## A GUIDE FOR PLANNING URBAN RENEWAL PROJECTS

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#### INTRODUCTION

According to Professor Charles Haar of the Harvard Law School,

The major urban land problems are congestion resulting from unplanned growth, slums, blighted areas, inadequate open spaces, disorganized land uses, high land costs in central areas, premature and abortive subdivisions, housing shortage, imperfect patterns of tenure, stratified physical patterns, and stratified social patterns. (26)

Of these many factors, slums are the most prevalent demagogue to American cities. Slums are the final product of a continuing process of decay that, in various stages, affects a large part of the urban area of today and threatens all of it——decay that is caused by civic neglect and inaction.

Vice, juvenile delinquency, murder and disease have all been proven to be more prevalent in slums than in other areas. These slums have grown in such a proportion that they are now a problem of national concern.

The Federal Government, through the Housing Act of 1949 (Public Law 171, 81st Congress) and The Housing Act of 1954 (Public Law 560, 83rd Congress) enacted legislation to aid cities in alleviating slum conditions. The acts were intended to (1) prevent the spread of blight into good areas, (2) rehabilitate and conserve those areas where it was economically feasible to do so and, (3) continue clearance and redevelopment of areas that can not be saved.

The projects contemplated under Public Law 560, 83rd Congress are usually referred to as a "Urban Renewal Project."

This paper was written to serve as a guide in establishing an orderly procedure for compiling the basic background data necessary for a successful urban renewal project. This basic data consists of "the physical setting,

the social organization, and the economic situation (Graham, 16). Any program should consist of a regional survey, a community survey, the selection of the site, an analysis of the neighborhood requirements, a means of financing, a means of securing active citizen participation, and the architectural engineering solution of these problems.

Each of these items has its own niche in the completed urban pattern, and each must be fully recognized if our urban areas are to be spared from utter destruction.

The author chose the city of Louisville, Kentucky as a hypothetical client and used it to demonstrate the fundamentals of Urban Renewal.

### URBAN RENEWAL

### Why Urban Renewal?

In this great land of ours, the United States, where the highest standards of living in the world exist, where immigrants expect unlimited opportunities for economic advancement, where per capita income is high, there is a grave and dangerous situation now facing its inhabitants.

Slums! 20 per cent of the residential areas.

Slums! 33 per cent of the population.

Slums! 45 per cent of the major crimes.

Slums: 55 per cent of the juvenile delinquency cases.

Slums! 50 per cent of total arrests.

Slums! 60 per cent of the tuberculosis victims.

Slums! 50 per cent of all diseases.

Slums: 35 per cent of the fires.

Slums! 45 per cent of total city service costs.

Slums! 6 per cent of the tax revenue. (1).

Slums! Slums! Slums!

Slums are the end product of a continuing process of decay that eventually affects all the citizens of these United States of America.

Slums are caused by civic neglect and inaction, by poor planning or no planning at all, by the greed of a few unscrupulous absentee land owners who place the almighty dollar above the accepted standards of decency for human beings. Slums are a disgrace not only to the people who are forced to reside in them but also to the remainder of the community who permit them to exist for no community is better than its worst neighborhood.

The population of Chicago's city core, that is the area within one mile of the center of the city which contains the bulk of the most severe slums, increased its density by 18% between 1940 and 1950. Slum areas of other central cities have experienced comparable growth. Negroes from the rural south, Puerto Ricans who have sought relief from even more critical conditions on their native islands, Indians and other minority groups have made up the bulk of these population increases. Yet 99% of all privately built housing during and since World War II has been restricted to white occupancy.

Despite encouraging events such as the New York Life Insurance Company's vast housing project in Chicago, these migrations have resulted in unprecedently severe slum conditions in our cities. New and more shameful chapters are being added to the already existing social treatises about disease, overcrowding, filth, corrupted morals and delinquency generated in such ghettoes.

Minority groups are being forced to live in slums even when they might logically afford other housing. Urban zoning provisions, FHA loan requirements, and other devices have too often been perverted to become instruments of minority oppression. Land lords have found new profits in the higher rents they can charge salaried slum dwellers as well as in the additional over-crowding itself. Thus resistance to effective slum elimination has increased with the severity of the slums. (Hodgell, 17).

In 1892, the Federal government discovered it was more costly to maintain slums than it was to clear them but the label of "socialism" was quickly attached to public housing legislation by real estate groups and banking institutions. The end result was that for 57 years, that is until 1949, there was no federal legislation concerning slum clearance.

The depression of the early 30's forced these same pressure groups to realize that unemployment and bad housing affected more than the individual, it affected the community and the entire nation's welfare. It also pointed out that certain people did not live in given areas by choice or lack of desire for better neighborhoods but because social pressures in legal guises had forced them to live in these areas.

Federally sponsored public housing was first introduced in the United States as a part of the National Industrial Recovery Act in 1933. It was designed to provide accommodations for low income families and these units were designed upon the minimum standards avoiding the possibility of discouraging the desire for self improvement on the part of these people.

In 1945, America found itself with a housing shortage for all income levels and so the public housing program, which had been discontinued at the beginning of World War II, was revived. The Reconstruction Finance Corporation offered 90 per cent loans to builders of low cost housing but high construction costs placed the units beyond the reach of the people for whom they were intended.

In 1953, the Housing and Home Finance Agency was born but, according to most material available, it seems to lack adequate finances or legislation to alleviate the inroads of slums upon todays urban areas. It is needless to say that unless drastic action is undertaken immediately, these communities can not continue to exist as they have in the past. They will become mere symbols of a lost era.

The Urban Renewal program of 1954 concerns itself with the problem of slums. It was intended to stop the spread of slums to other areas not already affected, to provide for the renovation of areas beyond repair or too costly

to repair and to provide means for reclaiming areas on the brink of disaster.

This law requires a "workable program" to be submitted by the applicant for assistance. This program consists of evidence that the community has

- (1) adequate local codes, effectively enforced, (2) a comprehensive plan,
- (3) an analysis of the neighborhood under consideration, (4) adequate administrative organization, (5) adequate financial stability, (6) provisions for rehousing displaced persons, and (7) citizen participation.

The intent of these requirements is to establish the fact that an area is in need of renewal and to determine the extent of renewal that is necessary. This requires the consideration of two concepts of planning, one physical and the other social.

### REGIONAL SURVEY

### History

If one should take a river excursion down the "beautiful Ohio", then he would see many historical points of interest. Clark B. Firestone, associate editor of the Cincinnati Times-Star lists the following outstanding points of interest: (Firestone, 13).

Pittsburgh - Here the Monongahela and Allegheny Rivers form the Ohio. It is also referred to as the Empire of Steel.

East Liverpool, Ohio - A renowned pottery center.

Martins Ferry, Ohio - Birthplace of William Howells.

Wheeling, West Virginia - The former capital of West Virginia.

Marietta, Ohio - Oldest settlement in and first capital of the Northwest Territory. A quaint "Hourglass" lock, on Muskingum River, and a very fine museum of river lore are located here. Blennerhassett Island - Aaron Burr planned his revolution here.

Mouth of Kanawba River - Near its mouth, French settlers buried a number of plates of dinnerware believed to be the "proof" of their travel and domain in the territory.

Gallispolis, Ohio - This is the home of O. O. McIntyre, newspaperman and author of the first widely syndicated newspaper column, "New York, Day by Day".

Ripley, Ohio - This is where Eliza of "Uncle Tom's Cabin" crossed the ice in her flight to freedom. In pre-Civil War days, it served as a northern terminus of the slave-traveled "underground railroad", for which the Rankin Home, still standing, was headquarters.

Point Pleasant, Ohio - This is the birthplace of U. S. Grant and the Grant homestead is now a state operated museum.

North Bend, Ohio - William Henry Harrison was born and is buried here.

Big Bone Creek, Kentucky - Big Bone, located three miles up this creek, is the site of important prehistoric discoveries.

Madison, Indiana - Hanover College, the oldest college in the state of Indiana, was founded here in 1827. The Lanier Home, open to the public, is a fine example of Colonial Architecture.

Tomb of Jay McHarrie - Located high on the precipitous slope, above the Indiana bank of the Ohio River, is a gray moss-covered granite structure with a single window overlooking the valley known to the residents as the tomb of Jay McHarrie. A legendary riverman of the flatboat days, his vindictiveness toward steamboats, whose era he lived to see, caused him to be buried upright so he could keep an eye on his enemies.

The Oxbow Country - For the next few miles, after leaving Lock 44, the traveler sees a magnificent stretch of river as it winds in "S" and double

"S" curves.

Lincoln Country - In his early youth, Abraham Lincoln operated a ferry here. Approximately 80 miles away is Lincoln City, Inc., where he passed a part of his youth.

Shawneetown, Illinois - Bankers of this early Illinois settlement refused to lend money for pioneers to develop an upstate city, Chicago, because, they said, such a community had no chance to succeed.

Cave In Rock, Illinois - It was famous as the hangout of early pirates.

Paducah, Kentucky - This is the home of Irvin S. Cobb.

Cairo, Illinois - Here the Ohio enters the mighty Mississippi River.

Southern Illinois, in the vicinity of Cairo, is known as Little Egypt. From the point where the two rivers meet, it is 966 miles to New Orleans, 853 miles to Minneapolis, and 180 miles to St. Louis.

### Geography

The region, for purposes of preliminary reconnaissance was delineated on the basis of the drainage basins within the United States. A drainage basin consists of the land areas immediately adjacent to a major river or its tributaries and there are ten such recognized areas of which the Ohio River Basin is one.

The Ohio River Basin consists of that land area draining into the Ohio River and its eighteen tributaries. It flows through the center of the basin in a southwesterly direction for approximately 981 miles, from Pittsburgh, Pennsylvania to Cairo, Illinois, consists of approximately 100,000,000 acres lying in eleven states, and includes parts of Illinois, Indiana, Ohio, New York, Pennsylvania, Maryland, West Virginia, Virginia,

North Carolina, Tennessee and Kentucky.1

### Climate

The climate in this region is as varied as the weather in the month of April. The average temperature for summer days is 75° F. and for winter days it is 32° F., with high humidity prevailing most of the time. The extreme temperature range is from -30 to 115° F., so there is enough variation to please the most indiscreet. There is an average of 5,670 degree days in the basin and a normal annual precipitation of 39.6 inches.

### Population

In this fertile basin lives a total of 17,330,000 people, one-ninth of the nation's total population. Nine of the 50 largest cities and 16 of the 140 metropolitan areas in the nation are here. Approximately 15.2 per cent of this population is classified as non-white, indicating that this area encompasses 4.7 per cent more non-whites than the median of the United States.

### Economy

Economically, the Ohio River Basin falls below the median income of the United States by \$109 even though 13 per cent of the nation's production workers are here. The median income of the Ohio River Basin in 1950 was \$2510 while the median for the United States was \$2619. The general distribution pattern for the total income of the basin closely follows that of the United States.

<sup>1</sup> All plates and tables are at the end of the section to which they refer.

Basically, the economy of the basin is very sound because the major portion of the income is derived from items that are vital to the welfare of the nation. Basic steel production, 75 per cent of the nation's bituminous coal, wearing apparel and agriculture are the foundation of the Ohio River Basin's economic status.

### Agriculture

Agriculture in the basin varies from cotton in the southwest part of the area to dairy farming in the northeast part of the area. Corn prevails in the northwest part of the area. It is also interesting to note, that, contrary to the popular belief that all southern states major crop is cotton, North Carolina, Virginia and West Virginia show the trend among southern states as being away from cotton (Plate V).

### Industry

Industrially, this basin has not developed to its full potential in the southwest portion. Within the last five years, in the southwest portion, General Electric, Westinghouse Electric and the Atomic Energy Commission have built plants in this area because of the large labor potential and existing power facilities.

The industries in the basin are varied to a great extent also. Basic metal products, apparel and related products, chemicals and allied products, machinery (except electrical), textile mill products and transportation equipment were the industries having largest number of man-hours according to the latest census figures. It is the author's belief that in the next census the manufacture of electrical equipment will make a great advancement.

### Transportation

Transportation facilities was the next item for consideration and it was ascertained that there existed four main ways of travel within the basin. Travel by airways, highways, railroads and water was available.

Airlines. Within the basin, four major airlines served to link the metropolitan areas, The American Airlines, The Eastern Airlines, The Piedmont Airlines and the Transworld Airlines. These airlines had regularly scheduled flights to and from the project site to the other metropolitan areas. It may be worthwhile to note that if the south should ever develop to its full potential industrially and agriculturally, then air traffic to the southeast will have to be further developed; otherwise the pattern as it now exists will be satisfactory for all purposes.

Highways. Road systems within the basin were found to be in good condition in so far as the connecting link between metropolitan areas was concerned, but lacking in adequacy from the farm areas to the metropolitan areas. The northeast section of the basin had the better portion of the system. From the project site it was found that U. S. 31 served to connect the metropolitan areas to the north and south and U. S. 60 served to connect the metropolitan areas to the east and west.

Railroads. No less than 25 major lines serve to connect the metropolitan areas within the basin. Eight of the railroads had regularly
scheduled "runs" serving to connect the project site with the other metropolitan areas within the basin. The availability of adequate railroad
facilities was one factor that induced industry to this area.

<u>Water.</u> As for water travel, the earliest civil works which Congress directed the Corps of Engineers to undertake was concerned with navigation on the Ohio and Mississippi Rivers. In 1820 Congress appropriated funds for

a survey of certain reaches and tributaries of the Ohio and Mississippi; the survey was made by a Federal Board of Engineer Officers. In 1824, Congress first appropriated funds for works in navigable water.

Traffic on the river was growing steadily in the years preceding completion. By 1929, the river was carrying about 22 million tons of cargo, or about 1.5 billion ton miles. Since 1929, the growth in traffic has been phenominal. In 1953, the last year for which complete statistics are available, the river carried a total of 62 million tons or nearly three times that in 1929. The ton-mileage in 1953 was about 11.7 billion, or more than seven times that in 1929." (Anderson, 2).

A tentative plan for replacing the original system with fewer, modern structures has been developed. Three of the replacement locks and dams—at New Cumberland, West Virginia, Greenup, Kentucky and Markland, Indiana—have been approved and are under construction and the detailed planning of the construction of Locks and Dam 41 at Louisville, Kentucky is far advanced.

## Regional Facilities

Regional facilities were investigated from the following points of view: public school facilities, hospital facilities and recreational facilities.

School Facilities. The Ohio River Basin schools had a median of 28.2 students per teacher in comparison to a median of 27.6 students per teacher in the United States. The median number of students per school in the United States was 180.1 and in the basin, the median was 240.1 students per school. This indicated a true condition, the schools are overcrowded. Any solution that tends to improve this situation represents advancement.

Hospital Facilities. The hospital facilities within the basin compared favorably with those of the United States. There was one bed for each 82.7 people within the basin in comparison with one bed for each 99.1 people within the United States as a whole.

These hospitals include those that are not restricted to veterans and those facilities that are registered by the American Medical Association as General Hospital Facilities.

Recreational Facilities. As for recreation, there were numerous outlets for vacation trips within the basin. A few points of interest within the basin are listed below:

Chattanooga, Tennessee. From atop Lookout Mountain, the traveler can see parts of seven states on a clear day.

Nashville, Tennessee. Commonly referred to as the "Athens of the South", "The City of Seven Hills", and the "Cultural Center of the South". Be sure to see the replica of the Parthenon that is located here.

Louisville, Kentucky. This is the home of the Kentucky Derby and 25 per cent of the alcoholic beverages in the United States is made here.

Horse Cave, Kentucky. One of several sets of underground charted caverns open to visitors.

Indianapolis, Indiana. May 30 is the big day here, for then the Memorial Day Races take place.

Ft. Knox, Kentucky. Home of the gold ignots that give value to Uncle Sam's dollar.

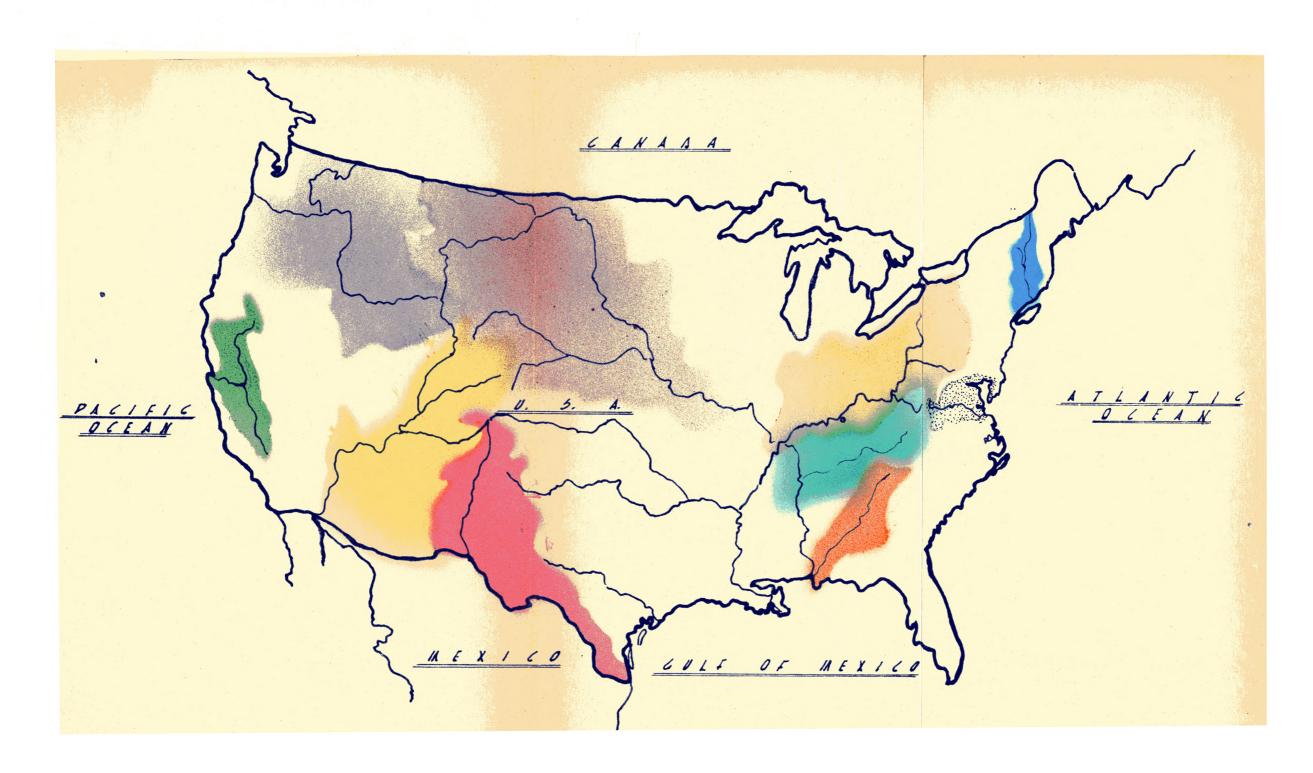
As would be expected, the development of the reservoirs, on the Ohio River to control the water level for navigation purposes led to the development of recreational facilities at these sites. The accommodations usually available at these sites were picnic areas, public camping sites, over-night accommodations, rental boats and restaurants.

## EXPLANATION OF PLATE I

Major drainage basins within the United States. (44 and 46). Key:

The	Columbia River Basin	0
The	Central Valley of California	0
The	Missouri River Basin	
The	Rio Grande River Basin	
The	Colorado River Basin	
The	Connecticut River Basin	3
The	Alabama-Coosa River Basin	•
The	Potomac River Basin	0
The	Ohio River Basin	<b>(</b>
The	Tennessee River Basin	•
Loui	isville, Kentucky	0

PLATE I



### EXPLANATION OF PLATE II

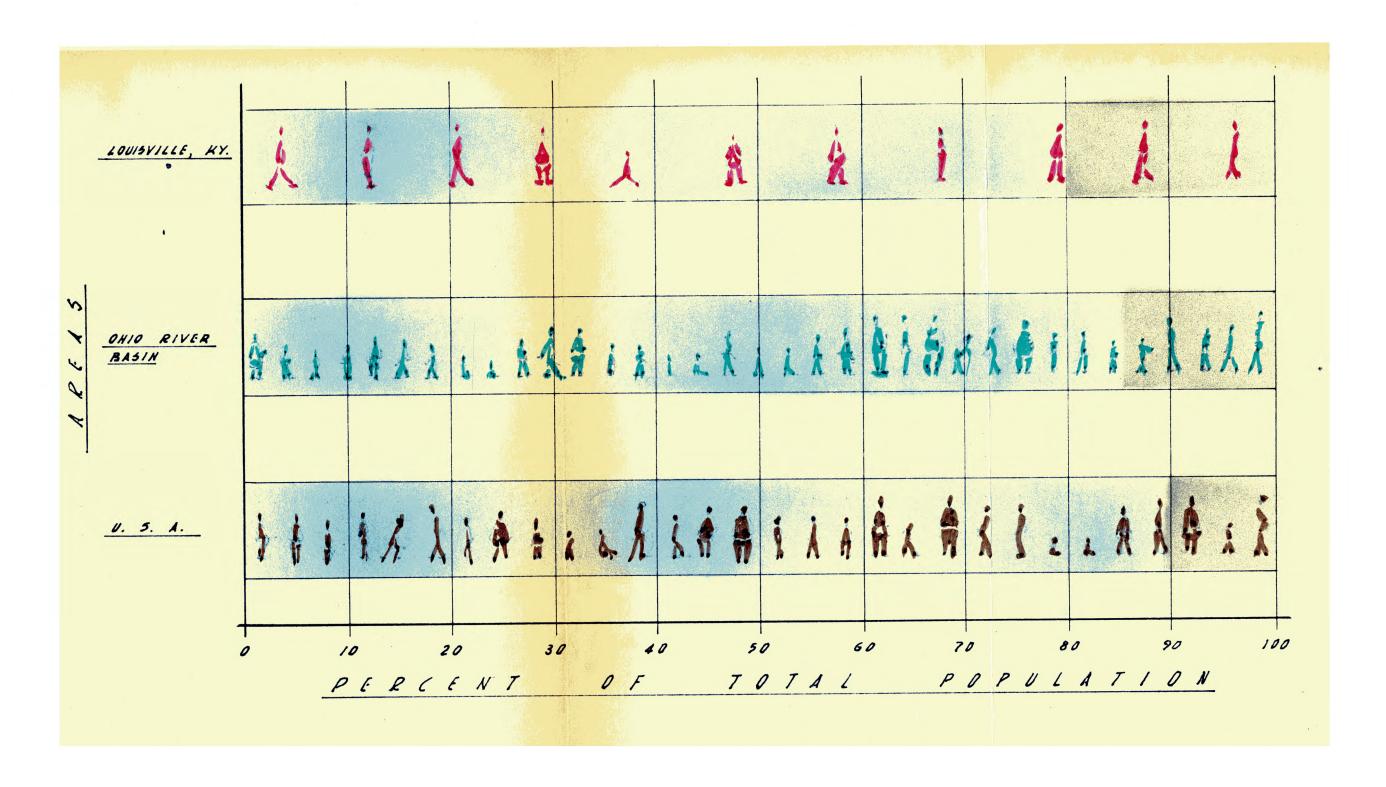
Population characteristics of the United States, the Ohio River Basin and Louisville, Kentucky. (38, 43).

## Key:

50,000 people per figure
500,000 people per figure
5,000,000 people per figure
non-white
white



PLATE II



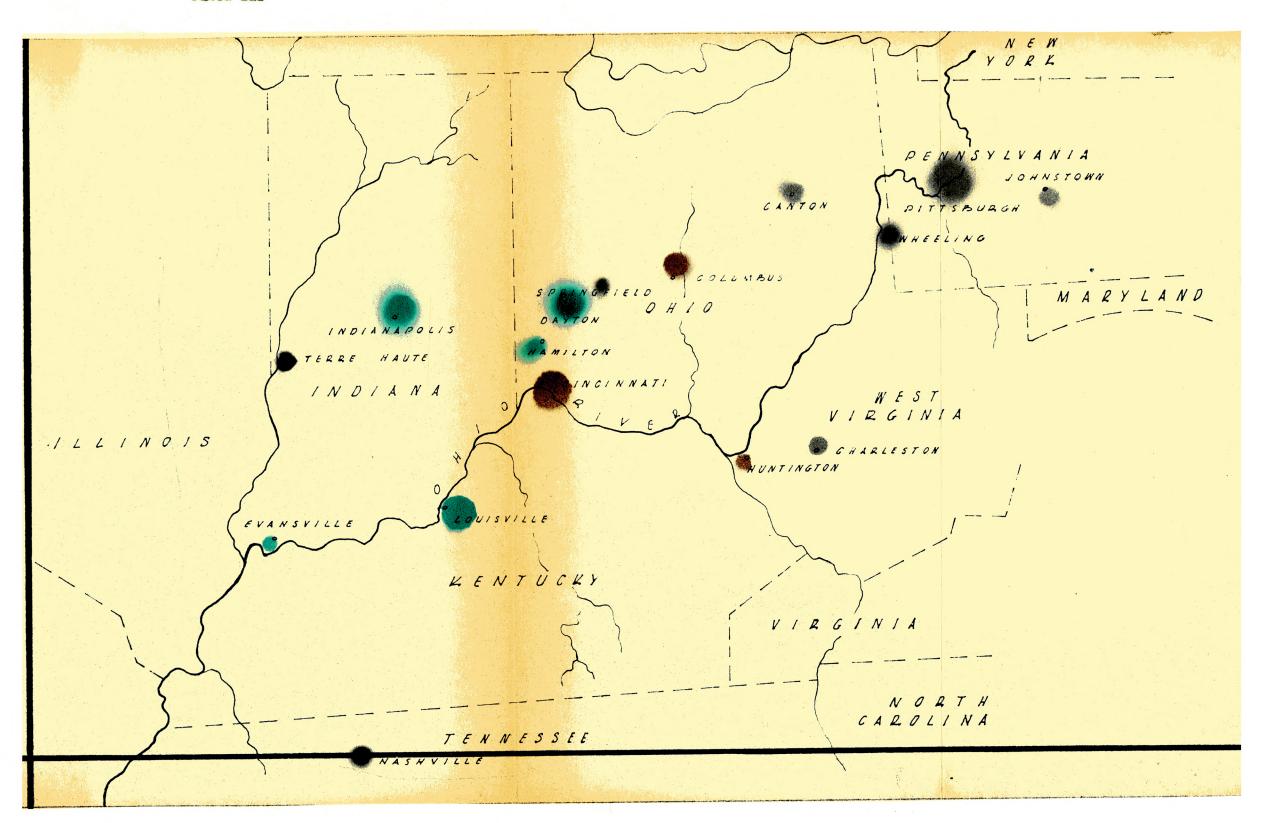
# EXPLANATION OF PLATE III

Metropolitan Areas of the Ohio River Basin. (3, 44).

## Key:

100,000		EEO 000	
100,000		550,000	
150,000	9	600,000	
200,000		650,000	
250,000		700,000	
300,000	6	750,000	
350,000	0	800,000	
400,000		850,000	
450,000		900,000	
500,000		1,000,000 or more	6

PLATE III



## EXPLANATION OF PLATE IV

Income Distribution (38, 43).

## Key:

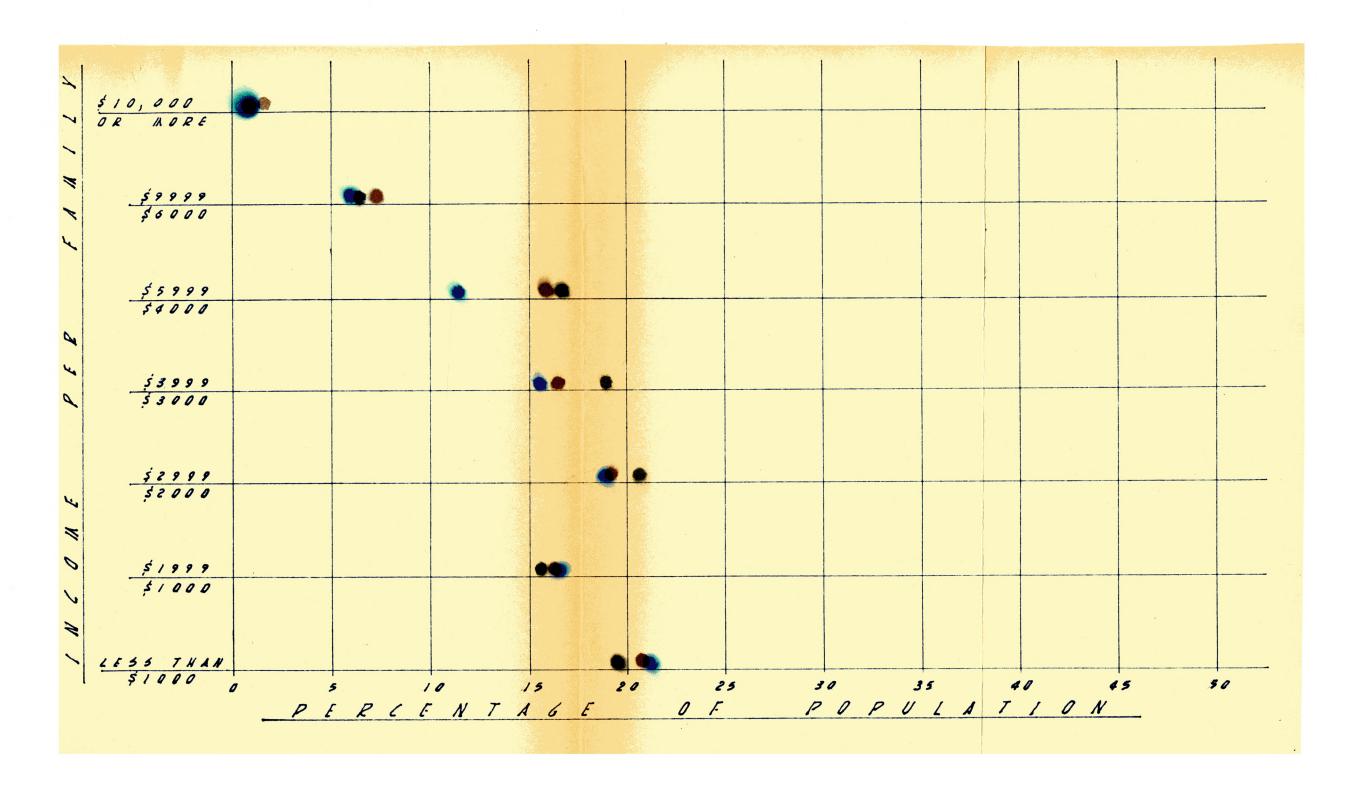
Louisville, Kentucky

U

Ohio River Basin

U. S. A.

PLATE IV



### EXPLANATION OF PLATE V

Agriculture in the Ohio River Basin (28, 41).

Key:

Livestock

(cattle, hogs, calves, etc.)

Cotton

Field Crops

(peanuts, potatoes, tobacco, etc.)

0

Cash Grain Crops

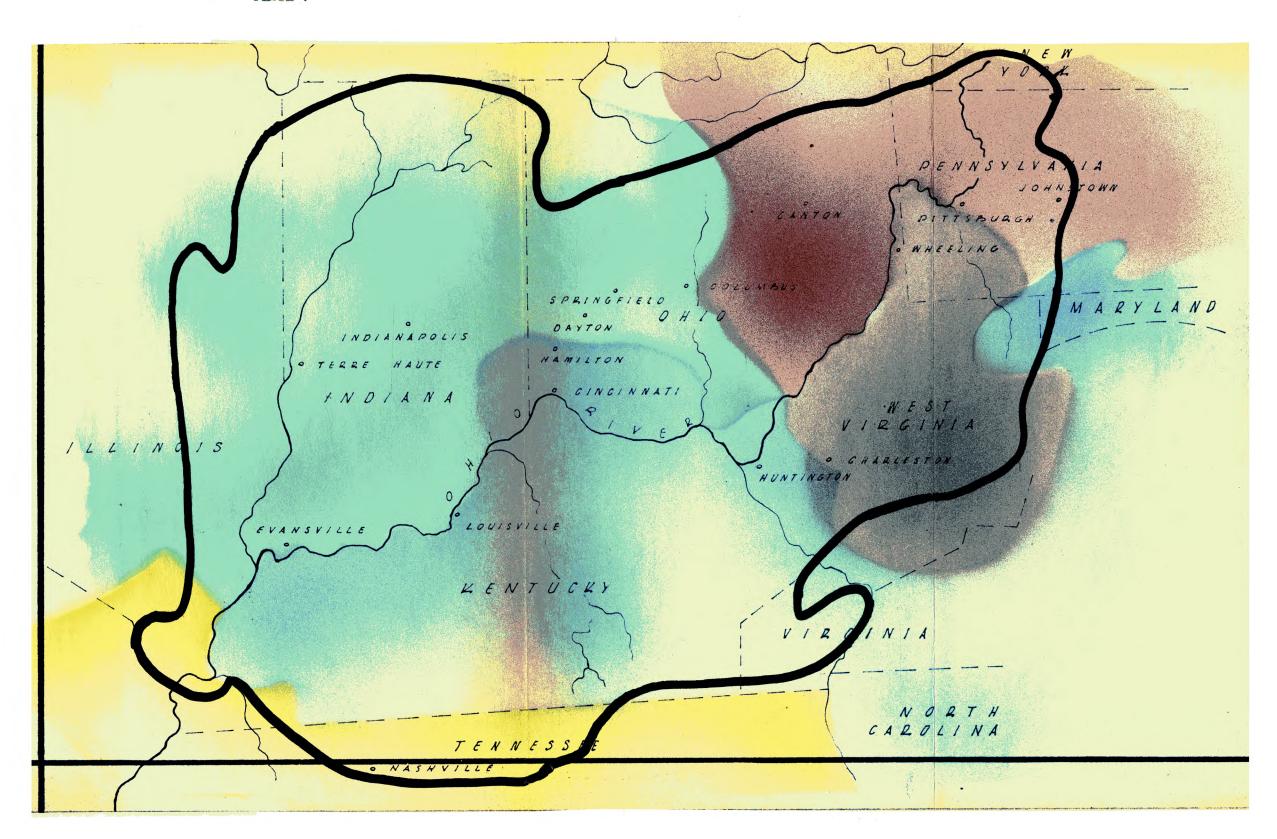
(field peas, field beans, corn, sorghum)

Dairy

(50% or more of the income of the farmstead is derived from cattle or dairy products)

64

PLATE V



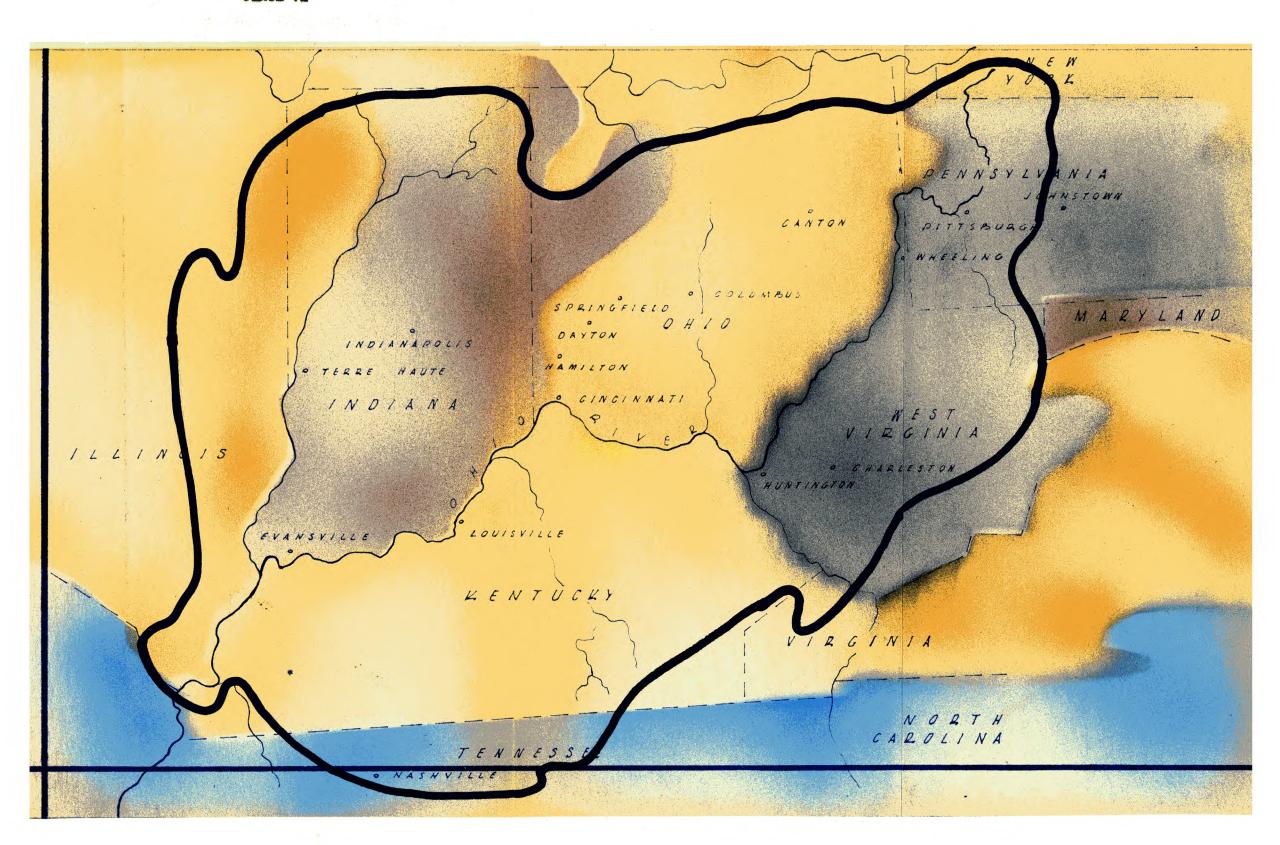
## EXPLANATION OF PLATE VI

# Industry in The Ohio River Basin (33)

## Key:

Apparel and related products	0
Chemicals and allied products	\$
Machinery (except electrical)	4
Primary metal products	•
Textile mill products	
Transportation equipment	O.

PLATE VI



## EXPLANATION OF PLATE VII

## Airline Routes (10)

## Key:

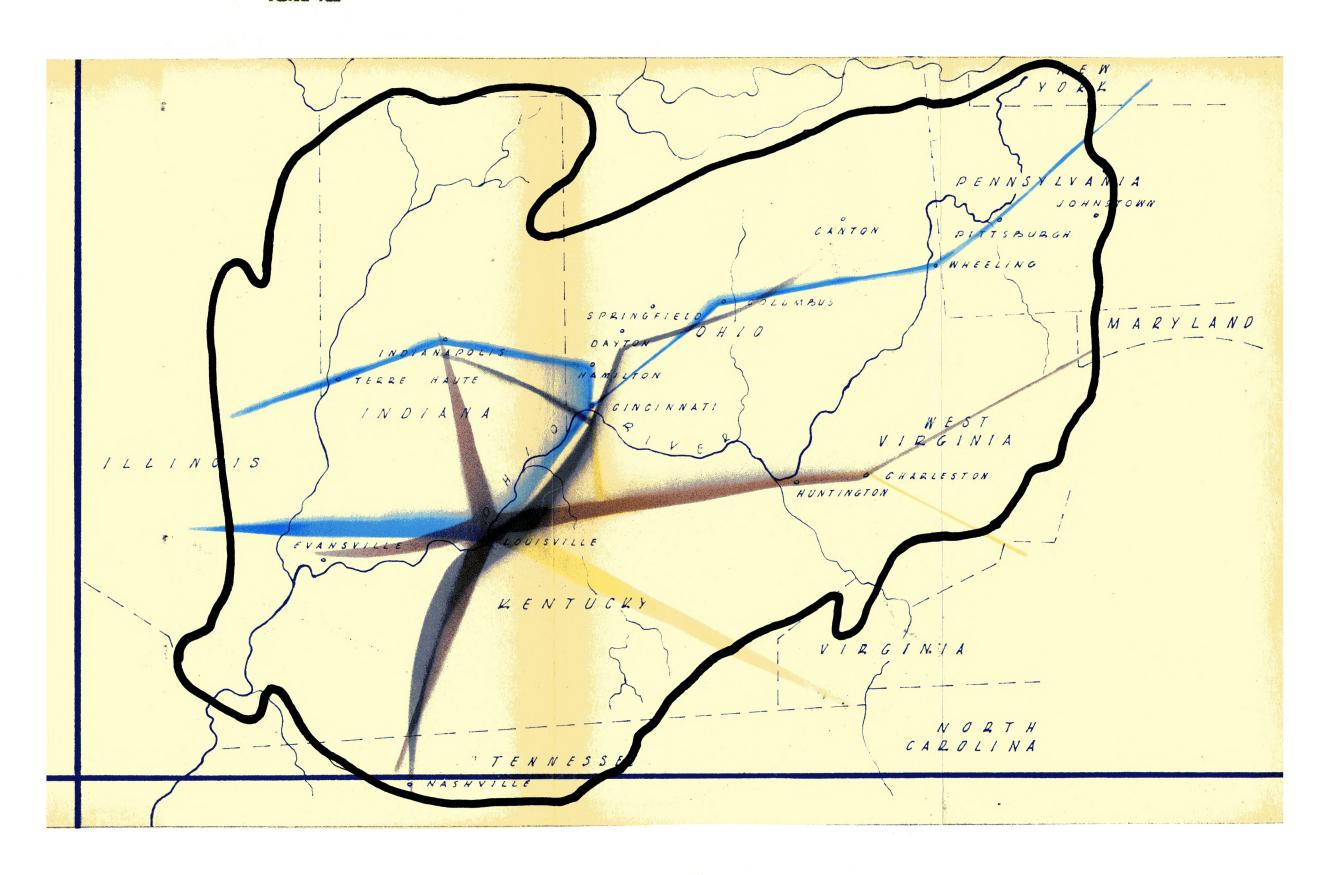
American Airlines

Eastern Airlines

Piedmont Airlines

Transworld Airlines

PLATE VII



## EXPLANATION OF PLATE VIII

# Principal Highways (47)

## Key:

U. S. 19

U. S. 25

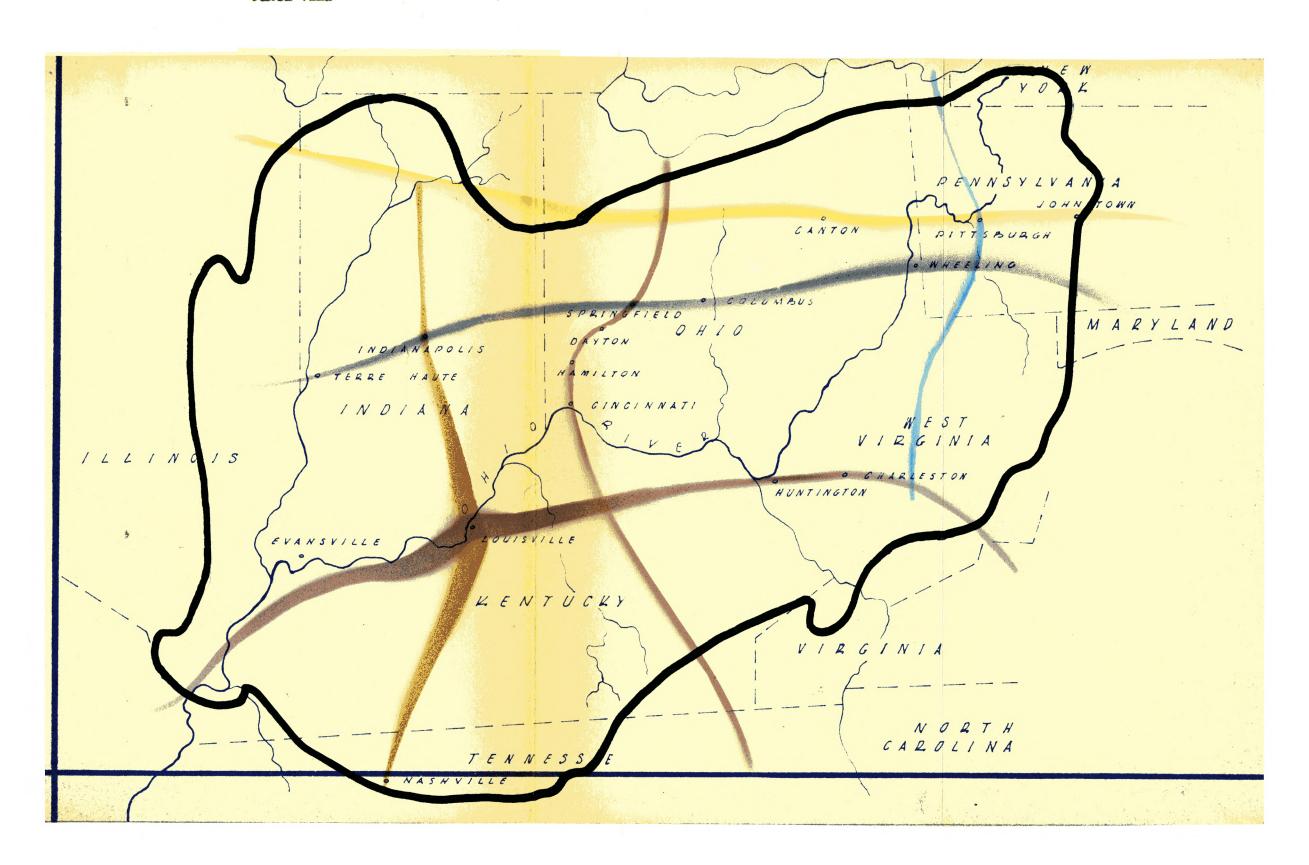
U. S. 30

U. S. 31

U. S. 40

U. s. 60

PLATE VIII



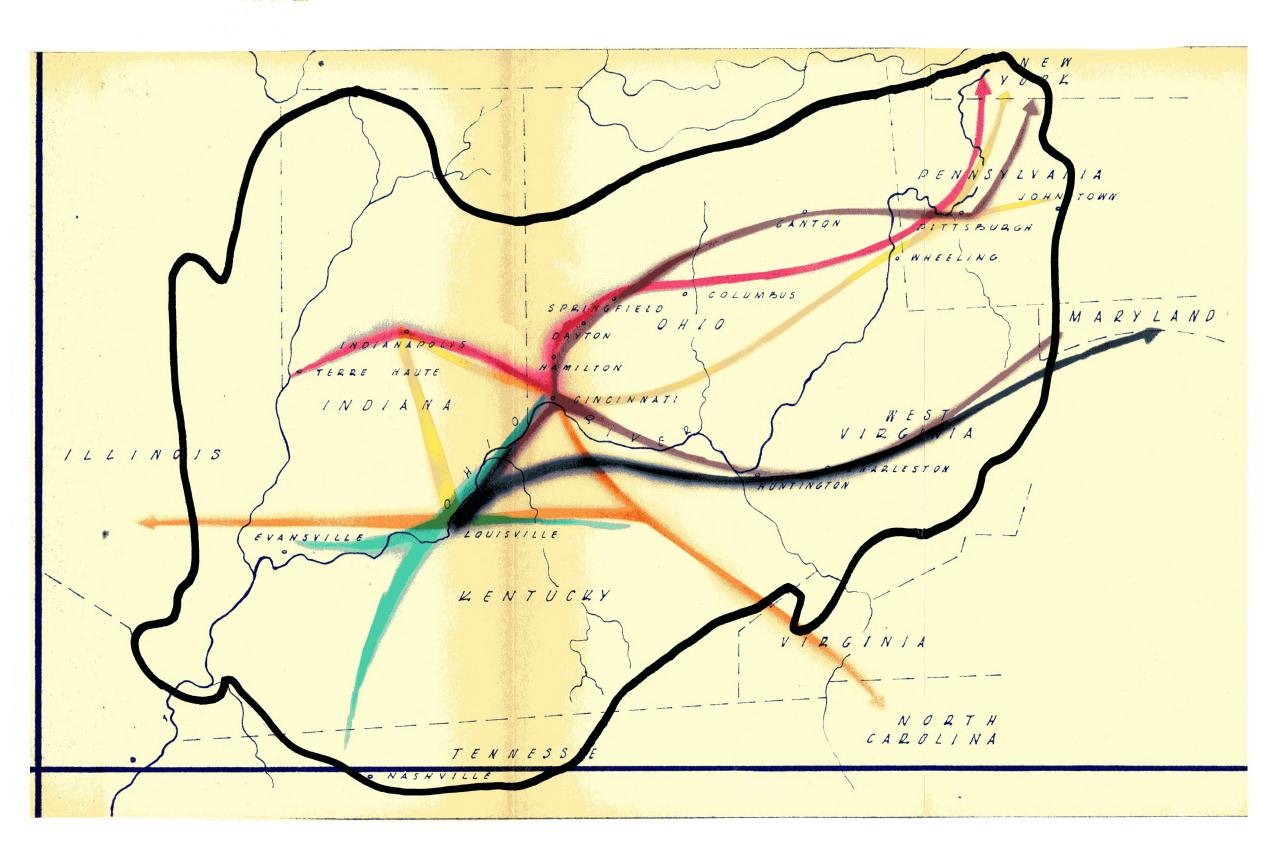
## EXPLANATION OF PLATE IX

# Railroad Routes (11)

## Key:

Baltimore and Ohio	· · · · · · · · · · · · · · · · · · ·	
Chesapeake and Ohio		0
Louisville and Nashville		1
New York Central		
Pennsylvania		
Southern		

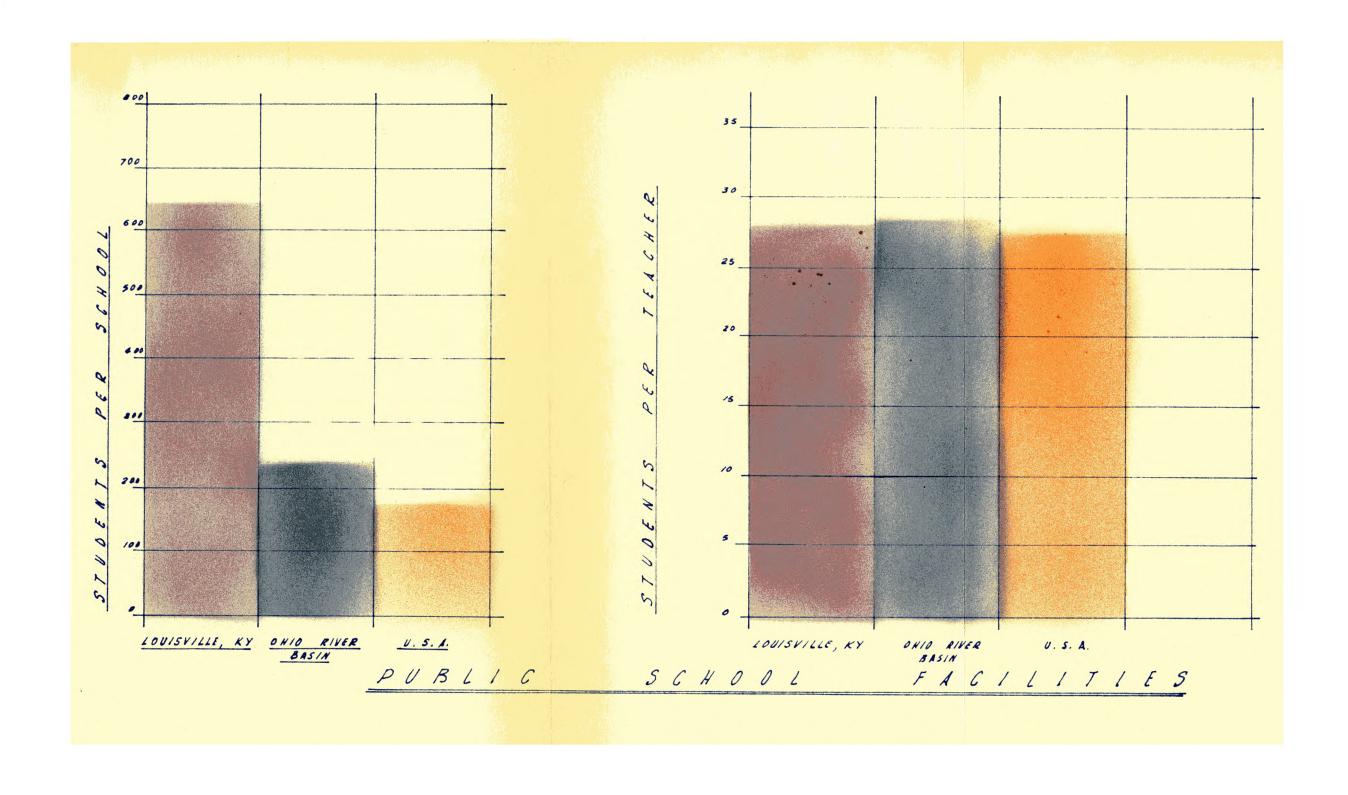
PLATE IX



## EXPLANATION OF PLATE X

Public School Facilities (30, 38)

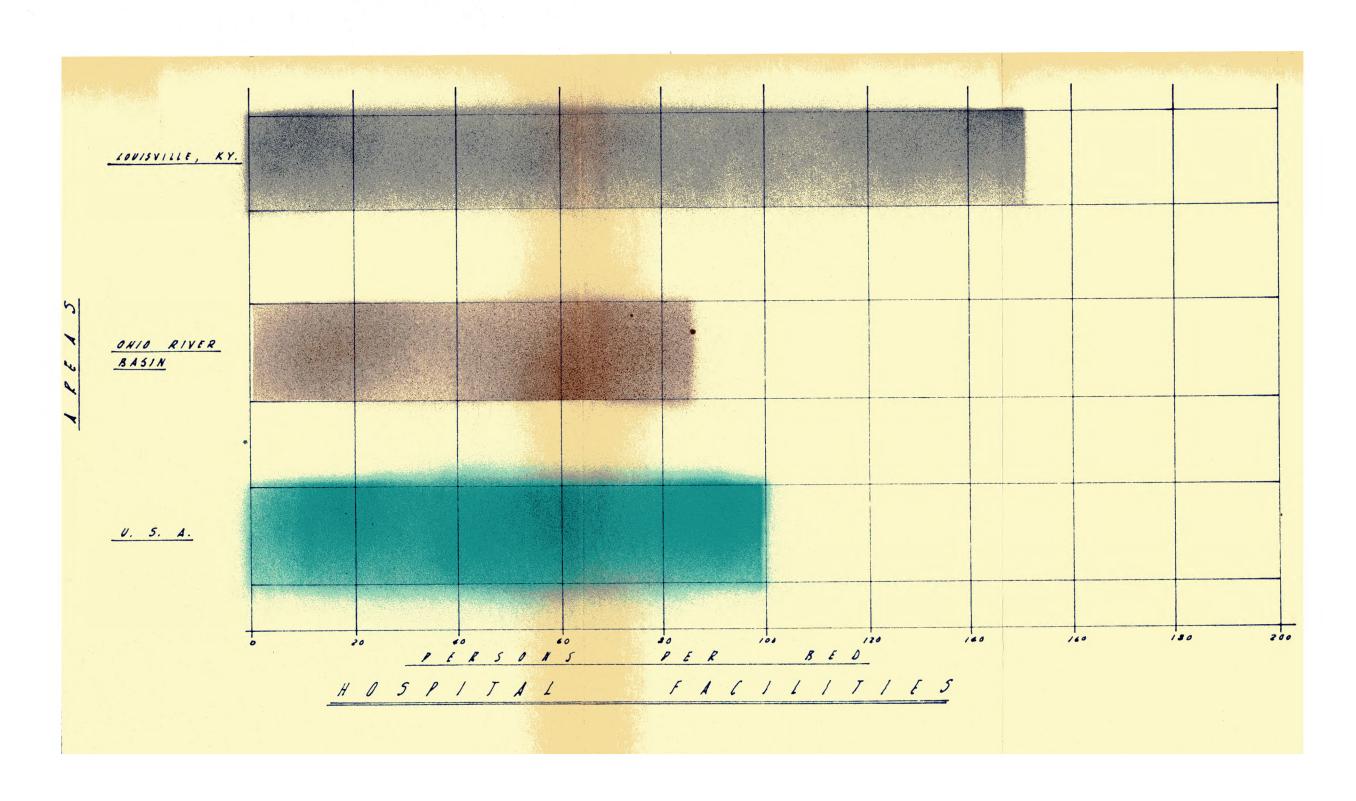
PLATE X



EXPLANATION OF PLATE XI

General Hospital Facilities (4, 46)

PLATE XI



#### CITY SURVEY

#### History

Louisville (pronounced Lou-i-ville) was blessed with a rare blend of tradition, history and progress. The city was named for King Louis XVI of France.

Robert De LaSalle was the first white man to view the great rapids of the Ohio in 1670. Almost one hundred years later, Captain Thomas C. Bluitt made the first settlement in 1778. Clark established an eighteen family base at Corn Island while heading westward on a campaign into what is now Indiana, and upon his return, he built a more pretentious structure at the foot of 7th Street. A monolith of the Colonial Dames still marks the site.

The first city charter was granted in 1779 by the Virginia Legislature when Kentucky was a part of the state. Kentucky entered the union in 1792, at which time the Louisville wharf had become a busy place. The office of Falls Pilot and Harbor Master was created in 1797. Two years later, Louisville became an official Port of Entry with a regular revenue collector, Overland stage coaches came daily and Michael Lacassagne opened the first post office in his home.

By 1800, roads had been built to Lexington and Bardstown. The first ocean going sailship arrived at Louisville from Elizabethtown, Pennsylvania on June 16, 1800, with a cargo of 720 barrels of flour. This was an era of firsts for Louisville.

Samuel Vail published the first newspaper, "The Farmer's Library."

The first church was built by the Methodists on Market Street between

Seventh and Eighth Streets. The first theatre opened on the north side of

Jefferson between Third and Fourth. John J. Audubon came to Louisville in

1808 and produced some of his famous bird sketches.

Between 1810 and 1820, Louisville's population grew from 1,397 to about 4,000, primarily due to water front activity. The first steamboat, the Orleans, docked at the city wharf in 1812. Between 1800 and 1820, several suburban communities sprang up giving the city its first semblance of a metropolitan area.

An epidemic of yellow fever in 1822 caused a business slump and led to the draining of swamp lands and the creation of the first Board of Health. The first public school was erected in the 1820's and in 1831, the first Portland Canal was completed. The first large hotel, the Louisville Hotel, was erected at 6th and Main in 1832. The fabulous Galt House, scene of many of the "coming out" parties of this era was erected in 1836 at 2nd and Main. In 1837, the Louisville Medical Institute was opened and the building of the present court house was begun. In 1840 Louisville became the first city in the west and the fifth in the nation to use gas lights.

In 1846, the University of Louisville was founded as the first municipal university in the country. In the 1850's, the railroads made their appearance. The Louisville and Nashville played a major role in large troop movements during the Civil War. (It is from this incident that it took the slogan "Gateway to the South.") The Louisville Water Company also had its inception during the 1850's.

Louisville did not suffer appreciably during the Civil War because

Kentucky adopted a neutral position. This enabled the businessmen to continue

their normal business trend and in many cases their business showed an in
crease. Simultaneously with this incident, the city was growing up as a

center of education and arts. Public schools were made free; in 1865 a

female high school was erected. In 1870, public education for Negroes was

#### commenced.

During the first World War, Louisville held a unique position of military significance. In World War I, Camp Zachary Taylor made this an important site. Bowman Field, an airport, was built in 1918 and the first airplane landed there a year later. This was also an era of suburban development.

In 1923, radio was an infant in this area, but the first local radio station was already gaining national importance. The first Junior High Schools were opened in 1928. World War II brought many new industries to Louisville including "Rubbertown", the Naval Ordnance Plant and Westinghouse Electric Plant. Many migrants invaded this city during the war, and most of them stayed. This caused Louisville to lose its identity as a sprawling country city.

#### Geography

Louisville is located in the state of Kentucky on the north central border at the Falls of the Ohio. Latitude 38 degrees 15 minutes North and Longitude 85 degrees and 45 minutes West are the coordinate given by the surveyor. The incorporated city limits, in 1953 encompassed 51.6 square miles. The metropolitan area included Jefferson County, Kentucky, Clark County and Floyd County, Indiana, and encompassed an area of 908 square miles.

The altitude of the city ranges from 440 feet above sea level to 540 feet above sea level. The topography is that of a broad river valley surrounded by a plateau and Ohio River knobs. This type of topography was found to be conducive to floods and after the devastating flood of 1936 and 1937, the citizens of this metropolis began an earnest plea for a flood control

project. In March of 1947, the Louisville local flood protection project was started, and to date, is complete with the exception of the Beargrass Creek Pumping Station. The completed project will include 12.8 miles of earth levee, 4.0 miles of concrete wall and 13 pumping plants for disposal of interior drainage during floods. This flood protection scheme will protect all property south of the wall up to and including the maximum of record, which occurred in January of 1937.

#### Climate

A survey of the climatic conditions prevailing in the city (over a 75 year period) showed that rain occurred an average of 124 days per year. The average annual rainfall during this period was 42.49 inches per year while the average snowfall was 13.50 inches per year. The median temperature approximated that of the United States average being 57° F. The lowest temperature on record was -20° F. while the highest was 107° F.

The prevailing winds in the winter come from the west south west and in the summer it comes from the south west. The average number of degree days was 4279 per year in comparison to 5670 per year for the Ohio River Basin.

(A degree day represents a difference of one degree below 65 degrees for a period of twenty-four hours.)

#### Population

The city of Louisville had some 403,879 people in 1954. In 1950, this population was found to be grouped into neighborhoods having a range in density of from one person per acre to 50 people per acre. It was the trend, as in other sections of the country, to move out of the central parts of the city. This indicated the densities and distribution now prevailing in the

residential areas of the central parts of the city will not gain very much in population.

If a projected estimate of the population for the entire city for the year 1976 were made, it would be approximately of 686,594 people, based upon the average growth over the last twenty years.

#### Housing

These 403,879 people were found to reside in 111,169 housing units in the year 1950. The median number of housing units per acre was found to be 3.38 although they varied in density from a low of less than one unit per acre to a high of 8.1 units per acre. (A unit is a group of rooms or a single room, occupied or intended for occupancy as a separate living quarter, by a family or other group of persons living together or by a person living alone.) Many of these areas having a high density were zoned for single families but were found to be viclating the zoning ordinances.

The characteristics of these units were investigated from the standpoint of units having no private bath or being dilapidated. For this reconnaissance, the term dilapidated refers to those units that have been neglected, or was of inadequate original construction, so that it does not provide adequate shelter or protection against the elements or it endangers the safety of the occupants. The city had a median of 31.1 per cent, with a low of 1.9 per cent, and a high of 71.4 per cent for housing with undesirable characteristics in an area.

#### Economy

In 1949, the median income for the city was \$2703. This surpassed the median income of the United States by \$104. The economic status of the city

was found to be sound with one minor fluctuation——that phase of the economy that depended upon automotive vehicles and parts which fluctuate as the national economic picture fluctuates. During the year 1954, commerce and industry attributed \$1,546,000,000 to value of manufactures, \$1,434,829,000 to wholesale sales and \$687,942,000 to retail sales.

#### Industry

The industry of the city varies considerably. Foods and beverages (including distilling) and tobacco products have the largest payrolls. Chemicals (including paints, varnishes and synthetic rubber), foods and beverages (including distilling), lumber and timber products (including furniture), metal products (including machinery), motor vehicles and parts, printing and publishing, railroad repair shops, stone and clay products, textile products, tobacco and electrical appliances are the major industries of the city listed by the Louisville Chamber of Commerce. (3).

#### Transportation

Air. The city had two airports available as indicated by Plate XIX. These facilities were found to be adequate for the amount of air traffic to and from the city but accessibility to the airport from the business and residential areas of the city should be carefully analyzed and some sort of relief pattern designed to reduce the amount of time needed to reach the airports from the areas mentioned.

Auto. The major traffic patterns for interurban and intra-urban travel are indicated by Plate XX.

The interurban pattern encroaches upon the intraurban pattern, mixing slow speed traffic with high speed traffic, therefore creating congestion.

This congestion had reached such a proportion, especially at the times "of going to work" and "coming from work" that nearly all streets down town are one-way at these times and others are one-way permanently. This solution does give relief to the situation but does not solve it.

Railroads. The town was made by the Louisville and Nashville railroad and it asserts itself upon the city in view of the fact that all trains entering the Union Station at Tenth and Broadway must back into the station; these trains are within four blocks of the main shopping district. The pattern of railroad traffic is indicated in Plate XXI.

An analysis of this pattern indicated that a condition of mixed land uses must prevail because of the manner in which the railroad pattern took its form. It also indicated that the auto traffic pattern must intermix with railroad traffic pattern. A subsequent investigation showed that both of these facts were true and that they were hazards to the safety and comfort of the residential areas encompassed by the railroads.

#### Community Facilities

Community facilities were investigated from the following points of view --- schools, hospitals and recreational facilities.

Schools. Plate XXII indicates the location and condition of Public Schools in the city of Louisville as of November, 1955. This chart indicated an overcrowding of elementary schools and forecasted an overload of secondary schools within the next three to ten years when these children become secondary students.

The physical plants housing these children are acceptable in most cases as far as such items as availability of inside water and toilets, adequate fire escapes, and sufficient lighting was concerned but the character of

the class room areas and the location of some of these plants need considerable attention in order to induce these future citizens to feel as though they all are an integral part of the society of this city.

Racial segregation is not a problem here as the elementary schools were integrated in September of this year, the colleges have been integrated since 1953. Furthermore, any recommendations made by this report will not be concrete realities before the problem of integration will either be solved or forgotten.

Hospitals. The city of Louisville, as of February 1955, had hospital facilities located according to Plate XXIII. These hospitals had sufficient beds to apportion one bed for each 153.2 persons in the city. This is above the median of the U. S. which was 99.1 persons per bed. Any renewal project should include at least clinical facilities if not hospital facilities in order to help alleviate this situation.

Recreational Facilities. Plate XXIV indicated the availability (or would it be more appropriate to say the lack of availability) of public recreational facilities in the city of Louisville. There was a variety of parks for public use but there was not enough of them. This lack of green spaces is a definite weakness of the majority of the urban areas of today. Interacting with this lack of green spaces is the feeling of a lack of social cohesion on the parts of the city dwellers who can not communicate with nature in a close proximity to their habitats.

The common excuse for the lack of green spaces is high land prices but the difference in revenue could be realized by a decrease of juvenile delinquency, crimes and mental illness, all traits that stem from the basic belief in social cohesion, or the lack of it.

#### Land Use

The land use map for the city of Louisville as of August 1955 is indicated by Plate XXV. This map indicated that the city conformed to the "strip zoning method of planning." This particular method is based upon the idea that each neighborhood should be a completely self sufficient economic unit and that the city is nothing more than a group of such little economic subdivisions.

This method of planning is responsible for the railroad pattern encroaching upon the business district. It is responsible for the mixing of interurban and intraurban traffic and it is indirectly responsible for the decay of certain areas (where the industry either has objectionable smoke, noise, or odor).

This map also indicated a flagrant violation of the land use scheme as recommended by the city zoning commission. If a comparison is made between the population density for census tract 25 and census tract 37 it would reveal that even though both areas are zoned for single units and both areas encompass approximately the same land area, tract 25 had a density of 24.2 persons per acre while tract 37 had a density of 11.7 persons per acre.

#### Zoning Regulations

The zoning regulations for the unincorporated territory of Jefferson County, Kentucky, were of recent vintage having been revised as of August 1955, but the city zoning regulations are still being revised. An analysis of these regulations indicated that they were still conforming to the strip zoning method of planning insomuch as they are permitting certain types of industries into all residential districts except type A districts (50).

This practice is seriously questioned by the author in view of the past experience this city has had with areas containing mixed land uses.

#### Building Code

The building code of the city of Louisville was found to be of recent vintage having been adopted in March 1950. It is complete in its scope and similar in character to the National Building Code. Especially worthy of note is the structural section of the code which is beginning to allow working stresses conforming to recent research data and not to the research of 20 to 30 years ago which has been causing structural systems to be out of proportion to actual strength of the members.

#### Utilities

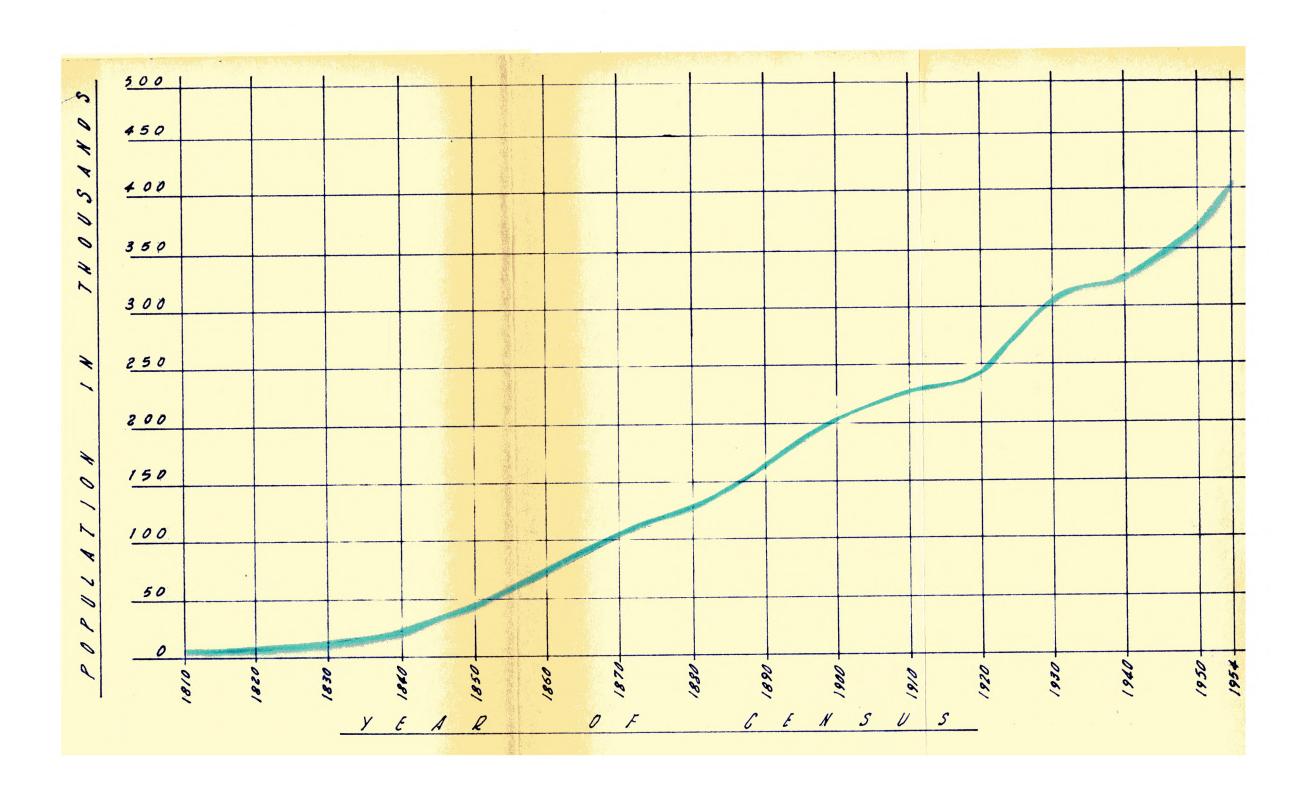
Gas and Light. The Louisville Gas and Electric Company has rated generating capacity of 445,000 kilowatts by steam and 80,000 kilowatts by hydro. Another 100,000 KW unit was planned for installation in 1956 and is now being installed. This same company can deliver 107MCF of natural gas per day to the metropolitan area. The total area, including standby and oil-gas, is in excess of 200MCF per day.

Water. Louisville Water Company has a rated production capacity of 80 million gallons per day. Plans are under way to increase this to 160 millions per day.

## EXPLANATION OF PLATE XII

Population Trend for City of Louisville (34, 35, 36, 37, 39, 40, 43)

PLATE XII



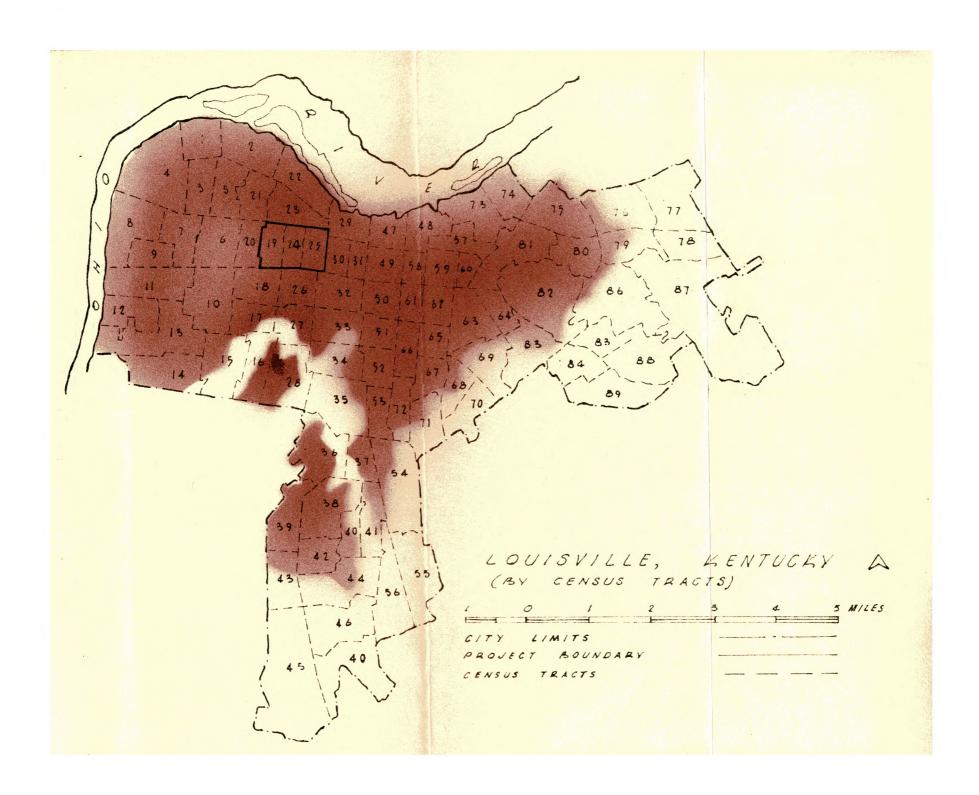
### EXPLANATION OF PLATE XIII

Flood Plains (14)

Key:

Area Included in Flood Plain of 1937

PLATE XIII



### EXPLANATION OF PLATE XIV

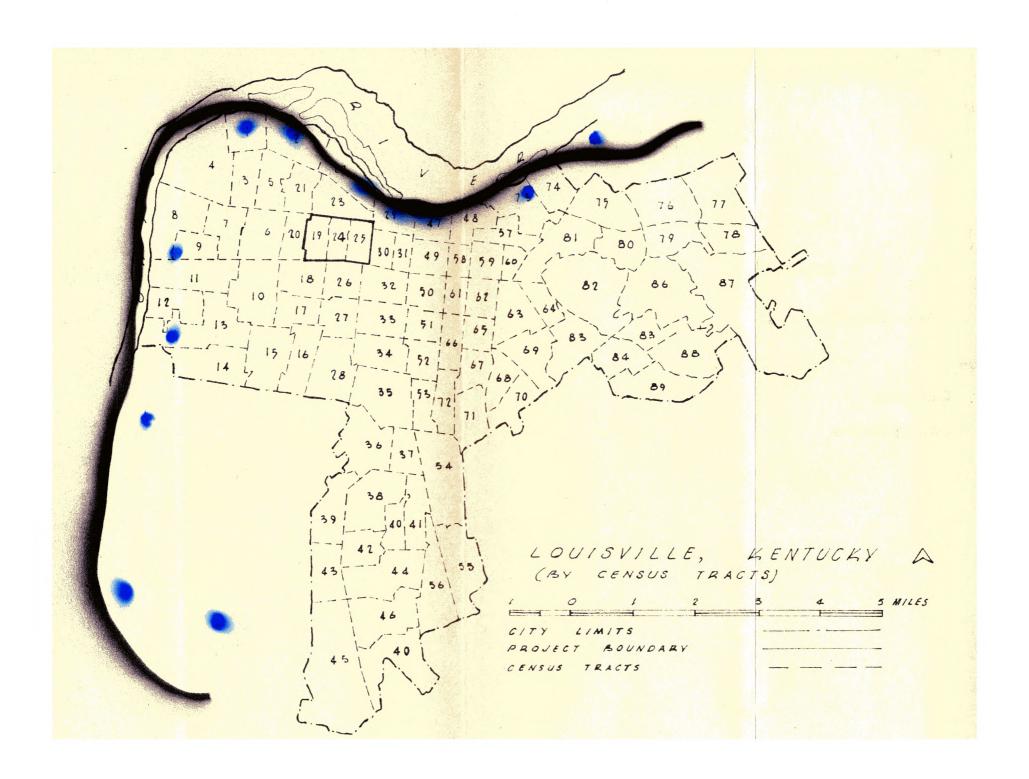
Flood Protection Facilities of Louisville (14)

Key:

Flood Wall

Pumping Station

PLATE XIV



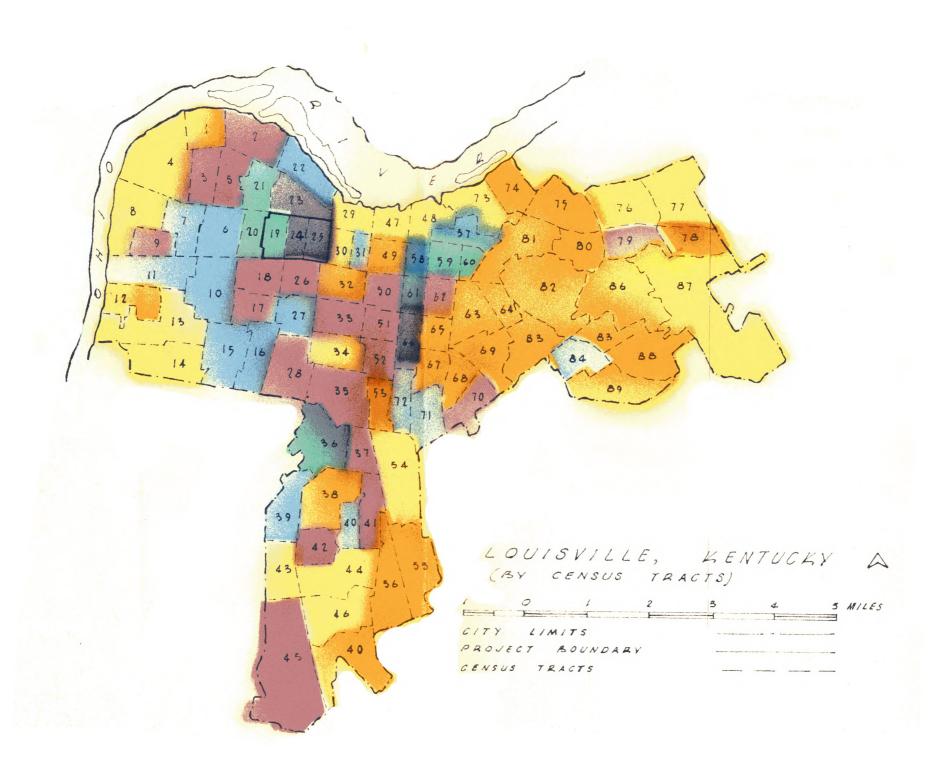
## EXPLANATION OF PLATE XV

# Population Density (43)

#### Key:

1 to 5 persons per acre	
6 to 10 persons per acre	
11 to 15 persons per acre	•
16 to 20 persons per acre	
21 to 25 persons per acre	0
24 to 50 persons per acre	•

PLATE XV



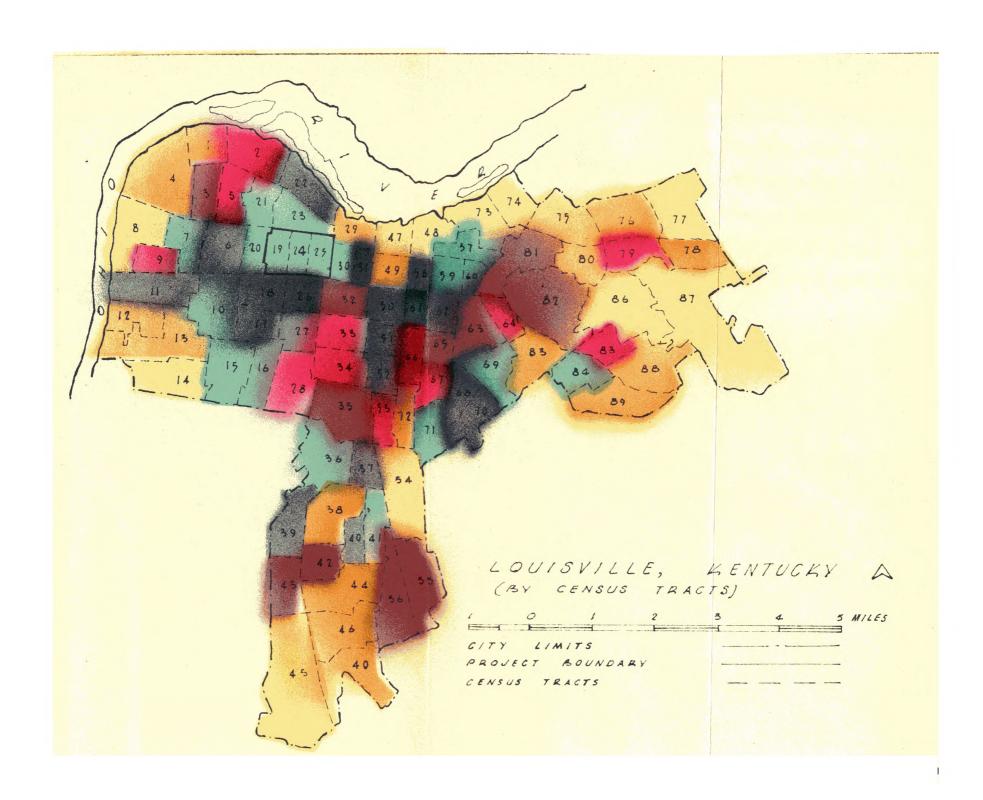
## EXPLANATION OF PLATE XVI

# Density of Housing Units (42)

## Key:

Less than 1 unit	per acre	
1.0 to 1.9 units	per acre	•
2.0 to 2.9 units	per acre	
3.0 to 3.9 units	per acre	3
4.0 to 4.9 units	per acre	•
5.0 or more unit	s per acre	

PLATE XVI



### EXPLANATION OF PLATE XVII

## Undesirable Characteristics of Housing Units (42)

## Key:

0% to 10%

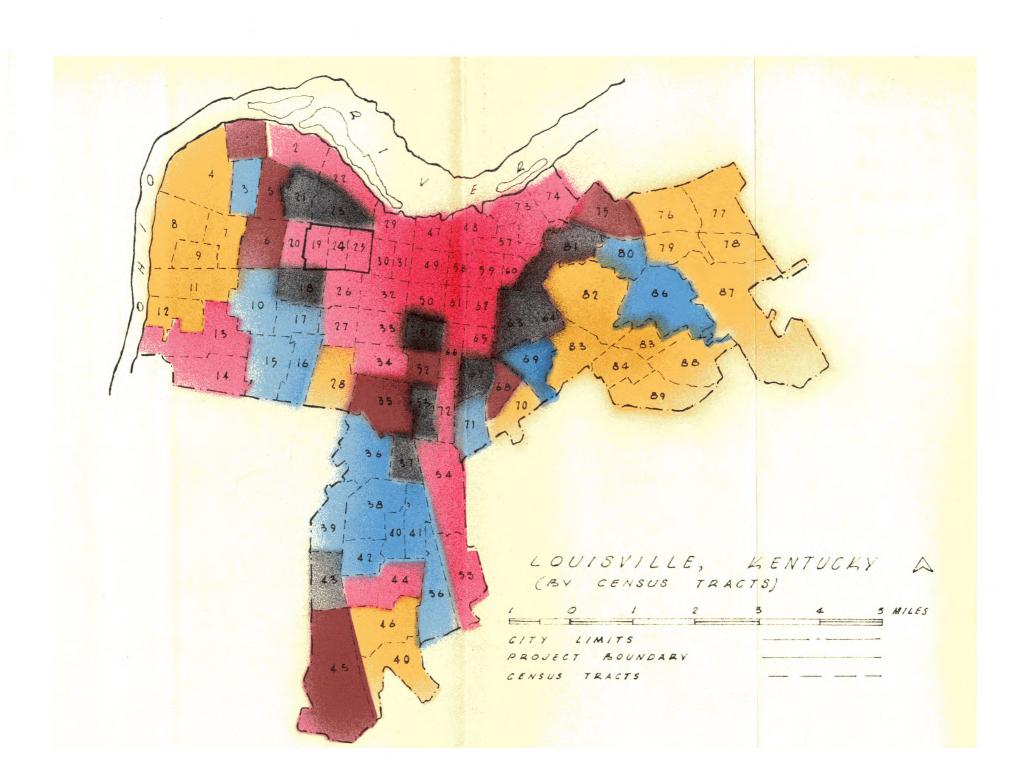
11% to 20%

21% to 30%

31% to 40%

41% or more

PLATE XVII



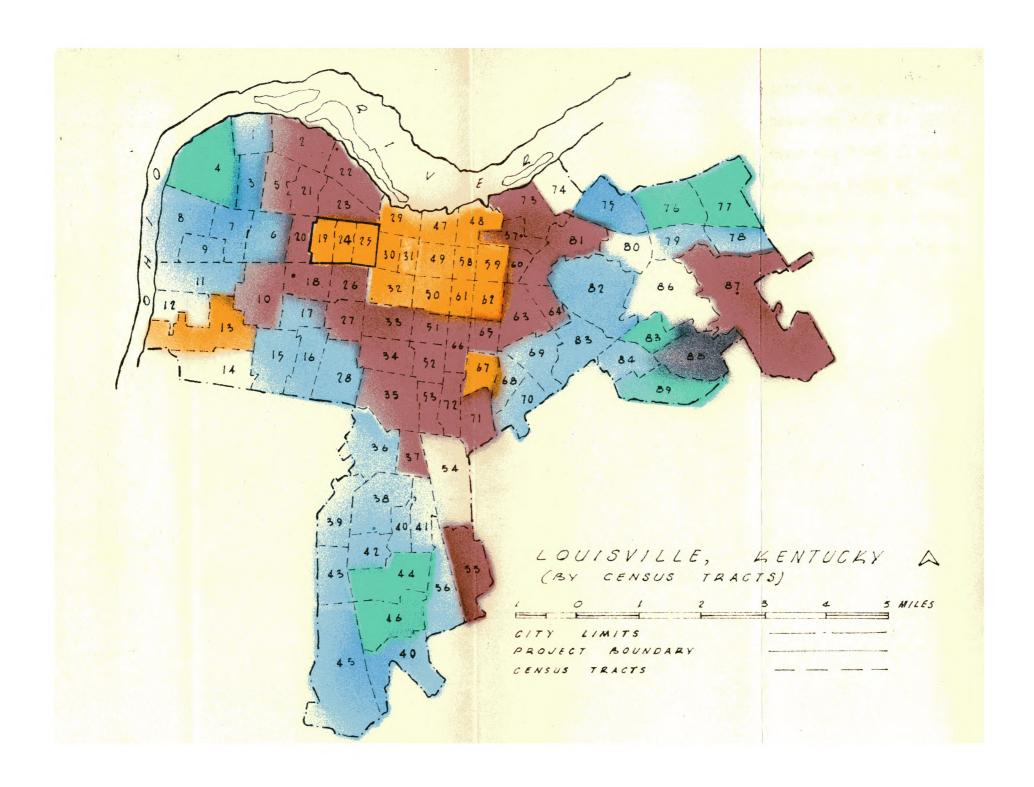
## EXPLANATION OF PLATE XVIII

## Income Distribution, City of Louisville, 1949 (43)

## Key:

Less than \$1000 per annum/family	
\$1000 to \$1999 per annum/family	3
\$2000 to \$2999 per annum/family	0
\$3000 to \$3999 per annum/family	
\$4000 to \$4999 per annum/family	
\$5000 or more per annum/family	

PLATE XVIII



## EXPLANATION OF PLATE XIX

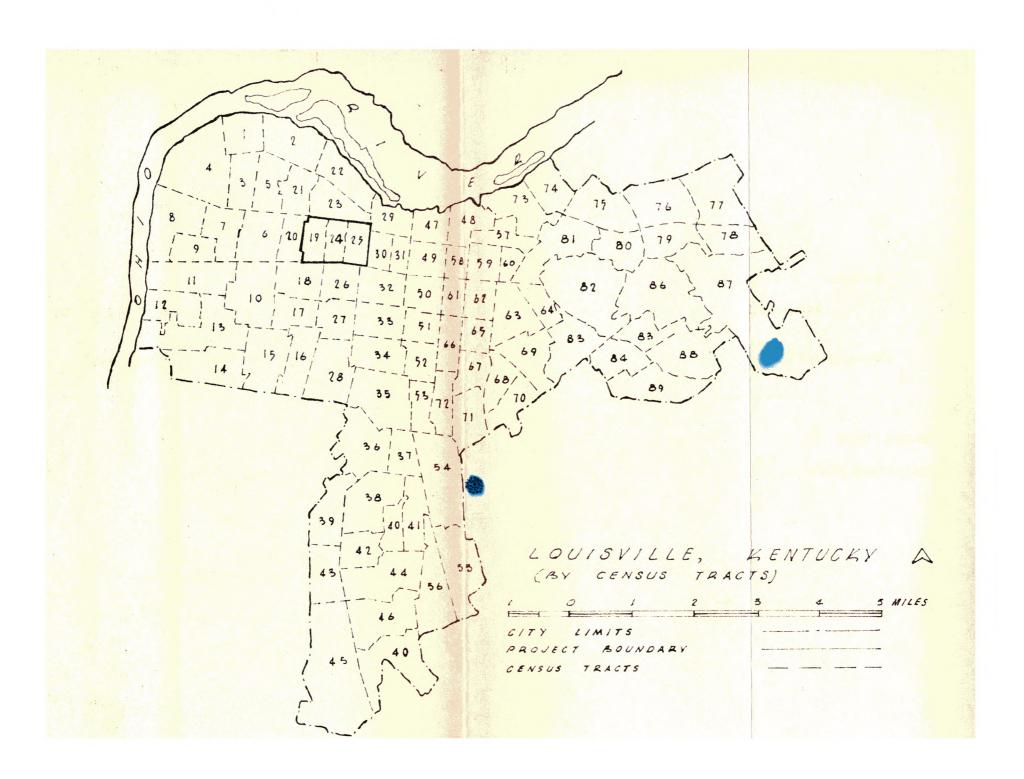
Airports for Louisville, Kentucky (29)

Key:

Bowman Field

Standiford Field

PLATE XIX



# EXPLANATION OF PLATE XX

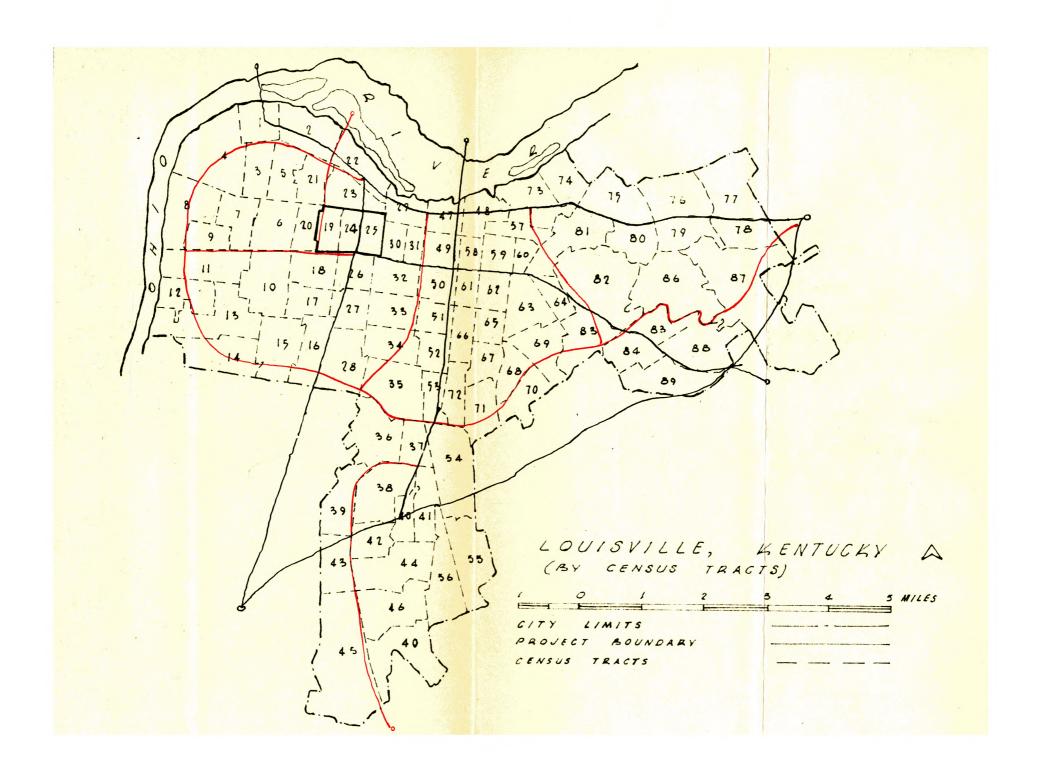
Major Auto Traffic Patterns

Key:

Intercity traffic

Intracity traffic

PLATE XX



### EXPLANATION OF PLATE XXI

Railroad Facilities within the city of Louisville, Kentucky (24)

Key:

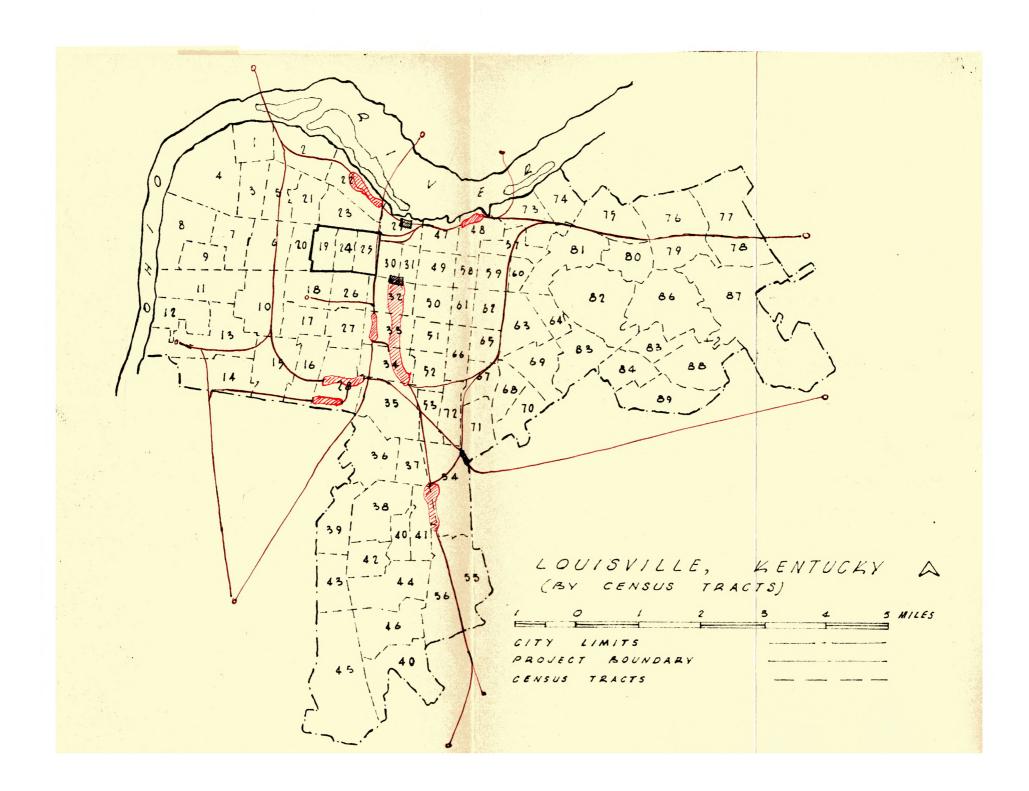
Railroad Yard

Railroad Station

Railroad Systems



PLATE XXI

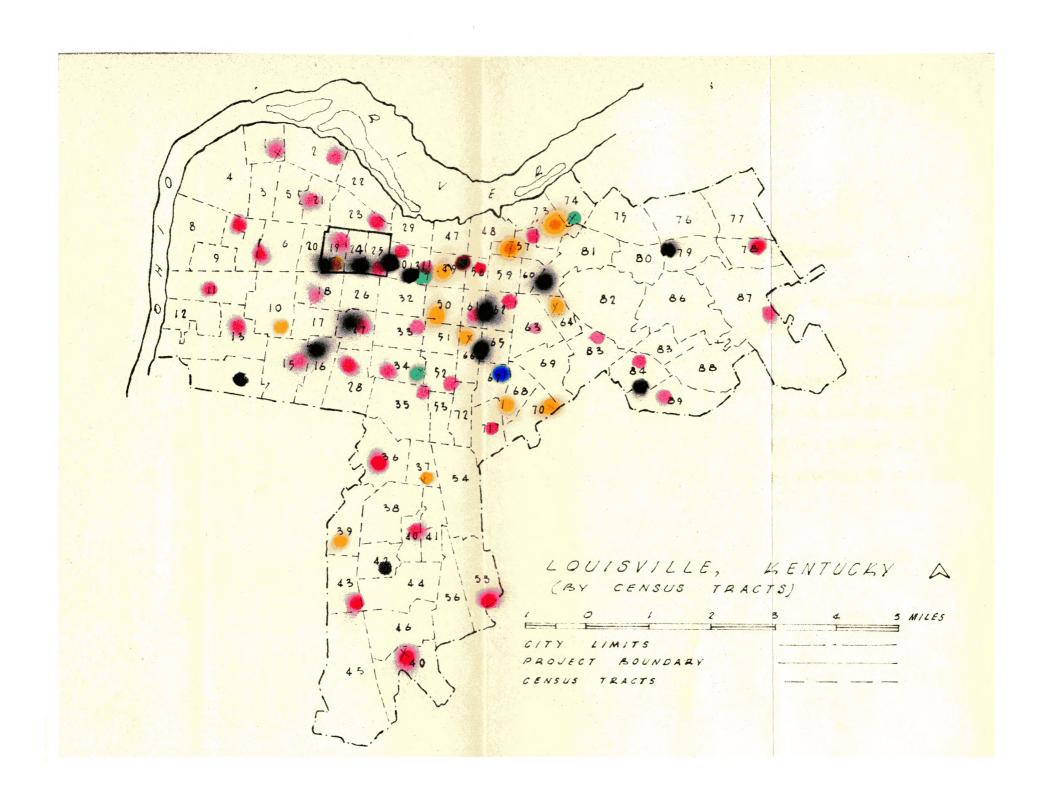


## EXPLANATION OF PLATE XXII

# Condition of schools in the city of Louisville (30)

Key:		Elem.	Second.
	Less than 20 students per teacher		
	20 to 25 students per teacher	•	•
	26 to 30 students per teacher		•
	More than 30 students per teacher		

PLATE XXII



#### EXPLANATION OF PLATE XXIII

### Hospital Facilities for Louisville, Kentucky (48)

#### Key:

0 to 99 beds

100 to 199 beds

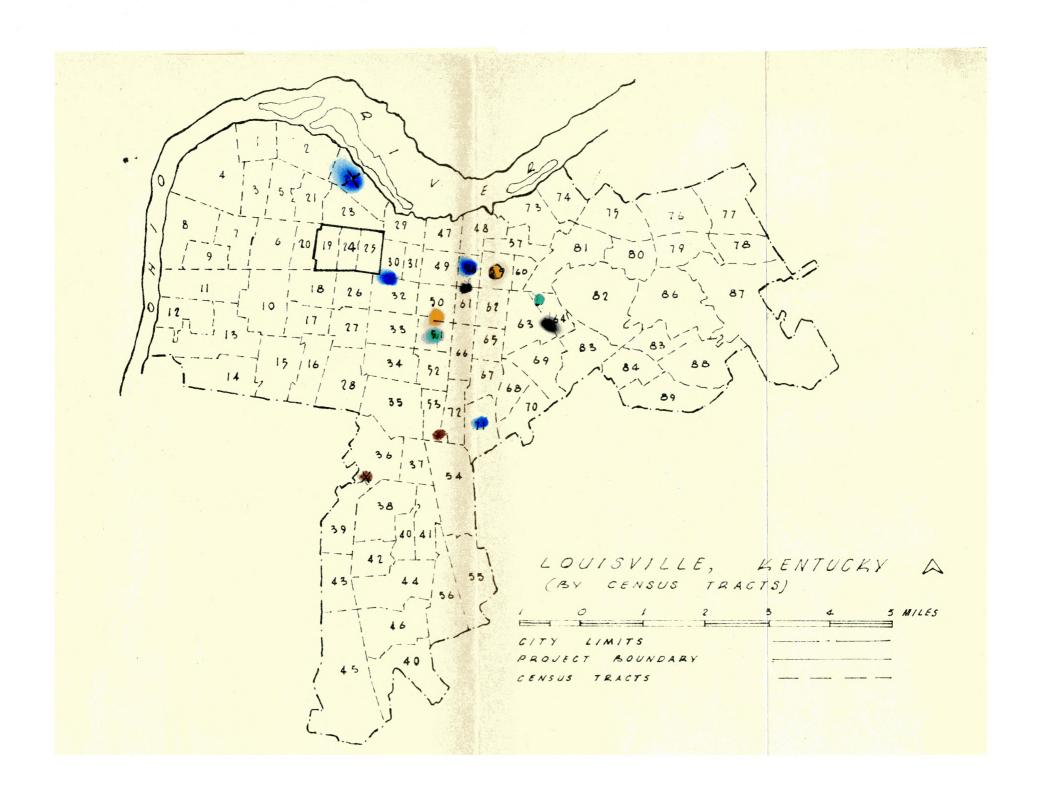
200 to 299 beds

300 to 399 beds

400 to 499 beds

+ means the facilities are restricted in their use,
i.e., such as Veterans Hospitals, Tuberculosis Hospitals
or Old Age Homes.

PLATE XXIII



## EXPLANATION OF PLATE XXIV

Public Recreational Facilities for Louisville, Kentucky (3, 29)

Key:

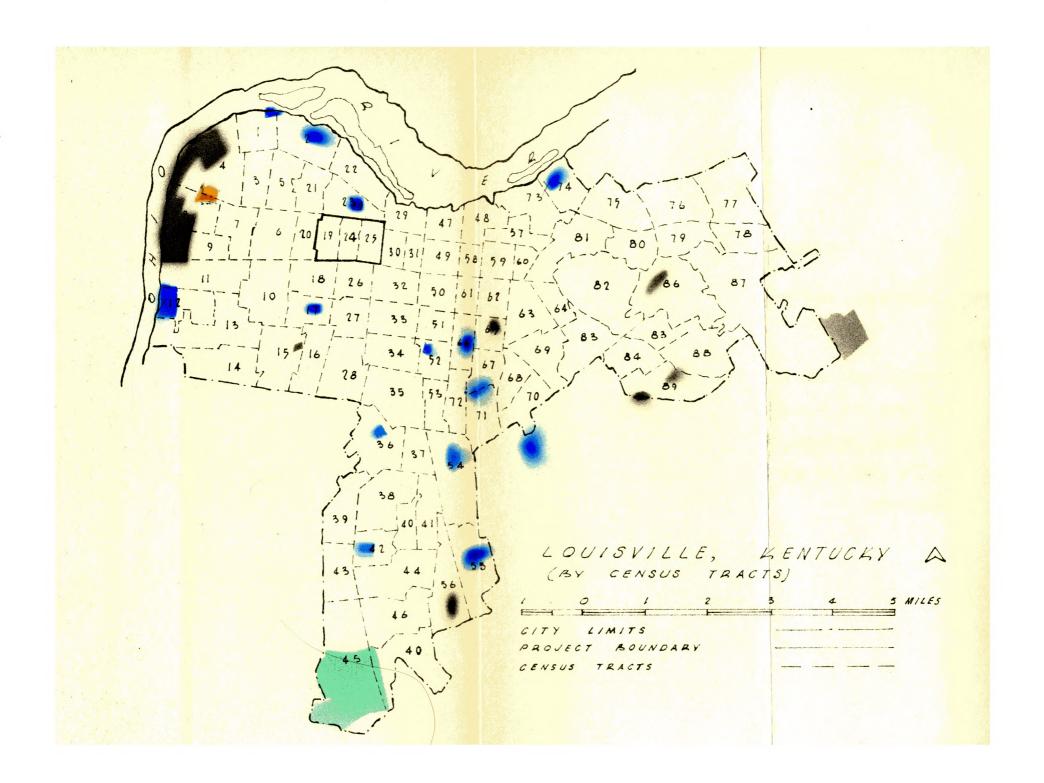
Amusement Parks with rides

Play areas with facilities for baseball,
football and wading pools

Swimming pools and golf courses

Amphitheatre

PLATE XXIV



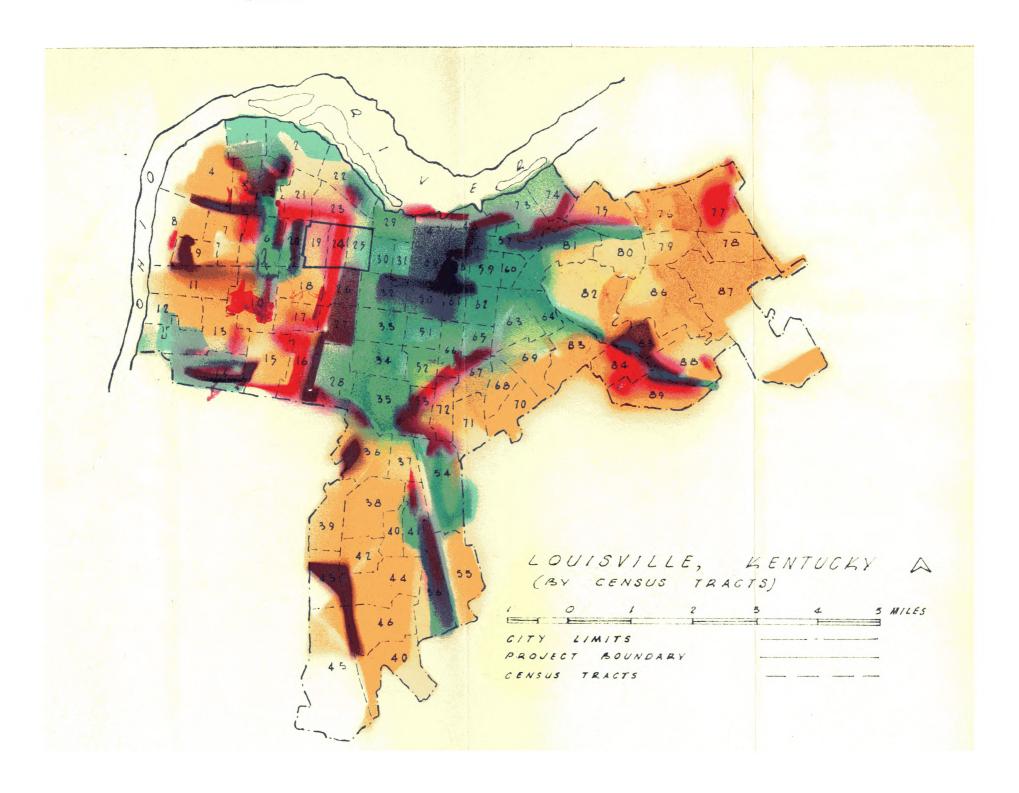
# EXPLANATION OF PLATE XXV

Land Uses for the city of Louisville, April 1954. (49)

# Key:

One family units including schools	
Two family units including schools	9
Apartment units	
Commercial units	•
Business district	•
Light industry	0
Heavy industry	0

PLATE XXV



#### SITE SELECTION

Very few urban areas are in a position or are willing to finance urban renewal projects without outside assistance. In order to qualify for urban renewal loans from the federal government, the planning authority must meet certain qualifications in their initial application as set forth by Public Law 560, 83rd Congress or Public Law 171, 81st Congress.

These requirements are as follows:

- (1) The site shall not be in a flood plain.
- (2) The site shall not be in an area that has objectionable characteristics, e.g., industrial plants with no provision for smoke abatement, or releasing non-toxic gases as a by-product of its manufacturing process or incessant noises.
- (3) There must be evidence of a need for either rehabilitation or renewal.
- (4) Proof must be shown that the families to be displaced by the project have been or are being provided with temporary or permanent shelter within their economic means.

Item 1 was found to be eliminated by the fact that there was a flood wall capable of protecting the city from all water rising to the record level of the 1937 flood (Plate XIV). Therefore any area chosen south of the flood wall would satisfy item 1.

Item 2 can be satisfied by either removing the hazard or correcting it. Whichever method of compliance the planner chooses should be effected before the application for federal funds is submitted in order to improve the chances for approval.

Item 3 is most advantageously presented by the use of the penalty-point

system. This system gives either credit or debit points for the comparison of certain areas, using the median condition of the urban area as the base condition.

The composition of the points for comparison is dependent upon the judgment and desires of the planner and as such includes an indication of his idiosyncrasies concerning planning. Table 1 indicated the assignment schedule of points for this report. It was based upon the supposition that all factors that affect the individuals feelings concerning a lack of social cohesion should be considered.

Certain items contribute more to this feeling than others, therefore the author chose to use a weighted penalty system. This system penalizes more for such items as undesirable housing characteristics, high population and lack of adequate play areas within easy walking distance than it does for other traits.

Table 2 represents the actual comparison of the different areas of the city. From this chart the planner selects his site. Here is shown the need for either renewal or rehabilitation of an area on the basis of comparison with the other areas of the city. The information gathered from this chart leads the planner to recommend to a responsible agency those areas that are in need of (1) stricter code enforcement, (2) rehabilitation or (3) renewal. Those areas having a score of zero should have stricter enforcement of the zoning regulations in order to preserve them and prevent them from falling below the median of the city. All areas having a score of minus one to minus nine are in need of some phase of rehabilitation (i.e., improvement of schools, inclusion of parks within the neighborhood boundaries, but not too many housing units to be replaced). All areas having a score of minus ten or more are in need of renewal (i.e., clear the land and replat).

The author chose tracts 19, 24, and 25 as the site for this renewal project. It was chosen because other tracts showing a greater need for renewal were either outside the flood protection facilities or lacked the similarities of cultural attainment that existed within this area.

Item 4 usually calls for citizen participation insomuch as all families living in the urban renewal area that are displaced by code enforcement, demolition of structures, or land acquisition must be given an opportunity to be relocated in decent, safe and sanitary housing within their financial means.

Some cities seek the cooperation of private citizens to house these displaced persons for the period of construction of the project, which is a very good practice. It brings the more fortunate citizens of the community into contact with the less fortunate and tends to create an interest upon their part in the problem of preventing or stopping decay of their city and their fellow citizens.

It was found that the city of Louisville made housing available to these persons through the efforts of the Welfare Department of the city and the Louisville Real Estate Board. The responsibility of the accomplishment of the relocation plan lies with the Division of Housing Conservation and Renewal. Such a plan includes the maintenance of a housing placement service for securing listings of private housing for rent or sale.

Table 1 shows the assignment schedule of penalty points for this project. The value of High Population Density, Undesirable Housing Characteristics and the Lack of Immediate Recreational Facilities were penalized more because the author felt that they were major causes for a feeling of the lack of social cohesion among the people of these areas.

Division 1 represents the worst conditions and Division 6 represents

the best condition.

Under Item 5, all areas having parks within their boundaries are given 2 points. Those areas having to go outside their boundaries, are penalized either 2, 4, or 6 points depending upon whether or not they have to cross one, two or three area boundaries to use these facilities.

Under Item 6, all areas having mixed land uses are penalized 2 points, regardless of the amount of mixing that occurs.

Table 1. Assignment schedule of penalty points.

			P	enalty	Points		
Item	Description	Div.:	_	Div.:	Median:	Div.:	
1	High Population Density						
	(Plate XV)	-6	-4	-2	0	2	4
2	Undesirable Characteristics						
	of Housing Units (Plate						
	XVII)			-4	-2	2	4
3	Low Income (Plate XVIII)	<b>-</b> 3	-2	-1	0	1	2
4	Overcrowded School Condi-						
	tion (Plate XXII)			-1	0	1	2
5	Lack of Immediate Recrea-						
	tional Facilities						
	(Plate XXIV)	<b>-</b> 6	-4	-2	0	2	2
6	Mixed Land Uses (Plate XXV)	-2	-2	-2	0	2	2

Table 2 represents the appraisal of areas for urban renewal purposes and is used in conjunction with the items listed on the preceding chart for observation.

A total score of 0 means that that particular area lies on the median of the city and should have the strictest enforcement of the zoning regulations in order to keep it from falling below the median.

Any area having a total score of -1 to -9 is in need of some rehabilitation, that is, some phase of the points under consideration need to be given immediate attention, but very little actual land clearance is deemed necessary at this particular time.

Any area having a score of -10 or more is considered to be in need of an immediate urban renewal project involving varying degrees of land clearance and replatting of these lands.

If any item has not been assigned a score, the necessary data for evaluation was not available.

Table 2. Appraisal of areas for urban renewal purposes.

Census Tract		Item Number							
	1	2	3	4	5	6	Total Score		
1	2	2	1	-1	2	2	8		
2	0	-1	0	-1	2	-2	-5		
3	0	4	0	0	-2	-2	0		
4	4	4	2	0	2	2	14		
5	0	2	0	0	-2	-2	-2		
6	-2	2	0	-1	-6	-2	-9		
7	-2	4	1	-1	-4	-2	-5		
8	4	4	1	0	2	-2	9		

Table 2 (cont.)

Census			Item	Number			Total
Tract	1	2	3	4	5	6	Score
9	0	4	1	0	-2	-2	1
10	-2	4	0	0	-2	-2	-2
11	-2	4	1	-1	-2	-2	-2
12	2	4	1	0	2	-2	7
13	4	-4	-1	-1	-2	-2	-6
14	4	-4		1	-2	-2	<b>-</b> 3
15	-2	4	1	-1	2	-2	2
16	-2	4	1	1	-2	-2	0
17	0	4	0	0	2	-2	4
18	0	-2	0	-1	-2	-2	-7
19	-4	-4	-1	-1	-2	-2	-14
20	-4	-4	o	0	-4	-2	-14
21	-4	-2	0	-1	-2	2	-7
22	-2	-4	0	0	-2	-2	-10
23	-6	-2	0	-1	2	2	-5
24	<b>-</b> 6	-4	-1	0	-2	-2	-15
25	-6	-4	-1	-1	-2	2	-12
26	0	-4	0	0	-2	-2	-8
27	-2	-4	0	1	-2	-2	<b>-</b> 9
28	0	4	1	-1	-4	-2	-2
29	4	-4	-1	0	-2	2	-1
30	4	-4	-1	-1	-6	2	-6
31	<b>-</b> 2	-4	-2	1	-6	2	-11
32	2	-4	-1	0	-4	-2	-9

Table 2. (cont.)

Census			Item	Number			Total
Tract	ī	2	3	4	5	6	Score
33	0	-4	0	-1	-2	-2	-9
34	4	-4	0	-1	-2	-2	-5
35	0	2	0	-1	-2	-2	-3
36	-4	4		-1	2	-2	-1
37	0	-2	0	0	-2	2	<b>-</b> 2
38	2	4	1	0	-2	-2	<b>-</b> 3
39	-2	4	1	0	-2	2	-3
40	<b>-</b> 2	4	1	-1	-2	2	2
41	0	4	1	0	2	2	9
42	0	4	1	1	2	2	10
43	4	-2	1	-1	-2	-2	-2
44	4	-4	2	0	-2	-2	-2
45	0	2	1	0	2	-2	3
46	4	4	2	0	-2	-2	6
47	4	-4	-1	0	-6	-2	-9
48	4	-4	-1	0	<b>-</b> 6	-2	<del>-</del> 9
49	2	-4	-1	2	-4	-2	-7
50	0	-4	-1	0	-2	-2	<b>-</b> 9
51	0	-2	0	0	-2	-2	-6
52	0	2	0	-1	2	-2	1
53	2	<b>-</b> 2	0	0	-2	-2	-4
54	4	-4		0	2	-2	0
55	2	-4	0	-1	2	<b>-2</b>	-2

Table 2. (cont.)

Census			Item	Number			Total
Tract	1	2	3	4	5	6	Score
56	2	4	1	0	2	-2	7
5 <b>7</b>	-2	-4	0	-1	<del>-</del> 6	<b>-</b> 2	-15
58	-2	-4	-1	-1	-6	-2	-16
59	-4	-4	-1	0	-6	-2	-17
60	-4	-4	0	O	-4	2	-10
61	-4	-4	-1	-1	-2	-2	-14
62	0	-4	-1	-1	-2	2	-6
63	2	-2	o	-1	-2	-2	-5
64	2	-2	o	2	-2	-2	-2
65	2	-4	o	1	-2	-2	-5
66	2	-4	0	1	2	-2	-1
67	2	-2	-1	1	-2	-2	-4
68	2	2	o	1	-2	-2	1
69	2	4	1	0	-4	-2	1
70	0	4	1	0	-4	2	3
71	-2	4	0	-1	2	-2	1
72	-2	-4	0	0	-2	-2	-10
73	4	-4	0	0	-2	-2	-4
74	2	-4		0	2	2	2
75	2	2	0	0	-2	-2	0
76	4	4	-2	0	-4	-2	0
77	4	4	-2	0	-4	-2	0
78	2	4	1	-1	-2	2	6
79	o	4	1	1	-2	-2	2

Table 2. (concl.)

Census			Item	Number		_					
Tract	1	2	3	4	5	6	Total Score				
80	2	4		0	-2	-2	2				
81	2	-2	0	0	-4	-2	-6				
82	2	4	1	0	-2	-2	3				
83	2	4	1	-1	-4	-2	0				
84	-2	4	1	-1	-2	-2	-2				
85	2	4	-2	0	-2	-2	0				
86	4	4		0	2	-2	8				
87	4	4	0	-1	2	2	$\mathbf{n}$				
88	2	4	2	0	<b>-</b> 2	-2	4				
89	2	4	2	0	-2	<b>-</b> 2	4				
90	2	4	1	-1	-2	<b>-</b> 2	2				

# EXPLANATION OF PLATE XXVI

A business establishment in census tract 25.

## PLATE XXBI



# EXPLANATION OF PLATE XXVII

A business establishment in census tract 24.

# PLATE XXVII



# EXPLANATION OF PLATE XXVIII

An apartment house in census tract 25.

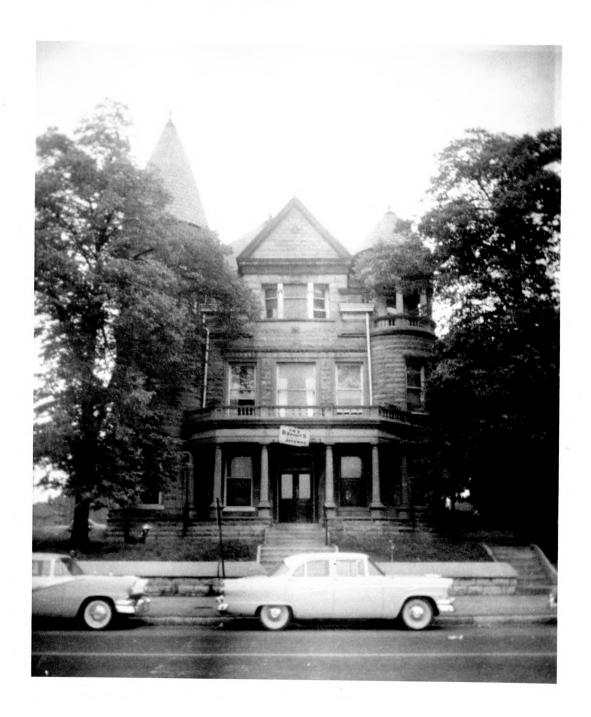
# PLATE XXVIII



EXPLANATION OF PLATE XXIX

An apartment house in census tract 24.

# PLATE XXIX



EXPLANATION OF PLATE XXX

A residence in tract 24.

# PLATE XXX



### EXPLANATION OF PLATE XXXI

A residence in census tract 19. It is commonly classed as the "shot gun" type of house in which you can stand in the front door and look out the back door. The frontage of many of the residences in this area is only 32.

## PLATE XXXI



## EXPLANATION OF PLATE XXXII

A church in census tract 24. This type of structure is referred to as a 'store front' church.

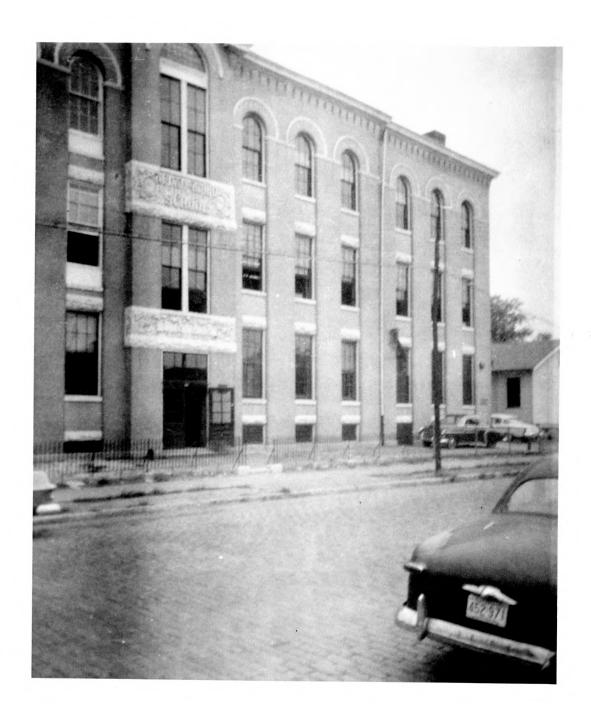
# PLATE XXXII



## EXPLANATION OF PLATE XXXIII

An elementary school in census tract 25 and is in need of repair as well as a larger site.

## PLATE XXXIII



### NEIGHBORHOOD REQUIREMENTS

The four main functions of human life are the reproductive, the educational and the economic. The attitudes of society causes each of these activities to be achieved by certain means or rather in a certain manner, and the interpretation of the ways in which these goals are achieved forms the character of our urban areas.

The city, as such, is the concrete realization of the mode of living of the people it encompasses and its character interacts with the character of its inhabitants. As the inhabitants progress, the city progresses and as the inhabitants retrogress, the city retrogresses.

To satisfy the inhabitants' desire for the sexual and reproductive, housing is supplied. To satisfy the function it was intended to serve, housing must be provided in a sufficient quantity and it must be within the economic reach of the people for whom it was intended. The educational desire has to be satisfied by the allocation of areas for schools and churches. The economic desire must be exercised in the area marked commercial district.

In this scheme the "strip zoning method of planning" which is employed throughout the city will be eliminated. The author is adverse to mixing any type of industry (a place of physical exertion in some manner) with the other functions of human existence which by their own nature attempt to express a feeling of relaxation. All recommendations will be based upon a 20-year plan, that is, all physical changes can be effected within twenty years and all estimates for requirements will satisfy the needs of the neighborhood 20 years hence (1976).

### Housing

The prime factor in the urban renewal project is usually housing, yet the character and scope of the projects available in most cities has been a victim of monetary allowance. Too many projects are designed with the dollar sign as the basis for the situation without just consideration of the effect of aesthetics upon the occupants.

In a conscious effort to instill a feeling of social cohesion among the occupants within the area, the author decided to approach the solution to the housing problem with the following attitudes prevailing:

- (1) The character of the housing units would be determined by their aesthetic and social value as well as of their economic assessment upon the more fortunate members of the city.
- (2) In order to provide open spaces for recreation and nature's growth, two items which help create an atmosphere of social cohesion, the majority of the units would be multi-family.
- (3) To prevent the occupants from the lower income groups from feeling as though they are being socially isolated, it was decided to provide individual units for those families whose income is \$10,000 or more, now residing in the area.

The effect of social participation or even observation of the mode of living of the upper middle income family should inspire the lower income families to try to attain a higher social role. Since these upper middle income families which are to be provided for are already residing in this area, then they should not have any objection to remaining there.

(4) No "institution look" would appear in the overall scheme, therefore each unit would have its own heating plant, facilities for laundry, etc. The author determined that the maximum annual revenue from rents would be \$1,907,750 (see Table 3). If all the residents were to form a cooperative housing association and apply for a twenty year loan, they could finance 5,295 units (which would be a sufficient number of units for the 1949 population). These units would have to contain 480 square feet, an area that is altogether insufficient. From this analysis it became evident that some form of subsidy would be necessary or a larger number of people would have to be incorporated in the area in order to finance this project. Methods of financing will be discussed later.

Table 4 represents the disposition of the housing units for this project.

### Schools

The author chose to divide the schools into three categories, the pre-school, the elementary school and the secondary school. In this day and age when more and more women are taking jobs in industry, a new type of school is taking its place along with the traditional public schools. This school was necessitated because of the need to give a more intimate type of training to future citizens who had passed the age at which they learn to control the drives of their original nature and who had not matured enough to enter elementary school.

This training would normally be given by the mother, but, as mentioned before, she now of necessity belongs to the laboring class and cannot supervise the most important days of her off-spring's life. This fact led to the idea of the pre-school of which there are two concepts, the Freebel and the Montesscri Theory.

Froebel maintained that a child seeks to develop his mind, acquaint himself with the new world, to collect his own unique personal experiences and to exercise his body through play. Therefore in his theory he stipulates that the designer should develop plans and original play material to guide children in their activities and to naively organize their play. To him goes the honor of conceiving the separate spaces for the organized group activities.

The Montessori Theory was based upon the supposition that each child has a different psychological need and therefore required an distinct educational procedure, thus the idea of stressing the training of the senses and a calculated system of educational apparatus was introduced.

The author felt that the Froebel Theory lent itself more readily to instilling a feeling of social cohesion among the children of the school and as such chose to use that theory as the basic theme for the solution of the pre-school child's requirement.

Engelhardt, et al. (12) recommended a minimum of 12 pupils per teacher and a maximum of 22 pupils per teacher in the pre-school. The author chose 15 students per teacher as the desirable criteria for this subject.

On a basis of this requirement, and the assumption that 60 per cent of the children would attend such a school, the project would require approximately 64 "play room" units to provide for all the students. The basic scheme for these schools was determined to consist of the following areas:

- 1. Play rooms or group areas
- 2. Sleeping areas
- 3. Dining areas
- 4. Bathrooms with scaled toilet facilities
- 5. Locker area

- 6. Observation area
- 7. Kitchen
- 8. Laundry
- 9. Isolation area with medical unit
- 10. Conference area
- 11. Office area
- 12. Teacher's lounge area
- 13. Caretaker's area
- 14. Utility area with heating facilities
- 15. Entrance hall and circulation areas
- 16. Storage area

Elementary Schools. The modern elementary school attempts to discover the special aptitudes of each individual and provide opportunities for the growth of these aptitudes and for the growth of behavior which we speak of as intelligence, character, citizenship and personality. As such these schools must express a note of gaiety in their character. They must be an inviting and inspirational, an asset to the community they serve. It was decided to limit the number of elementary schools to four. This would require facilities for approximately 350 children in each school and having limited the size of the classes to 25 students, there would be fourteen classrooms per school.

The character and nature of the school is determined by the progress of that particular school as devised by the board of education. In spite of the variations in the programs of the different schools, it was determined that certain basic areas were fundamental to all programs. A suggested spatial allotment for the schools in this project were as follows:

Four class rooms at 1,600 square feet per class One indoor play area at 2,000 square feet Ten class rooms at 1,000 square feet per class One library at 2,000 square feet One music room with storage facilities at 1,200 square feet Six music practice rooms at 80 square feet per room One all weather play room at 8,000 square feet One cafeteria with 100 seats at 1,200 square feet One kitchen and auxilliary spaces at 800 square feet One auditorium-gymnasium at 10,000 square feet One first aid area at 1,000 square feet One administrative area at 1,600 square feet One teacher's lounge area at 1,000 square feet per lounge General storage at 800 square feet Custodian's area at 800 square feet Mechanical area at 2,400 square feet Locker space and toilet facilities as needed.

For devising the master plan it was decided to allocate 1/2 acre per class room or a total of fourteen acres for each elementary school (305,000 square feet per site).

High School. According to the 1950 Census of Population for Louisville, Kentucky, Bulletin P-D29, as published by the United States Government Printing Office, Washington, D. C., a survey of persons 25 years or older living in the site area revealed that out of a total of 7,915 people interviewed only 2,205 of these people finished high school. This ratio represents a 27.6 per cent ratio between the elementary school graduates and the secondary

school graduates. By 1960 according to these figures, there would be a need for classroom space for 446 students.

The author ascertained that there had been a definite change in the attitude concerning education and that there had been a definite effort to enforce compulsory school attendance. These two factors were the basis for increasing the number of students to be provided for. This would increase the number of students to 514 or by 15 per cent.

The entire secondary school population would be instructed at one physical plant. Limiting the size of classes to 25 students would necessitate a school of 21 class room areas. The actual allocation of the spaces within the plant were to be as follows:

Twenty-one class room areas at 1,000 square feet per area Five industrial arts shops at 2,000 square feet per shop Three home economics laboratories at 1,600 square feet per lab One library-study area for 160 students at 3,200 square feet Twelve music practice rooms at 80 square feet per room Two music rooms with storage at 1,600 square feet per room Two all weather play areas at 8,000 square feet per area One cafeteria for 300 students at 2,400 square feet One kitchen with auxilliary spaces at 1,800 square feet One gymnasium at 15,000 square feet One first aid unit with 1,000 square feet One administrative area at 2,400 square feet Two teacher's lounge at 1,000 square feet per lounge General storage at 1,600 square feet Mechanical area at 3,600 square feet Circulation as needed

Student lockers and toilets

Bicycle park area

Jalopy area

For devising the master plan of the area, an area of one acre per class room (basic) was allocated. This called for twenty-one acres for the second-ary school site, or 914,760 square feet.

Religious Education. Because of the character of the churches and the requirements for obtaining federal assistance, it was decided to eliminate all religious structures from the areas (see Plate XXXII).

### Commercial Center

In determining the character and size of the commercial area, it was necessary to evaluate the answer to four basic questions: (1) What was the limit of the trading area? (2) How many families live in this area? (3) How much do they spend in retail stores? and (4) How much would they spend in the new center?

The size of the trading area will invariably depend to a large extent upon what commodities or services the new shopping center has to offer. These commodities or services should be either superior to or different from services already available at other stores within the immediate vicinity. The trading area is a plastic element and is influenced immeasurably by natural neighborhood boundaries such as rivers, canals, railroads, etc., by geographical location and by the availability of public transportation.

The trading area for the site was divided into three zones. Zone one included the area immediately surrounding the center and had the nearest food, drug and service stores for the project. Zone two has neighborhood stores nearer than the new center, but this zone lacks department and

clothing stores of a quality equal to those in the new center. Zone three is a fringe area, having all the same type stores as the new center and nearer, but these customers may be lured away by a greater selection of goods, better values, more comfort or conveniences if the new center can offer such an inducement. Plate XXXVI indicates the trading zones for the new commercial center.

Table 6 indicated the anticipated revenue for the commercial center.

Based upon a total gross sale of \$3,642,600 per year, it was concluded that
the commercial center could have the following spaces:

<u>Item</u>	Space in sq. ft.
Groceries	9,300
Bakery	2,800
Department Store	
General Merchandise	4,000
Variety	4,800
Yard Goods	4,120
Apparel	
Men's and Boy's Wear	3,700
Women's and Girl's Wear	7,950
Infant Wear	2,400
Women's Accessories	4,160
Shoes	2,200
Furniture and Household Articles	6,000
Automotive Group	
Gas Stations (2)	400
Garage	2,000
Hardware	3,300

<u>Item</u>	Space in sq.	ft.
Liquor	900	
Drug Store	4,050	
Restaurants (2)	5,000	
Miscellaneous		
Jewelry and Silverware	1,920	
Gift Shop	1,100	
Florist Shop	1,100	
Sporting Goods Shop	2,700	
Service Stores		
Cleaners	2,200	
Laundromat	1,100	
Barber Shops (2)	1,100	
Beauty Parlors (2)	2,200	
Shoe Repair Shop	1,000	
Professional Offices	15,000	
Banks	2,400	
Post Offices	2,000	
Theater	12,000	
Nurseries (2)	7,000	
Administration	2,360	
Mechanical Plant	3,000	
Total Shopping Area	112,540	
Parking Area	562,700	(in garage)
Total Site Area	675,240	

## Play Areas

This term was used to designate definite areas for recreation and play. It was felt by the author that (even though the city had provided play streets within the area) the provisions for parks and play grounds in this area was thoroughly inadequate (Plate XXIV).

The first attempt at learning on the part of tomorrow's citizens is through the play group and as such, these children should not be denied the opportunity to fully express the emotions of their drives. To most effectively do this, an area free from all mechanical traffic, adorned by nature and easily accessible to the people for whom it was intended had to be provided.

It is obvious that the total space included in a play area is dependent upon the number of children to be accommodated. Yet the practice of determining the spaces needed on a basis of so many square feet per child is unsatisfactory because the essential play needs of a small number of children require a certain minimum sized area in order to afford the essential apparatus and spaces for games. Research of the play requirements of children indicate that three and a half acres (142,460 square feet) are needed to provide a well balanced play area for an estimated population of 600 children in the six to fifteen age group.

The author concluded that at the age of 15, people did not stop playing and should be encouraged to participate in recreational activities. Therefore, the master plan should provide neighborhood play grounds to be designed in conjunction with the living units and one recreation center of eight acres (348,810 square feet). This neighborhood playground was designated to provide activities attractive to young people and adults.

The composition of the neighborhood playground included areas for the following activities or apparatus:

Item	Size	Area in sq. ft.
Sand Box	24' x 30'	720
Slides		
Gang (3)	25' x 40'	3,000
Kindergarten (3)	81 x 201	480
Swings (Chain type)		
Four sets of six each	301 x 501	6,000
Horizontal Ladder	10' x 30'	300
Climbing Structure (2)	201 x 201	800
Merry Go Round	14' diameter	1,000
Sail Boat Pond		60
Wading Pool		1,000
Organized Games Area		
Archery		2,000
Badminton	201 x 401	1,600
Baseball	2501 x 3501	62,500
Basketball, Outdoor,		
2 required	501 x 701	7,000
Croquet (2)	301 x 601	3,600
Football	160' x 360'	57,600
Handball (2)	201 x 341	1,560
Shuffle Board	6' x 52'	674
Softball		
Tennis Courts (6)	27' x 78'	12,636
Horse Shoes (4)	12' x 50'	2,400

Item

Size

Area in sq. ft.

Organized Games Area

Volley Ball

25' x 50'

2,800

The recreation center was designated to be composed of the same essentials as the neighborhood play area with the following additions:

Tennis Courts (12)

25,272

Field House with the following areas:

Swimming Pool Area

Advanced Pool 72' x 160'

Beginner's Pool 24' x 72'

Sand Box

8' x 24'

Locker Rooms

4,000

Outdoor Theater for 150 spectators

#### Circulation

Investigation of the basic data included in the City Survey revealed the following facts:

- (1) Strip Zoning had necessitated the mixing of high speed commercial traffic and low speed residential traffic.
- (2) Congested conditions existing in the down town business district had led to the formation of certain major traffic patterns within the selected area.
- (3) These patterns formed a vital connecting link between the other areas of the city and as such could not be destroyed at this particular time.

Based upon these conditions, it was concluded that certain restrictions would have to be imposed upon the solution to the problems of this area. following conditions would be adhered to:

- (1) Since it was deemed necessary for pedestrians to transgress on these arteries at various times, the planner advocated the use of either underpasses or overpasses for foot traffic at various points.
- (2) The residential traffic could have limited access to the major traffic patterns.
- (3) Residential parking would be segregated from the major traffic pattern.

Table 3. Estimated maximum rent.

Income per Family	Number of Families	Estimated Rent per Family	Total
Less than \$500	1,045	\$ 100/year	\$104,500
\$500 <b>-</b> 999	700	150 "	105,000
\$1,000 - 1,499	665	250 "	166,000
\$1.500 <b>- 1.</b> 999	635	350 "	222,000
\$2,000 - 2,499	705	450 "	317,000
\$2,500 - 2,999	420	550 "	231,000
\$3,000 - 3,499	320	650 "	208,000
\$3,500 - 3,999	185	750 "	138,500
\$4,000 - 4,499	120	850 "	102,000
\$4,500 - 4,999	65	950 "	61,750
\$5,000 - 5,999	95	1,100 "	104,500
\$6,000 - 6,999	15	1,300 "	19,500
\$7,000 - 9,999	55	1,600 "	88,000
\$10,000 or more	20	2,000 "	40,000
Not reported	305		
Total estimated ren	t per year		\$1,907,750

Table 4. Disposition of housing units (43).

Existing Population	Projected Population Estimate for 20 Years	Housing Type
6,330 families	7,295 families	Multiple Housing
		Units
		1,000 units with one bedroom
		3,540 units with two bedrooms
		2,755 units with three bedrooms
20 families	24 families	Individual Units

Table 5. Projected estimate of school age population (43)

Age Group	Existing Total	Projected Total (1970)	
Under Six Years	1,405	1,615	
Six to Fifteen	1,304	1,490	
Fifteen to Eighteen	451	514	

# EXPLANATION OF PLATE XXXIV

# Trading Zones for Commercial Center (5)

# Key:

Zone 1

Zone 2

Zone 3

12

PLATE XXXIV

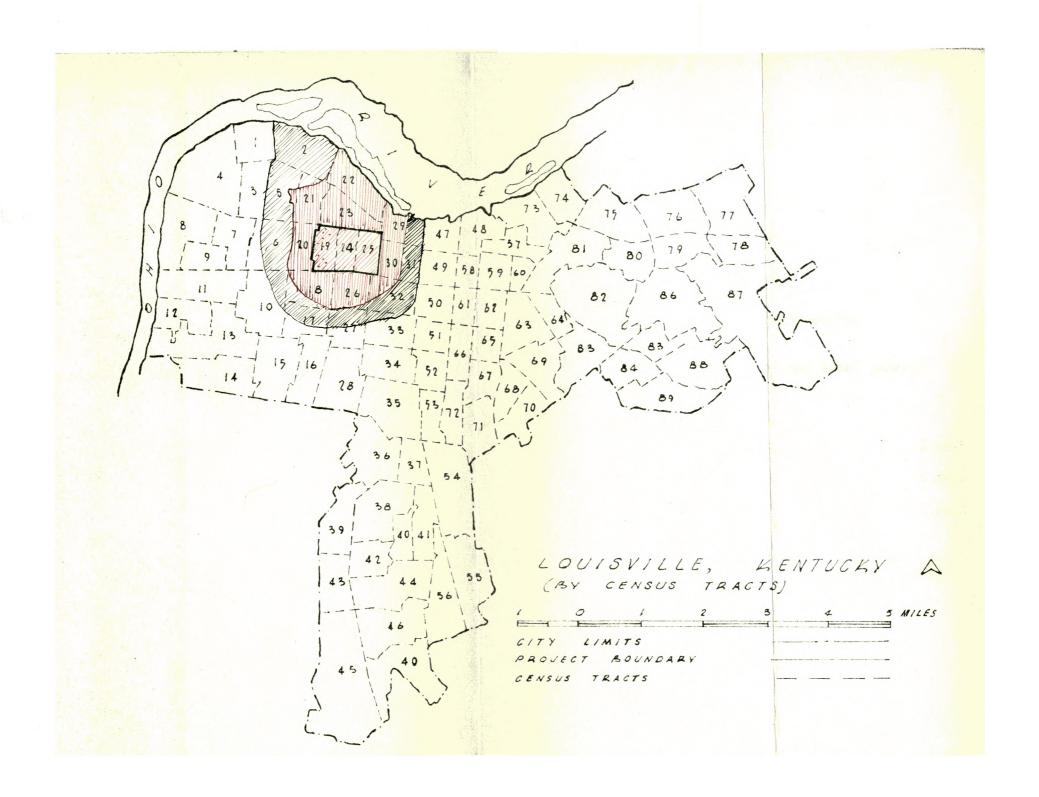


Table 6 shows the anticipated revenue for proposed commercial center (38). The anticipated sales for each zone are as follows: Zone 1, 20 per cent; Zone 2, 10 per cent; and Zone 3, 5 per cent.

Table 6. Anticipated revenue for proposed commercial center.

Consumer Expenditure			Zones		
No.	Item	×	1	2	3
1	All types	100.0	9,379	36,186	22,085
2	Food and tobacco	32.7	3,061	11,819	7,241
3	Clothing, accessories and jewelry	11.7	1,002	4,241	2,588
4	Personal care (dry cleaning, laundry, etc.)	1.3	122	471	284
5	Housing	10.9	1,020	3,940	2,415
6	Household operation	14.2	1,330	5,140	3,140
7	Medical care	4.7	441	1,701	1,040
8	Personal business	4.3	402	1,556	951
9	Transportation	12.2	1,140	4,421	2,700
10	Recreation	5.5	515	1,991	1,225
11	Private research and education	1.0	93	362	222
12	Religious and welfare activities	0.5	46.5	181	111
13	Foreign travel	0.5	46.5	181	111
	Commercial Center Esti	mated Sal	es 20%	10%	59
	Items 2, 3, 4, 8 and 1	0	1,020.4	2,007.8	614.45
	Total, in million	s			3,642,650

#### FINANCING

This phase of the treatise will be limited to a discussion of the major laws under which communities may apply for federal assistance for Urban Renewal Projects, namely Public Law 560, 83rd Congress, and Public Law 345, 84th Congress.

Public Law 560, 83rd Congress, in general provided for interest free advances of Federal funds to state and local public agencies to ensure a reserve of public works by aiding in the financing of the cost of engineering and architectural surveys, designs, plans, working drawings, specifications and other documents or data preliminary to the construction of public works (19).

Any non-federal public agency may apply for an advance for plan preparation for any public work (except a housing project) which it anticipates construction to begin within three years of the date of acceptance of the advance which covers said planning. No private or non-profit, privately controlled organization may receive an advance.

The types of projects that are eligible for advance planning grants are sanitation facilities, water facilities, public health facilities, public schools and other educational facilities public buildings (such as city halls, court houses, etc.), highways, roads, streets and miscellaneous public facilities which include such items as airports, parks, recreational facilities, etc.

Specific instances that aid any of the above projects being considered as eligible projects are:

(1) The work is a portion of an urban renewal project which an urban planning grant has been approved or is pending.

- (2) The work has been approved or is pending under the Public Facility Loans or College Housing Loans.
- (3) The work is part of a Public Housing Project of a Federal, State or Local Housing Authority.
- (4) The work is part of a Federal Project of a Federal Department, agency or its instrumentalities.
- (5) The work is a part of a project of the Bureau of Public Roads or the State Highway Departments.

Formal application for advances are made through regional offices of the Housing and Home Finance Agency on Form H-985. Included with this form must be a record of the act (or minute) enabling the applying agency to plan such a project and a resume of the project contemplated.

When an application has been approved, the HHFA Regional Office tenders an agreement which must be returned within 60 days or it becomes null and void. Advances must be repaid promptly upon the start of construction of the project set forth in the application.

Section 314, Public Law 560, 83rd Congress, provided for Demonstration Grants. The purpose of a Demonstration Grant is to aid in "developing, testing and reporting methods and techniques and carrying out demonstrations and other activities for the prevention of slums and urban blight. Preference is given to applicants whose program can be expected to contribute the most significant improvement of methods and techniques and serve as a guide for other communities undertaking urban renewal projects.

The government is allowed to furnish 2/3 of the estimated cost of projects approved under this section and the applicant must furnish the remainder of the project cost. No standard application form has been devised for loans under this section and interested public bodies must write

to the Demonstration Grant Branch, Urban Renewal Administration, Housing and Home Finance Agency, Washington 25, D. C., describing their program in general to secure a reaction to the acceptability of the project before any detailed study surveys or presentations are made.

The types of activities that can be financed under this section are any of the seven requirements of the "Workable Program" or an community problem that would be applicable to other communities as well as the applicant's community, providing that no comprehensive studies or experiments have not been made and are not being made now on a community problem of the same character.

Section 701, Public Law 560, 83rd Congress, provides for Urban Planning Assistance Grants. These particular grants were designed specifically for the advantage of communities of 25,000 people or less at the last decennial census. These grants must be applied for through the State Planning Agency and may be used for surveys, land use studies, urban renewal plans, technical services and other planning work but excludes plans for specific public works within the master plan. Also eligible for consideration under this same section are Metropolitan Planning Commissions and Regional Planning Commissions provided these agencies have been empowered to survey on this function by State Laws and not by local laws.

All Federal grants under this section may cover 50 per cent of the total cost whereas the state furnishes the other 50 per cent. Formal application for grants under this provision must be made on Form H-6701 as furnished by the Urban Renewal Commissioner, Housing and Home Finance Agency, Washington, 25, D. C.

Public Law 345, 84th Congress, is of more recent vintage than Public

Law 560. It provides more inducement to private interests to participate in Urban Renewal Projects and attempts to alleviate some of the characteristics of Public Law 560, 83rd Congress (20).

Section 220 increased the maximum FHA insured mortgage on multi-family housing units from 5 million to 12.5 million dollars where the mortgagee is a private corporation. This allows better housing developments in both size and character but places them beyond the reach of the low income persons for whom they were intended.

Section 221 specifically provides mortage insurance for low cost housing for families displaced by slum clearance and urban renewal activities plus other governmental action.

The Capital Grant authorization of Title I of the Housing Act of 1949, (as amended by Public Law 345) provides for a 70 million dellar limit to any one state for allocation to local public agencies within said state. Any state agency may borrow in addition to this sum 10% of the capital grant

Section 110 of the Housing Act of 1949 was amended by this law to allow for federal loans and advances for the purpose of redeveloping open land for industrial or non-residential uses. The limit of such advance is 2½ per cent of the estimated gross project costs of all urban renewal or redevelopment projects undertaken by the applying agency.

Under Title II of the Housing Act of 1955, the Housing and Home Finance Administration is authorized to purchase obligations of and make loans to agencies authorized to effect urban renewal activities. These loans may be made either directly or in cooperation with banks or other lending institutions, or through agreements to participate, or otherwise. All obligations shall mature in 40 years or less.

Loans under this section are known as Public Facility Loans and are

basically for assistance in construction of basic works such as water purification, sanitation systems, gas distribution systems, etc.

Formal applications for loans under this section is by HHFA Form 63-R914 which may be secured through the Regional offices of the Housing and Home Finance Agency.

#### THE MASTER PLAN

The culmination of the planning for an urban renewal project is the Master Plan or Comprehensive Plan as it is sometimes referred to. This plan is a preliminary proposal for the orderly development or redevelopment of a community and should be practical and objective without forsaking the human element of planning.

This Master Plan considers the following items:

- (1) Utilities
- (2) Transportation patterns
- (3) Recreational facilities
- (4) Religious facilities
- (5) Educational facilities
- (6) Industrial facilities
- (7) Recommended zoning regulations
- (8) Public facilities
- (9) Housing facilities

The basis for the planners proposals as to each of these items depends upon his philosophy of planning, his experience and the atmosphere he desires to attain in the community under consideration. He must always be conscious of the impact his design has upon the lives of the inhabitants of a community (Gallian, 15).

Plate XXXV represents the proposed land use map for the chosen site in this urban renewal scheme. The spatial requirements were shown in the section, Neighborhood Requirements.

In addition to the land use recommendations, the Zoning Regulations should also be recommended at this time. For this particular project the following regulations are recommended:

#### 1. Housing:

- a. Multiple housing units of 10 stories or less shall have a maximum land coverage of not more than 25 per cent and shall have a maximum height of 120 feet above finished grade.
- b. Multiple housing units of more than 10 stories shall have a maximum land coverage of not more than 20 per cent and shall have a maximum height of 240 feet above grade.
- c. Set back requirements for multiple dwelling units shall require a distance equal to the width of the facade facing the street.
- d. All multiple housing units shall be of fire-proof construction.
- e. Single, detached dwelling units shall be limited to two stories or 20 feet above grade with a maximum lot coverage of 20 per cent.
- f. Off street parking shall be provided for all housing units. A minimum standard of one parking space per family unit in multiple dwelling areas and two parking spaces per single dwelling unit shall be adhered to.

#### 2. Schools:

a. Schools shall be limited to 1 story and basement for elementary and nursery school. All teaching areas shall be above ground level.

- b. Junior High School shall be limited to two stories in height.
- c. All design standards must comply with the requirements of the State Board of Education.
  - d. All construction in this area shall be fireproof.

#### 3. Commercial Area:

- a. All construction in the commercial area shall be fireproof.
- b. Off street parking space in the ratio of 5 square feet of parking space to 1 square feet of selling space shall be required.
- c. Distance from facade facing street to street shall be two times the width of that facade.
- 4. Open landscaped areas are to remain open. These areas are to be used to integrate traffic patterns of the site with the traffic patterns of the remainder of the city.
- 5. Vehicular traffic within the site shall not interfere with the intra-urban or inter-urban. Limited access at not more than four points shall be provided for the traffic from each individual neighborhood unit.
- 6. Underpasses or cloverleafs shall be installed where needed to facilitate efficient flow of traffic.
- 7. Underpasses or overpasses shall be installed where needed for the safety of pedestrians.

Plate XXXVI is a photograph of a model used to demonstrate the character of the neighborhood it is possible to achieve under the requirements stipulated for this project. The key gives an adequate explanation of the project.

## EXPLANATION OF PLATE XXXV

#### Proposed Land Use Map

## Key:

# Hou sing

Multiple housing units, 10 stories and

under

Multiple housing units, more than 10 stories

with a maximum of 16 stories

Single, detached housing units

#### Schools

Nursery schools

Elementary schools

Junior high school

## Recreation

Neighborhood playground

Community park

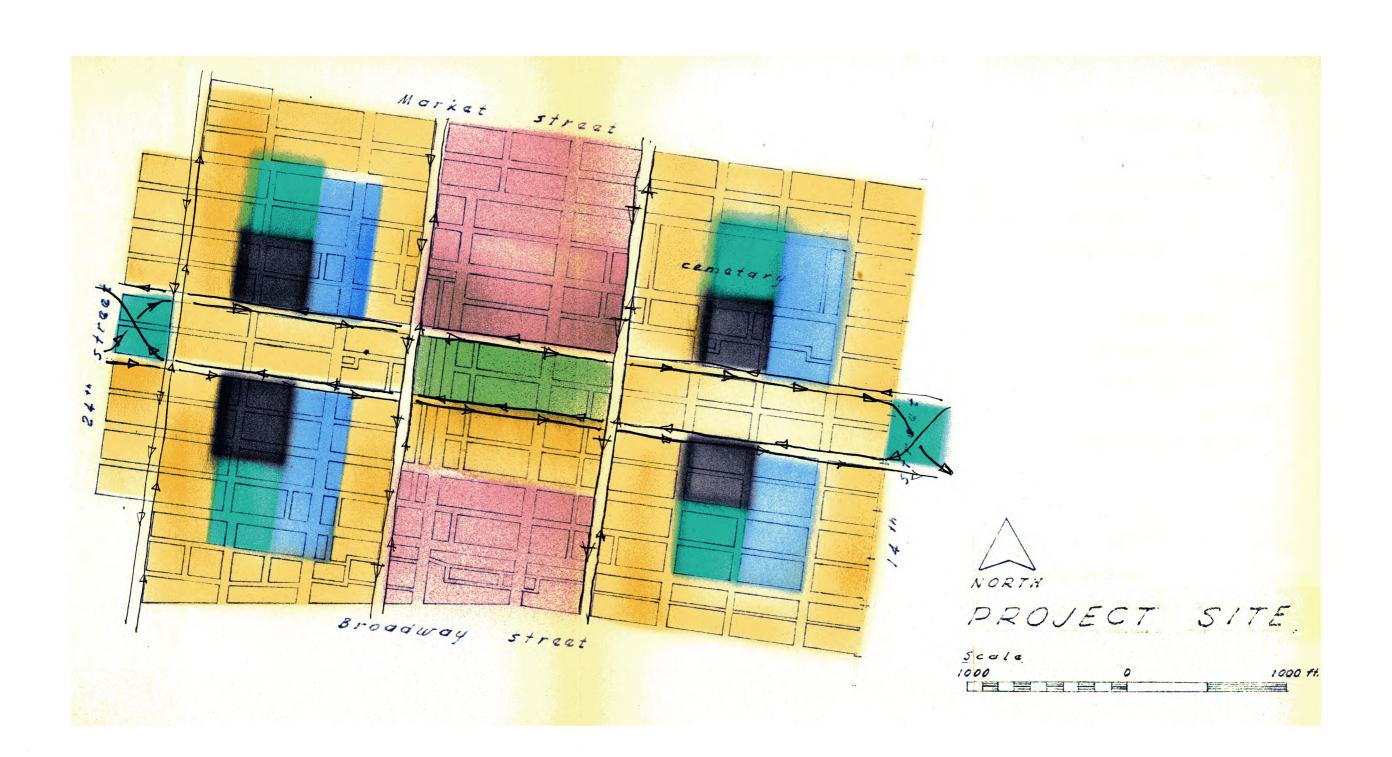
Commercial center

Open landscaped areas

Interurban and Intraurban traffic arteries

(Arrows indicate the direction of flow)

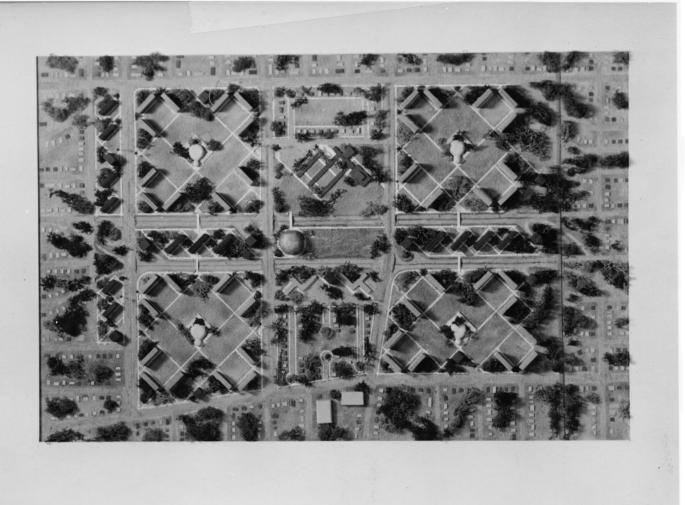
PLATE XXXV



# EXPLANATION OF PLATE XXXVI

A photograph of a model conceived as one solution possible under the restrictions for this urban renewal project.

\* PEDESTRIAN OVERPASS \* PEDESTRIAN UNDERPASS





## ACKNOWLEDGMENTS

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## A GUIDE FOR PLANNING URBAN RENEWAL PROJECTS

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AN ABSTRACT OF A THESIS

submitted in partial fulfillment of the

requirements for the degree

MASTER OF SCIENCE

Department of Architecture

KANSAS STATE COLLEGE
OF AGRICULTURE AND APPLIED SCIENCE

Juvenile Deliquency: Low Health Standards: High Crime Rates:

Low Levels of Educational Attainment! High Population Density! No parks

within easy walking distance! Sub-standard Housing Facilities!

These are all characteristics of slums! Slums that are the final product of a continuing process of decay! Slums that are caused by the neglect and inaction of the majority of the citizens in our communities! Slums that constitute the major part of the expense for community protection and services while providing the minimum part of the tax revenue! Slums that are a disgrace not only to the unfortunate victims of circumstance who are forced to reside within them but also to the residents of any community that permits these areas to exist!

It is needless to say that unless drastic and immediate action is undertaken by the citizens in the majority of our communities, these communities will not survive. These communities will not continue to progress as they have at one time. They will become mere symbols of a lost era!

This treatise was written to serve as a guide for planning a remedy to these situations. It is a guide for planning urban renewal projects. It is based upon the philosophy that the folkways and mores of the community are as important as the physical concept of the community. It is intended to benefit the small community that has no means of supporting a city planning department by giving them a source of material from which they can determine the type of surveys necessary for submittal to the proper authorities for assistance in urban renewal, and to identify these authorities to them.

The following items constitute a procedure for developing a workable plan for urban renewal projects:

- (1) A regional survey is performed to compare the community under consideration with the surrounding territory and with the country as a whole. This survey considers such items as history, geography, climate, population composition and density, economy, transportation facilities and regional facilities such as schools, hospitals, churches and provisions for recreation.
- (2) A city survey is performed to establish the conditions that exist in the community and the conditions that exist within the various neighborhoods. This survey consists of history, geography, climate, population composition, and density, educational attainment levels, income levels, housing characteristics and density, economy, transportation facilities and other facilities such as schools, churches, hospitals, existing land use patterns, zoning regulations, building code requirements and enforcement and utilities available or proposed.
- (3) Site selection consists of the evaluation of these various surveys to ascertain whether a neighborhood is in need of renewal, rehabilitation or stricter code enforcement. The items considered in site selection for this treatise were lack of recreational facilities within easy walking distances, high population density in relationship to the recommended land uses for the area, lack of running water in housing facilities, lack of adequate initial housing structure, low income, overcrowded school conditions and mixed land uses.
- (4) Neighborhood requirements establish the necessary spatial allotments and the recommended land use pattern for the new community.
- (5) A program for financing the community's share of the financial obligation for construction of the project under Public Law 345, 84th Congress or Public Law 560, 83rd Congress has to be established.

- (6) A Master Plan is devised to control the development or redevelopment of the site selected.
- (7) A program for active citizen participation in the community redevelopment plan, a phase of the program which is usually related to the manner in which shelter for the displaced families of the area under construction is provided.

The author chose the city of Louisville, Kentucky as a hypothetical client and demonstrated the mechanics of urban planning in this thesis.