all of the qualitative need for housing comes from the low-to-moderate income families in Carroll County. The quantitative need on the other hand will largely come from moderate-to-high income families' desire for new housing. For while it is true that the low-to-moderate income families will increase in the future and will need new homes they unlikely will be able to pay for it. So the real expression of the quantitative need will come from the higher income group who will be able to pay for new housing.

MEETING THE HOUSING NEEDS

Qualitative housing needs can be met two ways. First, the need may be accomplished through the renovation of existing, structurally sound, housing units, or, secondly, the need can be satisfied by the construction of adequate new housing.

There is very little data available on the structural soundness of the present housing units constituting the qualitative need. A detailed survey of all housing units in this category would be necessary before a definite plan of action could be determined insofar as restoration of existing housing is concerned.

The construction of new housing units is not only a method of up-grading existing, low-quality, housing but it is also necessary for the provision of replacement and population-change housing. While the number of new housing units needed to meet the "quality" needs is presently indeterminable, the number of housing units required to meet the quantitative needs has been determined. A portion of the new construction for quantitative needs will also help provide

for qualitative needs since it will involve replacement of demolished, destroyed, or dilapidated existing housing units, some of which are also deficient either in plumbing or number of rooms.

To meet quantitative needs an average of 91 new homes per year will be necessary. This is a 36 percent increase over the annual new home construction rate experienced in Carroll County between 1960 and 1970. An even greater increase will be necessary, however, if new home construction is expected to also satisfy a significant part of the qualitative needs. While the exact number of new homes to meet qualitative needs cannot be determined for planning purposes it can be assumed that each year Carroll County will need at least 100 new homes.

OBSTACLES TO MEETING HOUSING NEEDS

There are several obstacles to be overcome in meeting the qualitative and quantitative housing needs. Public and private efforts to improve housing in Carroll County need to be stimulated by removing the present restraints to a properly functioning housing development program. Among the obstacles are:

(1) A lack of effective planning by local government. Better planning would provide a solid, factual base for future decision and a framework to carry out the recommendations for housing.

(2) Overall organization and administration at the city and county level of a comprehensive housing plan is presently not functioning, largely due to a lack of planning.

(3) Funding of public and private housing efforts is not sufficient to meet current needs.

(4) Community services, primarily water and sewer, are not presently available in all parts of the county. This restricts the choice of location and tends to increase the cost of providing an acceptable level of housing.

(5) Building code, plumbing code and electrical code in the City of Carrollton need to be updated to the latest edition of the codes. (In 1968, the City of Carrollton adopted by ordinance the 1968 edition of the Kentucky State Plumbing Code, the 1967 edition of the National Building Code, and the 1968 edition of the National Electrical Code. Both the Plumbing Code and the Electrical Code have been revised since being adopted by Carrollton.)

(6) Subdivision Regulations for the City of Carrollton need to be updated. (Carrollton adopted the Subdivision Regulation in 1969 but there is a need to thoroughly review the provisions of the regulations and to correct any noted deficiencies in the present regulations. The Master Street Plan should be reviewed and amended where necessary and incorporated into the Subdivision Regulations.)

(7) The Carrollton Zoning Ordinance needs to be updated. (The present Zoning Ordinance was adopted in 1969 and is generally adequate but still should be reviewed and changed where necessary. Also, the present Land Use Plan should be revised and incorporated into the present ordinance.)

HOUSING GOALS AND OBJECTIVES

The overall goal for housing in Carroll County is that every citizen should have the opportunity to live in a decent home with a desirable living environment.

Objectives relative to the overall housing goal are as follows:

(1) Increase the supply of housing units to overcome quantitative and qualitative deficiencies. A minimum of 100 new homes per year will be required.

(2) Expand housing opportunities to all parts of Carroll County.

(3) Continue to accumulate statistical information to analyze housing problems and opportunities, gather and disseminate housing information and coordinate public and private efforts relative to housing, and provide a vehicle for every citizen to state his desires for his housing and his community.

(4) Provide a varied supply and diversity of housing and environment and, whenever possible, the choice of renting or owning. Special attention will be given to supplying housing for low and moderate-income groups.

(5) Integrate planning as a required foundation for systematic housing development.

(6) Expand the range of housing opportunities for all citizens by expanding employment possibilities and public service facilities. Analyze service needs and the ability to provide service to accommodate a full range of housing types. Prepare recommendations to assist developers, communities and State and Federal agencies to supply the type of housing needed for balanced growth in Carroll County.

HOUSING PLAN OF ACTION

To overcome the obstacles to the provision of housing and to set in motion a procedure to meet the goal and objectives the following plan of action is proposed.

(1) Undertake a thorough study of existing housing in Carroll County to determine the units that presently lack essential plumbing and/or have more than one person per room.

(2) Determine the structural adequacy of the housing lacking plumbing or that is overcrowded.

(3) Develop the needs in terms of housing units to be upgraded and units to be replaced that are presently deficient in plumbing or size.

(4) Coordinate efforts with City and County officials and the utility companies to extend services to all parts of the county where additional services are needed to expand housing opportunities.

(5) Develop and keep current a county-wide land use plan that is conducive to the orderly development of residential areas.

(6) Promote an increase in job opportunities and the upgrading of types of employment as a means of providing a more sound financial base for better housing for Carroll County.

(7) Work with the Northern Kentucky Area Development District, State and Federal agencies to keep abreast of their pro-housing programs and to be able to obtain financial or other kinds of assistance to the Carroll County housing program.

(8) Revise the existing building, plumbing and electrical codes to reflect latest editions of the State and National codes.

(9) Revise the existing Zoning Ordinance and Subdivision Regulations and update the Land Use Plan and Master Street Plan.

NOTE: For additional statements on housing at the regional level, refer to:

1. Initial Housing Element: A Design for Housing Development, Northern Kentucky Area Development District, 1972.
2. Market Analysis and Housing Distribution Plan, Northern Kentucky ADD, Office for Local Government, 1973.