METROPOLITAN MASTER PLAN

1948

CITY PLANNING COMMISSION

Robert A. Taft

THE CINCINNATI METROPOLITAN MASTER PLAN

and

THE OFFICIAL CITY PLAN

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THE OFFICIAL CITY PLAN

of the

CITY OF CINCINNATI

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Cincinnati

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By unanimous action of the Commission, the Master Plan of Metropolitan Cincinnati is dedicated to the memory of

ALFRED BETTMAN
(1873 - 1945)

As long as Cincinnatians love their city and strive for its future greatness; as long as they remain eager to make it the best place in all the world in which to live, the spirit and work of Alfred Bettman, member of the City Planning Commission from 1926 and its Chairman from 1930 will live on. Death came to him (January 21, 1945) just as his beloved Cincinnati, for which he had labored because it was his native city, was awakening through the beginning of the Master Plan project to the full practical import of the doctrines he had so long advocated.

INTRODUCTION

This volume, with the graphic material and the Master Plan Map which are integral parts of it, was adopted by the City Planning Commission on November 22, 1948, under the provisions of Sec. 4366 of the General Code of Ohio and Article VII of the City Charter, as the Official City Plan of Cincinnati.

This book, the final one in a series, presents a condensation of the findings and conclusions of the individual reports, each of which was devoted essentially to a single functional element, and a co-ordination and integration thereof into a unified Plan. The book has been prepared according to a plan as simple as the complexity and interdependence of the numerous subdivisions of the subject matter permit.

The titles of the earlier publications, copies of which are available at the City Planning Commission offices in City Hall, are listed on the last page. These are the reports referred to herein from time to time.

The FOREWORD is a brief glance backward to the beginnings of planning in Cincinnati, a short review of the history of the 1925 City Plan and a discussion of the conditions, legislation and action which have led up to the Master Plan project of 1944-1948.

Chapter 1, titled OBJECTIVES, sets forth the underlying concepts upon which the Plan is based, the policies which guided its formulation and the ends toward which the Plan is directed.

The extensive research work done in connection with the Plan is summarized in Chapter 2—BACKGROUND.

Presentation and explanation of the MASTER PLAN MAP for the whole Area is the purpose of Chapter 3. At this point the reader is given a bird's-eye view of the future Area as envisioned in broad strokes by the master planners. In Chapter 4 the Area Plan is broken down so that it can be examined as it applies to each of the individual communities comprising the Metropolitan Area.

Chapters 5 to 10, inclusive, discuss and interpret plans in those major functional categories which are area-wide in character and application: RESIDENTIAL AREAS, INDUSTRIAL AREAS, MOTORWAYS, PUBLIC TRANSIT, PUBLIC SERVICES, AND RECREATION.

In Chapters 11 to 16, inclusive, plans for special and localized areas and facilities are shown: RAILROADS, AIRPORTS, RIVERFRONT, PUBLIC BUILDINGS, PARKING, and the PRODUCE MARKET.

Ways and means for putting the Plan into effect over the years, a review of the tools at hand and a statement of those still needed for complete implementation are the subjects of the concluding chapter.

FOREWORD

Cincinnati is our city and we like it because we know it is a good city. We also know that we can make it better, more convenient and more prosperous. Realistic and thorough, yet imaginative, planning of its future, and the future of the Area of which it is the metropolis, is essential to attain that result.

A city and the surrounding area which it influences are primarily a home for people. Better life for people is the major objective of planning. Not only must plans be made but the indicated improvements must be carried into effect if we are to make the Cincinnati Metropolitan Area an increasingly better place in which to live.

The City Planning Commission endeavors in this volume to point the way by offering a comprehensive, modern Master Plan to guide us along the road of continued progress.

Our Area's record is one of much solid achievement although in accord with our tradition of conservatism its accomplishments have been unheralded by fanfare. Like every city Cincinnati has always had municipal problems. Today these problems are many and pressing.

In presenting herewith the Cincinnati Metropolitan Master Plan, adopted November 22, 1948, by the City Planning Commission, we carry on a tradition of planning begun as far back as 1907 when the Kessler Plan of Public Parks was prepared and became the official guide in maintaining and extending our park system. As set forth in the Official City Plan of 1925, that city plan was the first to be officially adopted by any city of Cincinnati's size or larger in the United States. Since that time Cincinnati has held and nurtured an enviable position as a city which plans its future.

The movement which culminated in the 1925 Plan began in 1915 when the United City Planning Committee, a federated association, was formed by representatives of some of the major civic organizations. The Committee, enlarged so that it contained representatives of substantially all the civic organizations then existing, undertook as its first piece of work the placing upon the statute books of Ohio a general city planning law which up to that time had been lacking. This law later furnished the basis of the city planning provisions of the Cincinnati Charter adopted in 1926. Since the passage of that law the city has had a continuously functioning City Planning Commission with full planning powers.

The Commission employed the Technical Advisory Corporation of New York, a firm of engineers whose city planning department was in charge of two of the most experienced and expert American city planners of that day—George B. Ford and Ernest P. Goodrich. They made a preliminary survey and a program for the making of a plan and were then authorized to carry out that program. The Official City Plan of 1925 was the result.

However, the main pattern of the city and its metropolitan area had been set long before that Plan was adopted. While some of the deficiencies existing in 1925 have been corrected others have increased in seriousness and new ones have come to light.

The 1925 Plan was prepared more than twenty years ago. Meanwhile a new generation has grown up in Cincinnati and in the nation. Twenty years ago the full impact of the automobile, the bus and the motor truck on city living and on manufacturing and merchandising was just beginning to be felt. Air transportation was in its infancy.

Twenty years ago, too, planning for cities in the United States was still in swaddling clothes. In the intervening period great advances have been made in planning methods and techniques, as in other fields. Better tools for effectuating plans have been developed.

The Official City Plan of 1925 was not intended to be, and it could not be, static. It was amended and expanded frequently to meet new conditions. But by 1944 it had become evident to the Planning Commission and to City Council that because of the accelerating swiftness of change the Plan required a thoroughgoing revision. It was agreed that the time had come to bring it up to date, to recast it entirely if need be, in terms of what we now need and want.

Appropriation to the City Planning Commission to revise the 1925 Plan and to formulate what is now called the Cincinnati Metropolitan Master Plan and presented herewith, was provided by an ordinance passed by City Council on February 16, 1944.

The Commission began immediately an investigation of the problems involved in the undertaking. Their inquiries included a review of advances made in recent years in planning, methods of procedure adopted by other cities, and the essential features of other cities' plans of particular importance to, and possible application to, the local Area. These activities, the decisions to which they gave rise, and the search in a time of war for competent personnel, occupied the attention of the Commission for several months.

On May 29, 1944, the Commission adopted a resolution in part as follows:

"That the Cincinnati Planning Commission do and does hereby establish as part of its organization a Division of City and Metropolitan Master Planning which, subject to the general direction and control of the Commission, will be under the immediate charge of a Director of Master Planning and advised by consultants and with such staff as may from time to time come to be established, and with the work of said Division financed through the appropriation to this Commission made by the City Council by its Ordinance of February 16, 1944."

It is recognized that sound planning for a city must embrace the whole of the area that constitutes the social and economic community. The Plan presented in this book gives as full effect as possible to this concept.

The City Planning Commission, as the planning agency for the metropolis of the Area, assumed the initiative and spearheaded the formulation of the Plan. All of the financial costs and responsibilities were voluntarily assumed by the City of Cincinnati.

In undertaking so complex a project as a metropolitan master plan it was recognized at the start that the support and assistance of the officials of every governmental unit involved was not only desirable but essential and that systematic contact and consultation with all the Area's planning executives must be provided for. Moreover, it was seen that carrying into effect a Plan metropolitan in scope requires continuing collaboration and co-ordinated action by the legislative, planning, and administrative officials of all the governmental units within the Area.

Accordingly, formation of the Metropolitan Planning Committee was one of the first steps in the Master Plan project. Through the activities of this group the formulation of the Plan became a truly metropolitan effort. Because of the size of the Committee a number of its members were designated "Planning Associates" to represent it at all meetings of the Planning Commission relative to the Plan. Throughout the project these Associates, three representing the Ohio side and two the Kentucky side of the river, were entitled to participate in these activities as fully as were members of the Commission.

The Master Plan as now adopted by the Commission represents, in the best way possible, the combined wants, thoughts and knowledge of the citizens of the Area. Although its preparation was administered by the Commission in collaboration largely with the interested governmental agencies, there have been continued constructive criticism and suggestion from private sources assuring a product that reflects the public viewpoint.

It is a well-known fact that many cities have spent large sums of money in the preparation of plans only to permit those plans to be filed away in some dusty corner of the City Hall and forgotten.

One reason for such a fate for otherwise valuable plans is that those cities merely *bought a package of plans* instead of *adopting planning* as a continuous and regular approach to their civic problems. Planning, like every other phase of government, is never finished. There is nothing *final* about a Master Plan. It is a reviewing-stand in a continuous job of planning. It is a stopping-place from which the people can look backward a generation or more to sum up their accomplishments to date—and to look ahead and lay the foundation for desired improvements in the generation or so ahead. From the date of adoption of this Plan it should be subject to continued study and as needed, to change. It should be at all times constantly sensitive to the wishes and needs of the people and to the requirements of a changing world.

Another reason for the failure of good master plans to be fully effective is that they did not represent the wishes, needs and hard work of enough officials and citizens. Had these participated more fully they might well have become more appreciative of and concerned with a continuance of planning and an awareness of the master plans made. The City Planning Commission has taken every precaution along these lines to assure the success of our Plan.

The Commission has at all times solicited the tangible assistance of civic-minded citizens who had ideas of value to contribute to the development and improvement of their city and its surrounding Area. Many individuals have preferred, or found it more effective, to express themselves through organized groups. Notable among the latter is the Citizens Planning Association (now the Citizens Development Committee) which was organized expressly to represent the public, to inform it regarding the Commission's proposals and to co-operate with the Commission in the formulation of the Plan.

A Master Plan is an overall diagram or framework for desirable future developments rather than a detailed blueprint of specific improvements. Continuous study and alertness and detailed plans are necessary when the projects recommended in general terms come up for consideration and effectuation.

Keeping the Plan up to date, as well as putting it into effect during the years ahead, provides special opportunities for constructive co-operation by individuals and by civic organizations. The Commission recommends that every organization of citizens and property owners and business men designate a standing committee to study the problems of the Area, and instruct and authorize its committee to transmit to the Commission its conclusions and recommendations in writing.

Only thus can this Master Plan continuously reflect the desires and aspirations of our people, and operate as an effective instrument through which the Area can become a better place in which to live and work.

We want more good homes located in modern, desirable neighborhoods. We want more health centers, more branch libraries, more recreation centers, safer streets, modern thorofares, better public transit. We want to reclaim our shabby riverfront and to eliminate our slums.

These and many other public improvements can be ours if we want them enough to work together for them. The time for wishing is past. The Master Plan is our opportunity. Its proposals are realistic, while not overlooking Burnham's precept to "make no little plans." We believe they are far-sighted enough to be inspiring and practicable enough to be attainable. Sound planning and engineering principles have been adhered to throughout the project.

In this Comprehensive Master Plan the Commission believes it is presenting a new point of departure toward a more efficient and inviting Cincinnati Metropolitan Area for today and for tomorrow.

CITY PLANNING COMMISSION

November, 1948

Chapter 1
OBJECTIVES

An understanding of the general policies, principles and pattern underlying the Cincinnati Metropolitan Master Plan is essential to an understanding of its specific proposals and to a clear conception of the future city and metropolitan area which it portrays.

First of all, the Master Plan sets forth only the general nature and extent of the future physical development of the Area. It shows the relationships between the different functional classes of public improvements, streets, parks, etc., and the locations and extents of residential, commercial, industrial and other privately-owned areas, based on estimates of the Area's probable needs over a period of years.

The reorganization of the Area could not be brought about overnight or in any brief pre-determined period by any amount of money or of governmental power. Of necessity, it is a gradual process extending over the years ahead. The overall function of the Master Plan is to plan broadly the kind of communities and neighborhoods and commercial and industrial developments we want.

Some of the changes called for by the Plan can be made today and in the immediate future, others can be foreseen definitely within the next five years, still others less definitely ten years ahead. But if there is to be orderly growth and constant improvement, the Master Plan must look ahead as far as possible and record now even distant possibilities, subject to modification as the years unfold.

The Master Plan has no overall legal effect on property. Its function is not that of a blueprint but of a guide for the later and more definite legislative and executive steps, which have legal effect.

Plan Metropolitan in Scope

The resolution of the City Planning Commission establishing the staff for the preparation of the Plan declared that because the factors bearing on the development of the territory of the City of Cincinnati are closely interrelated with the factors bearing on the development of the territory of the Metropolitan Area outside the corporate limits, the Master Plan should embrace the whole of the Metropolitan Area. It defined the area to be covered as roughly the urbanized portions of the three counties—Hamilton in Ohio, and Kenton and Campbell in Kentucky.

Designation of the whole of the Area as the unit for planning purposes constitutes a forward step long advocated. The significance of this step is evident when one considers that the Metropolitan Area includes parts of three counties in two states; 53 cities and villages (32 in Ohio and 21 in Kentucky), some of them completely or partially embedded within the territory of Cincinnati; 17 townships; 60 school districts, and several special authorities.

Co-operation among these governmental units made possible, among other things, a diagnosis of existing conditions, present needs and probable future requirements of the whole Area and of each part. Further, it permitted the specification of facilities for housing, shopping, industry, motorways, schools, recreation areas and other uses where most appropriate, regardless of municipal or state boundaries. A higher degree of coordination and sounder plans were attained than would have been possible by planning independently for each part of the Area.

Broad Objectives of the Plan

Throughout the project the City Planning Commission has recognized promotion of the social and economic welfare of the people of the Area as the basic purpose of the Master Plan. Accordingly, it was developed with the chief ends in view of realizing the maximum potentialities of the Area in terms of the most satisfying and healthful living conditions and the highest degree of economic well-being attainable by its people.

Expansion Potentialities

As American cities go, Cincinnati is a mature community. The growth of the Metropolitan Area has been relatively modest in recent times, averaging about 10 per cent per decade since 1900. In view of the rapid slowing down of population growth in the nation, Cin-

cinnati along with most metropolitan cities is likely to grow still more slowly in the years ahead. Careful estimates based on population trends and economic potentialities indicate average population increases of about three per cent during each of the next three Census decades.

The prospect that the Metropolitan Area may experience only modest population increases in the future does not mean that there will not be considerable expansion of its area. The loosening up of older, congested sections; the continued outward trend of residential construction; the demands of industry for larger sites; the need of additional open spaces — these along with some increase in population and a somewhat greater one in the number of households will combine to extend the limits of the urban area. An expansion of the urbanized portions of the Area to the extent of about 30 per cent in approximately 25 years is not unreasonable to expect.

The Outward Movement

Cincinnati, like every city, is and has been expanding territorially. Much of the new residential development occurs at or beyond its periphery, over a wide area of surrounding territory. Retail stores have sprung up in all sorts of outlying locations, attempting to follow the spread of population. Some large new industries and a number formerly within the city have located outside the city limits where there is more room for modern, efficient plants.

This continuing movement outward is not new. From earliest times residents wanted to live on the "outskirts." Even in what is known as the horse-and-buggy age, up to about 1870, people lived as far from "downtown" as they could conveniently walk, or ride in a horse-drawn conveyance.

The coming of the street car increased the radius within which people could live in the "country" and still work in the city. The automobile had an unprecedented impact, and improvements in automobiles and roads have continued to enlarge this radius.

The great majority of families have sought single-family homes, each with a plot of ground with trees, grass and flowers. Most people would like to live on the "edge" of the city. But the "edge" is not permanent because there is always the procession of those who push farther out. The "outlying" community of a few years ago is now appreciably within the scattered fringe of later developments.

Much of the development at the outskirts is pushing farther and farther into unincorporated and rural territory. Improvements in the speed and safety of travel brought about by modern highways are accelerating this trend, the ultimate future extent of which is not in sight. It is becoming feasible to live conveniently at distances from the city heretofore impracticable.

Cincinnati has itself subsidized this outward development in that the residents of these surrounding communities enjoy many services daily at the expense of the central city. They make daily use of streets in the city which have been widened and developed with lighting, traffic signals and police protection to accommodate them. Food inspection, building inspection and countless other services are at their disposal in the central city. The water supply and sewer systems have to be designed to accommodate this daily population load. The public library, museums, parks, airports and many other public institutions are available to those residing beyond the Cincinnati corporation line at little or no expense to them.

The outward expansion goes on apace. The Master Plan accepts its continuance in the future and was designed to provide for and guide this peripheral development. But there is another side to the coin:

The Older City

The older city lives on. Over the years it has tended to stagnate. The basic structural form of the inner city is essentially that of the last century and ill-fitted to present-day needs. There has been a serious and cumulative lag in modernization and improvement. Indeed, many of the older sections never were provided with many of the conveniences and amenities necessary for urban life.

These older sections originally had a period of rapid growth, followed by a period of stability. Then began the process of decline. Gradually and perhaps imperceptibly, a complex of debilitating factors came into play.

The homes depreciated in value, partly because by their very nature they are wasting assets, and partly because the newer homes being built farther out in more attractive neighborhoods tended to make them obsolete. Selling of the older homes began, with changes in the type of residents, and with a gradual shift from owner to tenant occupancy. This shift was often accentuated by the conversion into smaller apartments of the larger houses for which the market became increasingly slow.

In many of these residential sections some land was taken over by industry. Business frontage expanded. Mixed uses hastened the process of depreciation. Streets and highways took on heavier traffic loads, causing congestion, noise, and danger to children.

In the oldest and most centrally-located neighborhoods, the deterioration and obsolescence have proceeded to a marked degree and the whole pattern of land use

has changed radically from its original character. Pursuing this course, parts of the city once containing the best residences have become what are known familiarly as blighted areas. In some of these the process of deterioration has gone so far that the only satisfactory solution is clearance and a fresh start.

Increasing deterioration and congestion of these areas within the city resulted in the decline of municipal revenues and a rise in the cost of municipal services such as health, police and fire protection, recreation, welfare and sanitation. The deficiency between municipal income and outgo will be made up primarily from two sources: those more outlying residence properties within the city limits which are still in sound condition and the industrial and commercial sections, especially the Central Business District.

Much injurious mixing of uses occurred before the passage of the original Zoning Ordinance in 1925. Many of the better sections of the older city would no doubt now be well on their way on the course of depreciation except for the protection of zoning in recent years.

Basic Planning Problems

The Area thus faces two great planning problems, (1) to provide for the orderly development of peripheral land and the normal processes of expansion, and (2) to restore and maintain the livability and attractiveness of the inner communities.

The two processes involved are to a large extent complementary. The forces of expansion and of aging are controllable. Sound urban planning must consider their mutual relationship and develop effective methods for their control.

Development on the Periphery

The expansion on the outskirts must be controlled to the full extent made possible by the governmental powers of the political subdivisions of the Area. Much has been done, particularly through the traditional co-operation in dealing with larger geographical entities between the Cincinnati City Planning Commission and the Hamilton County Regional Planning Commission, established in 1929. Much more can be accomplished through efficient land subdivision, zoning protection, more comprehensive building codes and standardized requirements for public utilities and services within streets.

In the absence of regulations, the desire for the advantages of "country" living, away from the noise, smoke, traffic and congestion of the city proper, tends to ignore proper safeguards as the outward trek continues. Those who move out look only to the present and wave aside the fact that sooner or later adequate public services will become a necessity and that their cost will be very great.

Shoddy building construction, poor land subdivision, absence of zoning protection, and other similar deficiencies in new areas of scattered development produce more and worse blighted areas. This result is inevitable unless measures are taken which will prevent repetition of the mistakes which produced the slums and the blighted areas, actual and potential, which now afflict the central city.

Since their establishment, the influence of the several planning commissions within the Area upon the protection of old and the development of new neighborhoods has been continuous and beneficial. The commissions must play an even more vital role in the future. They must use to a greater extent than heretofore their powers to require adequate planning of subdivisions, large and small, and to achieve their amalgamation into organized and balanced neighborhoods. Many small subdivisions in the past have made provision only for streets and building lots. Parks, shopping centers and other facilities for modern living have been conspicuously lacking. Planning needs to play a more positive and constructive role in shaping future areas for living.

Restoration of Inner Communities

As for the older city, a major long-range objective of the city's planning program under the Master Plan is rehabilitation and redevelopment of declining areas, to hold and attract a balanced proportion of families of varied incomes and sound business and industry within the city limits. This is both a social and an economic necessity.

The Master Plan indicates the areas for which redevelopment (for residence or industry) or rehabilitation is proposed. Redevelopment involves complete clearance, replanning and rebuilding. Rehabilitation calls for a variety of treatments.

When and if state urban redevelopment legislation is passed, it will probably be the function of the planning commissions to designate specific areas as those needing redevelopment under the Master Plan; to prepare a land use plan for each redevelopment project with new and proper densities determined; and, in the effectuation of each project to apply appropriate zoning and planning controls.

In connection with rehabilitation areas, planning commissions will prepare plans for the physical improvement of each neighborhood involved. These plans will look to such physical changes or additions in streets,

parks, playgrounds, schools, and public utilities and services as are required to restore the specific neighborhood to attractive and more livable condition. Other public departments will apply programs related to health, sanitation, safety and the like. Repair of residences, education of owners and tenants and stimulation of neighborhood interest are the tasks of property owners, tenants and civic organizations.

All available ways and means must be exerted to conserve good residence neighborhoods. Action on the recommendation of the Cincinnati Committee to Expedite Housing for a separate housing code to provide minimum standards for existing dwellings with respect to conditions affecting health will go a long way in this regard. The retroactive features of such a code will give the building department adequate power to require buildings to be so maintained that neighboring property is not adversely affected. The Committee's recommendations for the adoption of comprehensive and objective methods for determining the quality of existing housing and the establishment of a program for the condemnation of substandard dwellings will make distinct contributions in the same direction if adopted and acted upon.

Arresting through conservation, rehabilitation, and redevelopment the destructive processes by which the central city is being gradually weakened is a long-term program. It may prove an important factor in the effort to solve the city's financial problem which may tend to become more serious. Cincinnati's fiscal dilemma is not novel. Most cities face the same problem. Expenditures are rising faster than revenues and may be expected to go on rising. Higher real estate taxes add to the other forces that lure taxpayers outside the city limits. Taxes must be raised on those who remain but then more taxpayers move out and so on. It becomes harder and harder for local governments to make ends meet, let alone cope with new problems.

Good planning by helping the city to become a conspicuously desirable place to live contributes to the solution of these problems.

Refashioning the Land Use Pattern

In order to assure healthy expansion and to rehabilitate, conserve and protect the older city, and to maintain a proper balance between these developments, the Master Plan calls for the gradual refashioning of the basic land use pattern and structural organization of the whole Area. This will not involve radical departures from the existing pattern.

The living areas and industrial sections, major highways and public facilities can be so rearranged in the years ahead as to bring about a more satisfactory community life, and it can be done piece by piece with little disturbance to the Area as a whole. The problems involved can all be solved by sensible planning, by guiding the location and nature of improvements, public and private, so that as the building and rebuilding process goes on over the years, the Area will grow into the pre-determined design for better living set forth in the Master Plan.

The first and perhaps the most essential process is the readjustment of the basic pattern over a period of years in order eventually to separate the urban producing and distributing machine from the living areas.

Underlying this approach is the proposition that cities have two primary functions: (1) to furnish healthful, convenient, safe and attractive areas for living, and (2) to provide other areas, which should possess comparable attributes, for making a living.

Between these two functions there is a natural conflict. The intrusion of factories into residential neighborhoods is of course undesirable, but so also is the encroachment of dwellings upon areas needed for industrial development.

For some years the very size of industrial establishments, the scale of activities they generate and the amount of traffic they attract have had a debilitating effect on nearby residential sections. The coming of the railroads, then the motor vehicle, and the tremendous increase in city traffic have had radical physical consequences for which Cincinnati has failed to make adequate provision and adjustment.

Many evidences of physical deterioration and unsatisfactory living conditions in Cincinnati as in other cities are traceable to this conflict between the city as a producing machine and the city as a place of residence. The effects of this conflict can be redressed only by planning appropriate locations for each function and by insulating one against the other.

The Plan is therefore directed toward making secure, and restoring where needed, the desirability and stability of residential communities and neighborhoods and the improvement of industrial and commercial areas.

In approaching this problem the Master Plan has followed three major lines of attack, (1) Organization of Residential Sections; (2) Consolidation of Industrial Areas, and (3) Functional Organization of Public Services.

Organization of Residential Sections

The plan for achieving improved living areas consists of the reorganization of existing residential sections and the development of new ones as individual communities, each more or less self-contained, and each further organized into neighborhoods.

This approach is based on the observation that when a city expands beyond a certain size it reaches the point of diminishing returns in terms of the advantages which a city, as a social community, should provide for its inhabitants. Somewhere in the course of its growth a city attains the optimum stage with reference to the conveniences of living or the economy of public and private services. When the metropolitan city grows beyond this size there is a progressive multiplication of problems, complexities and inconveniences and of the costs of operation and waste of time, money and human effort.

The chief purpose of the Plan for an integrated system of communities is to reintroduce in Cincinnati as a metropolitan center the advantages of the self-contained city of medium size. The concept of these communities will be clear if they are thought of as cities of about 20,000 to 40,000 population, self-contained in respect to the everyday life of their inhabitants except for such facilities and services as will continue to be located in or supplied by Cincinnati as the central city, and by institutions serving the Metropolitan Area.

By reproducing over a period of years in each of the communities which are to make up the whole of the Area, an approximation of the physical pattern of a medium size city, re-creation of some of the desirable environmental and social conditions characteristic of such cities will be promoted.

In this manner we can recapture the advantages of the medium size city in each of these communities and at the same time make available those institutions to be found only in a great metropolitan city, for example: the University, the Art Museum and the Symphony Orchestra—things a town of even 100,000 population can rarely afford. We can then capitalize to the fullest extent all the advantages which urban society can offer the average family.

Fortunately, an excellent basis already exists for organizing the Metropolitan Area into communities and neighborhoods. The Area is made up of a number of natural residential communities with separate identities as social and civic units. Building on this foundation the Master Plan rounds out the system and reinforces it by introducing features that will maintain and strengthen the unity of these communities and by eliminating or avoiding features which would tend to interfere with or weaken it. The physical plan cannot, of course, create a community or a neighborhood but it can and will assist other forces in fostering a true community and neighborhood spirit.

Four basic forces are at work, or can be put to work, to bring about this objective:

1. The number and size of the communities in the Plan correspond fairly closely to our junior high school districts. A junior high school, along with several elementary schools, one for each neighborhood unit, constitutes perhaps the most potent force for community cohesion and solidarity. The Cincinnati Board of Education is now committed to the type of organization that divides grades on the 6-3-3 basis, that is, the first six grades in an elementary school, the next three in a junior high, and the final three in a senior high school building. A junior high school requires at least 15,000 to 20,000 population from which to draw.

2. Another unifying feature in most of the communities is or will be a community business district, a secondary business district in relation to the Metropolitan Area as a whole, but the chief center of commercial activities so far as the community is concerned.

3. Wherever and whenever possible a "community civic center," bringing together in a group of unified composition such buildings as a branch library, a recreation center, a health center, a branch postoffice, and in some cases appropriate semi-public buildings, is a third force helping to establish and maintain the identity and cohesion of each community. The civic center will usually be combined with or adjoin the community business district.

4. The size of each community in point of both area and population is limited by physical features separating one from another. In addition to topographic features such as deep valleys, steep hillsides and the flood plains of streams, these "separators" consist of industrial belts, railroads, expressways and modified expressways, large parks and parkways, green belts of public and private open spaces, cemeteries and institutions, singly or in combinations. Each neighborhood, too, is demarcated by topography, green belts or thorofares, or sometimes only by the intangible barrier of tradition. (See chapter on Community Plans.)

Consolidation of Industrial Areas

The Master Plan provides for a further concentration than now exists of the Area's industrial machine into belts or corridors. These will contain most of the industries, railroad lines and other rail facilities and the trunkline motorways. These motorways, generally of expressway or modified expressway design, industrial parking areas, recreational open spaces or topographic features such as steep hillsides are among the elements employed in the Plan to buffer the living areas against those devoted to industry.

Consolidating in this fashion the Area's production and major transport facilities and separating them from residential neighborhoods is not as difficult in this Area as in some others.

The topography here initially limited the choice of locations for railroads and industries. By and large, both were forced to stay in the valleys notwithstanding the flood danger which was not removed to any great extent until very recently. The residential settlements, on the other hand, naturally sought the hilltops as soon as developments in transportation made this possible. Of course, conscious efforts beyond this natural evolution will be required to achieve the necessary separation of basic land uses. But with an already existing pattern of the sort which has grown through the years the task will be facilitated.

Within the separating corridors there will be brought about improved transportation by rail and highway, further flood protection and grading, the closing of unneeded streets to make possible the assembly of large parcels, and the gradual elimination of substandard residential uses characteristic of such areas. All of these operations, both public and private, are parts of the Master Plan program to fit these industrial areas better for the purposes they are to serve. (See chapter on Industrial Areas.)

Functional Organization of Public Services

The third major line of attack of the Master Plan is concerned with the provision of the many necessary or desirable kinds of metropolitan and community facilities and services, appropriately located and in scale with anticipated needs. Such facilities as those for shopping, health, education, recreation, circulation and transportation and public services such as police and fire stations and the like, are included.

Where possible, facilities of governmental or cultural character are combined in a planned community civic center or in a building containing municipal offices. Commercial activities are concentrated in community, neighborhood and local shopping centers.

These plans and programs for additional or improved facilities are guided by the community-neighborhood concept of organization and are designed to promote its realization. (See chapters on Recreation, Motorways, Public Transit and Public Services.)

Framework for All Elements of Plan

Such are the leading concepts and principles underlying the Master Plan. The basic land use pattern and structural organization that give expression to them furnished the framework and guide in the design of all other elements of the Plan, public facilities and private developments alike. With the natural social units in terms of neighborhoods and communities identified, the type and scope of facilities and services for the effective functioning of each have been planned on the basis of functional relationships as components of a unified organic design.

The overall pattern also guides the detailed proposals for the conservation and rehabilitation of older neighborhoods—perhaps the most perplexing task confronting Cincinnati today.

Chapter 2
BACKGROUND

In order that the Master Plan might have the solid foundation of facts essential for it to be sound and thus achieve the basic objectives set forth in the preceding chapter the Master Planning Division undertook comprehensive studies of the topography, history, regional status, economy and population of the Area.

As planning must be done within the broad limits set by nature, a study of the physiography of the Area, particularly the topography, was important here because the rugged terrain which prevails gives rise to problems in nearly every phase of metropolitan activity.

In addition to the physical conditions presented by land use and topography, the workings of social and economic trends and forces in the Area were brought under review in studies of its history, its regional status and its economy. These studies were helpful in showing how the Area developed, what it is today, its relation to contiguous areas and its future potentialities.

An analysis of population figures and trends, and estimates of the future population were necessary if the Plan were to be properly dimensioned for probable future needs.

Two of the volumes in the series of published reports of the City Planning Commission issued during the preparatory period of Master Plan formulation were devoted to exposition of these research studies and their findings. These are the reports entitled "Population" and "Economy of the Area."

Topography

From the standpoint of physical development the first hard fact which planning must face in the Area is the topography. (Fig. 1.) This appeared as a major stumbling-block in the path of development in the days when the urban area began to spread beyond the limits of the relatively flat Basin. While the series of hills and valleys adds a quality to the Metropolitan Area which agreeably distinguishes it from areas characterized by mile after mile of level terrain, the irregular land surface has always presented difficulties to that process which deals with the use of the land — planning.

Of course, it was not by chance that Cincinnati originated in this particular locality and that it has grown into a metropolis now estimated to have passed the half-million mark. To early settlers who floated down the Ohio River and to those who ventured north through Kentucky from Cumberland Gap, the advantageous position of the site was obvious. Whereas for hundreds of miles along this navigable river high bluffs rose close to its banks, here was a spot where the hills receded on both sides to form an ample basin, most of it 100 feet and more above the river.

The site of today's Metropolitan Area once extended over a low plateau about 900 feet above sea level. In prehistoric times this plateau was cut deeply by the Ohio River and its tributaries. Now the floors of the larger valleys thus formed vary from 200 to 400 feet below the general level of the plateau and are from one-half to three miles wide between rugged wooded slopes. Continued erosion of the plateau has developed numerous ridges and sharp narrow valleys, resulting in a serrated pattern that distorts the general outline of the principal valleys. Large, relatively level areas of the plateau remain on the Ohio side of the river. The Kentucky portion is generally more rugged.

The dominant feature from the settler's viewpoint was the basin on the Ohio side formed by the deposits of the Licking River. This basin afforded a particularly desirable site for the original settlement and it is now Downtown Cincinnati.

The valley of Mill Creek, which now divides the city, provided an inviting level route northward from the basin. Five miles upstream the valley of the Little Miami River, adjacent to the present eastern limits of the city, provided a route northeastward. Less than 20 miles downstream from the basin the broad valley of the Great Miami River, a considerable distance beyond the present western city limits, opened northward into the wide pre-glacial valley of the Ohio River.

Another significant feature is the so-called Norwood Trough which is a part of the old bed of the Ohio River in the pre-glacial period. It was irregularly filled with deposit left by melting glaciers, but is still a well-defined, well-drained lowland area which early was found suited for industry.

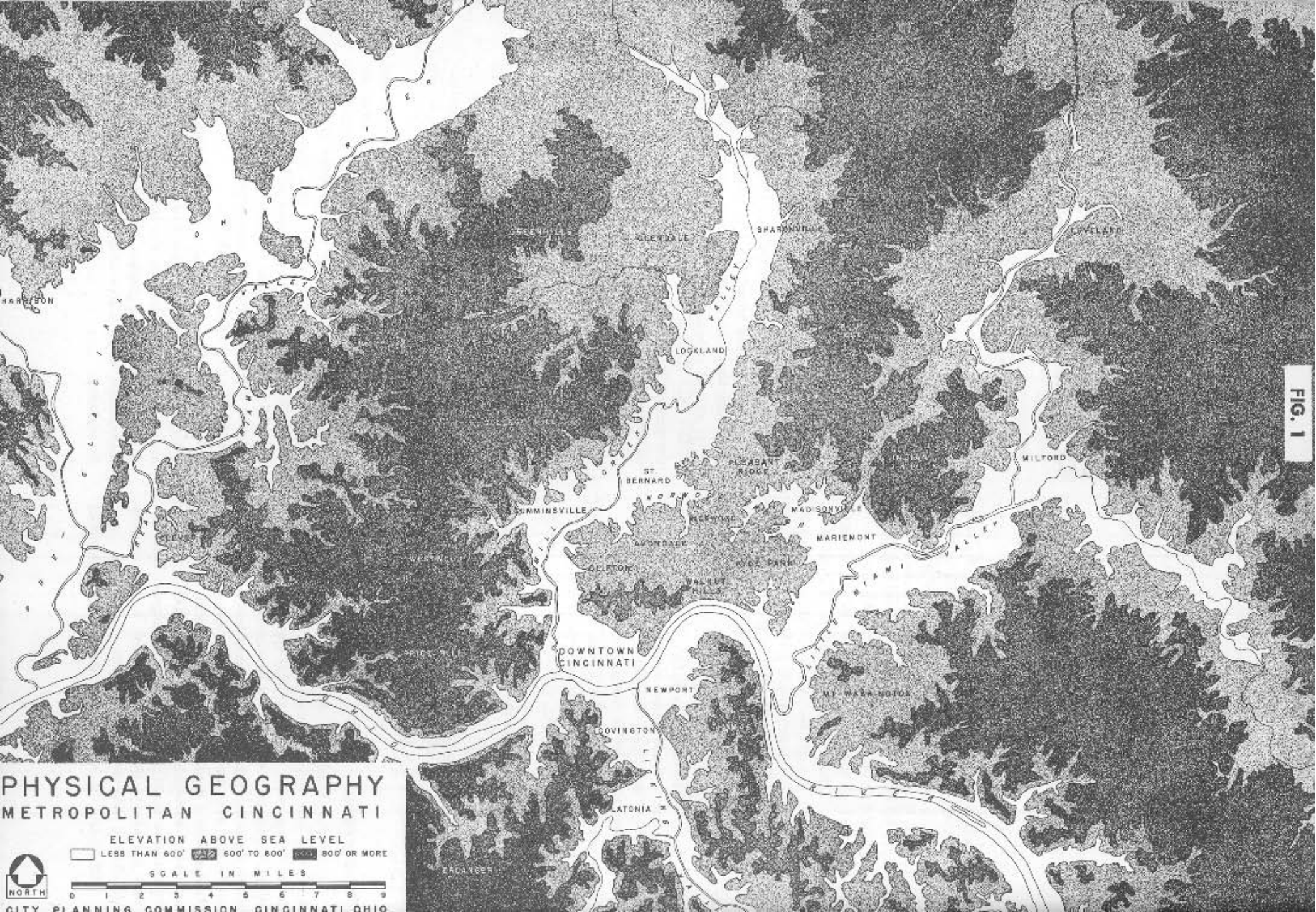

HARRISON
GLENDALE
SHARONVILLE
CLEVELAND
LOCKLAND
ST. BERNARD
NORWOOD
PLEASANT RIDGE
MILFORD
CUMMINSVILLE
MADEIRA
MARIEMONT
CLIFTON
WALNUT HILLS
DOWNTOWN CINCINNATI
NEWPORT
COVINGTON
LATONIA
MT. WASHINGTON
ERLANGER
PHYSICAL GEOGRAPHY
METROPOLITAN CINCINNATI
ELEVATION ABOVE SEA LEVEL
LESS THAN 600'
600' TO 800'
800' OR MORE
NORTH
SCALE IN MILES
0 1 2 3 4 5 6 7 8 9
CITY PLANNING COMMISSION CINCINNATI OHIO

FIG. 1

On the Kentucky side the Licking River forms the most important valley. Above its confluence with the Ohio it divides the basin area on which Covington and Newport are located. It is also the boundary between Kenton and Campbell Counties.

As Cincinnati spread out of the Basin to the surrounding hills, streets were run upward through the comparatively few secondary valleys or gashed into the hillsides in order to reach the uplands. These same valleys tended to block crosswise connections between outlying communities. Due partly to this cause and partly because of the difficulties inherent in developing its rugged terrain, the Cincinnati Area on both sides of the river grew up as a succession of small towns located where topographic conditions were favorable rather than as single, unified towns of larger size. Because of its superior location Cincinnati from the earliest days was predominant among these surrounding settlements.

In few American cities has topography had as great an effect on the character of development as in Cincinnati. This effect is reflected today not only in the location of the various residential areas but in such important elements as the street patterns and the trend of industrial and railroad development.

Brief History of Cincinnati

Cincinnati was founded in 1788 during the first wave of migration that followed the Revolutionary War. In the beginning it was a crossroads village — a frontier outpost in the path of westward movement. Incorporated in 1802, it acquired the essential municipal services and more permanent homes.

River trade increased steadily after the introduction of the steamboat. In 1825 construction work began on the Miami and Erie Canal which brought the markets of Hamilton, Dayton and Toledo within the influence of Cincinnati. Then from 1846 to 1851 came the various railroads, at first supplementing, then largely supplanting the river and the canal as means of transportation.

Newport, settled about the same time as Cincinnati, and Covington which came into being a few years later, grew up on the basin area across the Ohio. Railroad service on the Ohio side encouraged development of commuter villages: Glendale, Wyoming and Hartwell to the north; Fernbank to the west; Madisonville and Terrace Park to the east.

In 1868 Cincinnati promoted passage of state legislation permitting a city to construct, own and operate a railroad and in 1877 completed construction of its railroad to Chattanooga. The commerce accruing through this main rail artery from north to south amply justified the far-sightedness of the progressive citizens of that day.

In 1870 Cincinnati was the largest city west of the Alleghenies and the nation's sixth largest city. A major factor in its development was the great mid-century influx of German migrants, introducing such pursuits as brewing, baking, meat-packing, and the enjoyment of symphonic music. Commerce and manufacturing flourished.

From 1870 to 1900 the city continued to grow rapidly though not so rapidly as in the preceding period. Additional industries were built on the skills of the German immigrants. Brewing, machine shops that later developed into the machine tool industry, piano manufacturing and candle- and soap-making flourished. Eight miles from the center of U. S. population in 1880, the city was in a key position to send its products into all parts of the country. Short line railroads and electric street cars expanded the Metropolitan Area. The Ohio River bridges (starting with the completion of the Suspension Bridge in 1866) brought Kentucky closer. Contiguous communities developed on the Ohio side and were absorbed. Most of Cincinnati's growth in area occurred during these decades. (Fig. 2.)

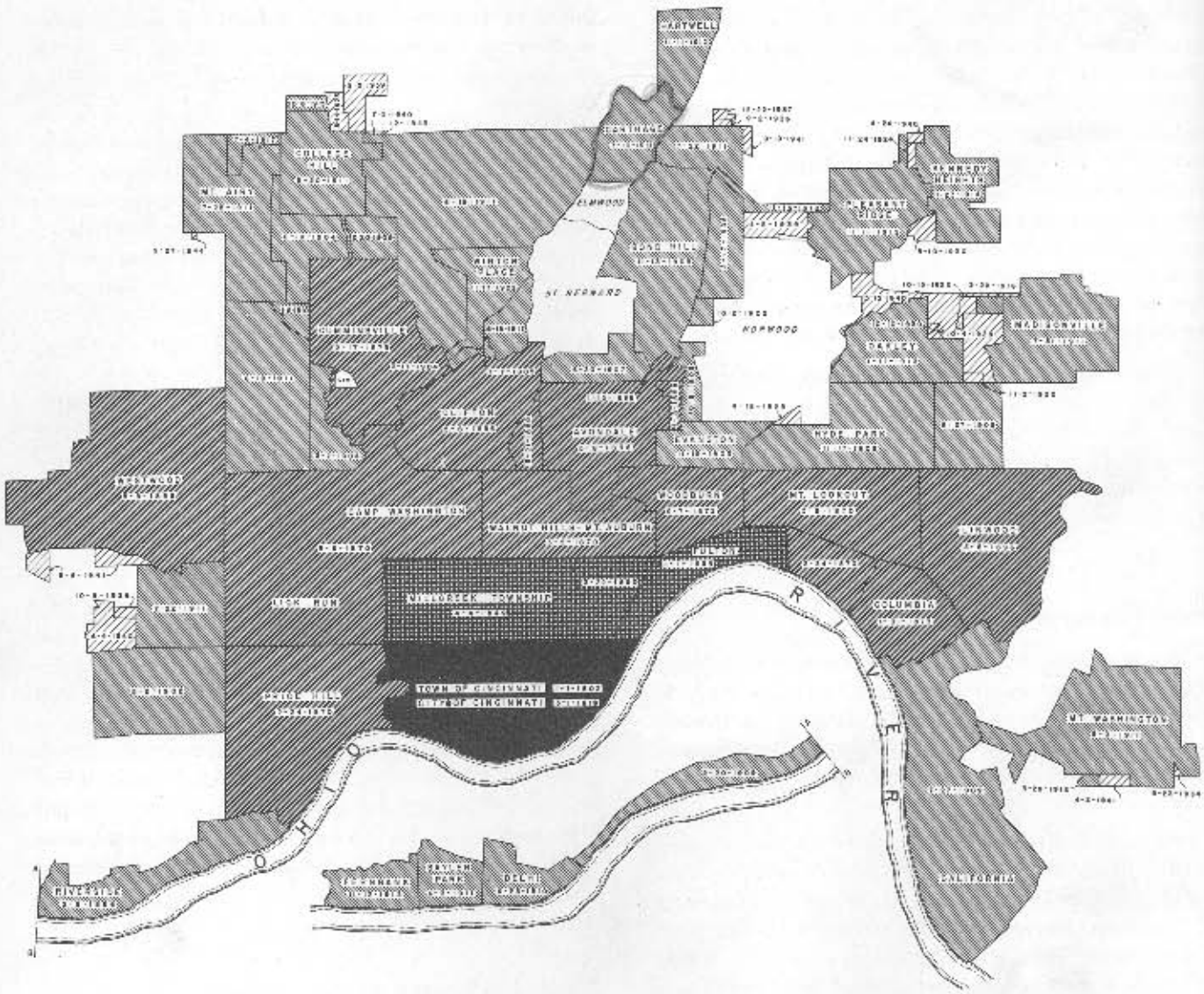
In entering a period of slower growth both local and national, and an era of keener competition, the city found itself in changed circumstances but still with specific advantages. The region dominated by Cincinnati, while not the empire of earlier history, was still extensive. It remained a gateway not so much between the East and West as formerly, but between the North and the South. It was still a transportation focus. It had also the advantages of a going concern — the skills and know-how of its leaders and workers, the investments in physical plant, a large local market and established outside markets.

Regional Status of the Area

A plan for the Metropolitan Area must take into account the place it holds and is likely to hold in the continuing economy and development of the surrounding area, of the states of which it is a part, and of the nation as a whole. The economic life of the Cincinnati locality is nourished by their resources and their need for goods and services. The future of the Cincinnati Area is even more intimately bound up with its trade and service area. (Fig. 3.)

Accordingly studies were made to bring out the salient facts about these relationships — such facts as Cincinnati's traditional place and future potentialities

FIG. 2



ANNEXATIONS TO CINCINNATI

1920 THRU 1945
1900 TO 1920
1860 TO 1900
1820 TO 1850
CITY AS OF 1820

NORTH

SCALE IN MILES
0 1 2 3

CITY PLANNING COMMISSION
CINCINNATI OHIO

METROPOLITAN MASTER PLAN

as a gateway, its importance as a distribution center, its relation to basic resources, and so forth.

The Cincinnati Metropolitan Area has a uniqueness of regional location. Its position as "Gateway between North and South" is featured by a position on the inland waterway system and on the traditional rate break line of railroad transportation. Important as this gateway function has been in the past, it should be no less so in the future. The South, long important as a source of raw materials for the North, is rapidly becoming industrialized and the trend toward increasing diversification there should benefit the Cincinnati Area.

Between Cincinnati and New Orleans there are no centers approaching the complete range of metropolitan services, amusement, convention, and cultural assets possessed by Cincinnati and its Area. Nowhere in this large territory is there a comparable array of first-grade attractions ranging from the Symphony and Summer Opera to major league baseball, the Zoo and Coney Island.

The Area's history has always been closely interwoven with means of transportation. Today Cincinnati, the metropolis of the Area, is a rail-river-highway hub with seven railroad trunk lines, 128 interstate lines reaching 25 million people overnight, low cost transportation on the Ohio River and 15,000 miles of inland waterways.

Cincinnati is important not only as a gateway for north-south railroad traffic but for east-west traffic. It is a focal point for rail movements between the great commercial, manufacturing, and agricultural regions of the Middle West and similar areas in the southeastern states. No other gateway for such traffic exists between Cincinnati and Washington.

Within the last two or three decades motorized surface transportation has been pacing, and in some respects, outdistancing the railroads. But Cincinnati has definitely lost ground in respect to motor transport. The foresight of earlier generations did not reassert itself soon enough to overcome the natural topographic handicaps inherent in highway approaches to the city. Up to this time Cincinnati has lagged behind many other cities in the provision of broad, convenient entrance highways. Adequate highways must be provided to insure quicker ingress and egress to and from the city. This is one of the objectives of the Master Plan's motorways plan.

Cincinnati is now the airway traffic control center for an area which includes and extends beyond Terre Haute, Indianapolis, Dayton, Columbus, Huntington and Lexington. This function naturally gives Cincinnati a position of eminence considerably beyond what it would have as merely an airline stop, however important.

Cincinnati is advantageously located to become one of the great hubs of air travel in the United States. It is close to the national center of population and is one of the major geographical air cross-roads of the country east of the Mississippi — the populous eastern third. Completion of the Blue Ash Airport will consolidate its position in respect to air facilities.

From the viewpoint of integration of all forms of transportation the favorable position of Cincinnati becomes still more apparent.

There is the Ohio River, canalized in 1929 to provide a 9-foot channel, connected with thousands of miles of similarly-improved inland waterways, the Great Lakes, and the Mississippi, Illinois, Tennessee, Cumberland and Kanawha Rivers. There will be no conflict between expanding aviation and this vast network of waterways which is geared for slow but economical movement of heavy bulk freight such as coal, iron, petroleum products and building materials.

There are the railroads, now alerted to face a new competitor in the air. As far as cargoes are concerned, expanding aviation will give to the railroads in bulk tonnage of construction materials, fuel, and the like, a much greater load than it may take away in light-weight, high-value shipments.

Buses, trucks, and automobiles will undoubtedly feel the effect of the competition of air travel, but they will all continue to be important factors in transportation because of their flexibility of movement.

For co-ordinating air traffic with movements by water, rail, and motorway, few cities in the country therefore are as favorably situated as Cincinnati. Terminal facilities for navigation might be improved to advantage and, as stated earlier, at the moment motorways leave much to be desired.

The greatest need is for expressways and other routes approaching expressways in character to carry traffic conveniently and quickly into and out of the city. Cincinnati's deficiencies in this respect are in process of being corrected. If the picture has been accurately interpreted Metropolitan Cincinnati as a regional capital faces a highly promising future.

The Economy of the Area

Metropolitan Cincinnati, like all modern urban areas, owes its existence to the fact that it is a center for the production and distribution of goods. One objective of planning is the enhancement of these functions.

Any realistic plan for the future development or redevelopment of the Area must therefore take into account and give expression to the characteristics of the Area as an economic unit. Its economic structure, the nature and relative importance of the different functions

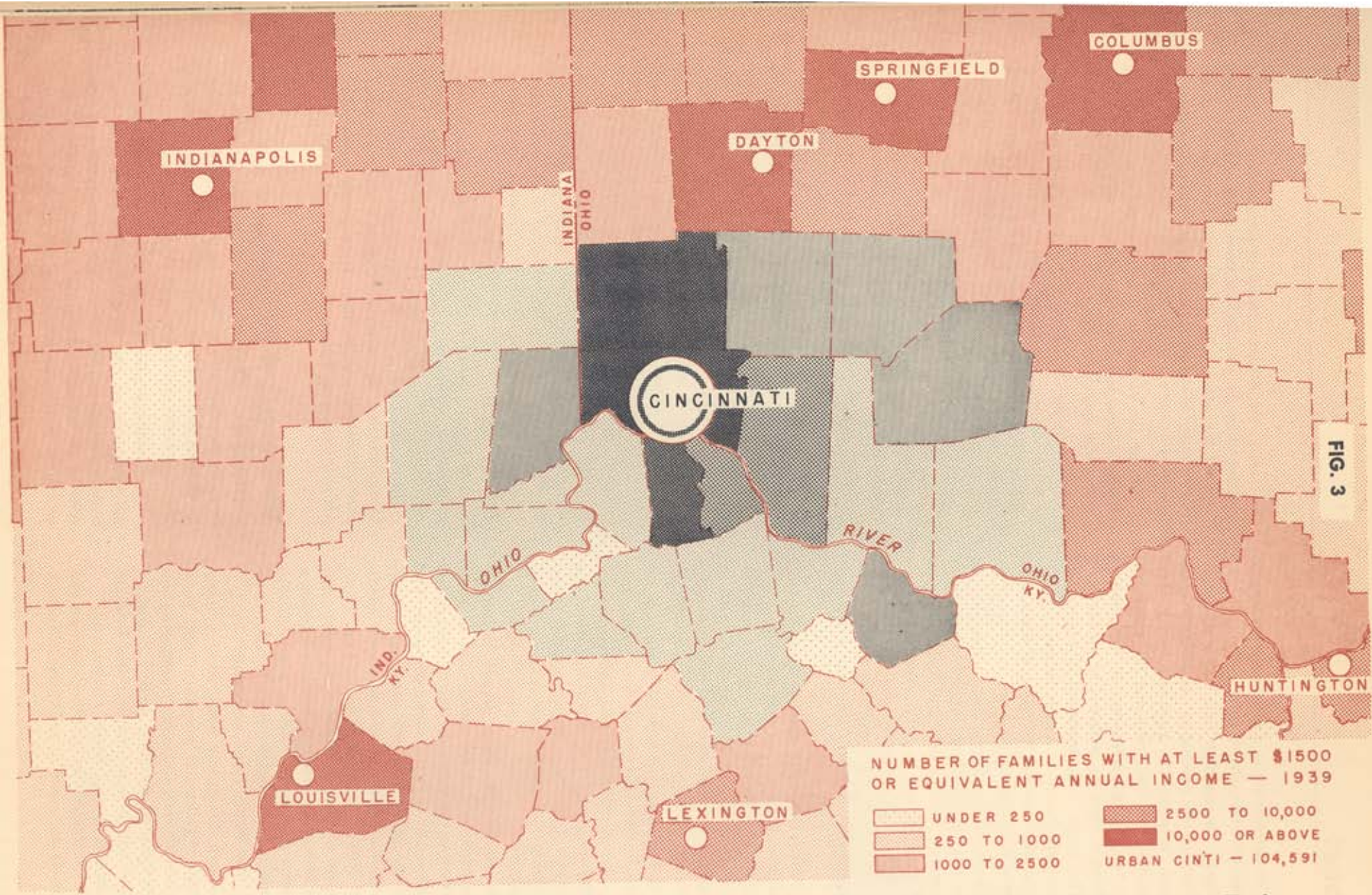


FIG. 3

THE CINCINNATI TRADE AND SERVICE AREA

BY COUNTIES

DATA BASED ON U.S. CENSUS
METROPOLITAN MASTER PLAN

CITY PLANNING COMMISSION

it performs, the soundness and stability or the weakness and vulnerability of its economic base are the factors controlling its future.

Consequently, preliminary to the Master Plan an exhaustive inquiry was made into the economic structure of the Area. Just as parts of the Plan propose physical improvements as a solution of problems of transportation, land use, etc., this survey pointed to measures whereby the Area might assure future economic development on a sound and balanced basis. Some of these measures deserve brief comment here:

Population Growth — We are approaching a time when population will be far more stable than in the past and the growth of any city or area will depend more and more on the opportunities for work and attractive living which it is able to offer in competition with other cities or areas. Continued growth, then, is largely in the hands of Cincinnati itself. That growth, however moderate, is desirable was established when in the study the experience of groups of otherwise comparable growing and non-growing cities was reviewed. The group of growing cities had a greater construction and general business volume, smaller increase in taxes, a larger volume of debt retirement and greater retention of that portion of the population from which progressive future leadership of cities is drawn. These effects involved, directly or indirectly, practically all segments of the population of these cities. The favorable differences appeared although the population growth of the growing cities averaged only 7%.

Industrial Policy — In view of the history, present character and prospects of Cincinnati and its Area the most suitable policy for future industrial development was indicated as "growth on a selective, quality basis." In other words, the encouragement of those activities whose expansion or introduction in the Area will make the economic base sounder. The concept emphasizes the quality aspect in expansion through which expansion becomes a means to an end rather than the end objective itself.

As a suggestive guide in this direction, the 109 specific activities for which the 1940 U. S. Census of Population reported information were evaluated from the viewpoint of their possible contribution to the economy of the Area. Using a rating system based on eight criteria, the so-called "service activities" — utilities, finance, insurance, real estate, communications, government, etc. — rated highest. The various types of manufacturing ranged from high to a very low rating, indicating the advisability of a policy of selective expansion.

Many of the service groups employ high proportions of female and mature workers. The proportion of middle-aged and old people in the population, and the proportion of women to men are both growing. It is therefore important that future opportunities for the increasing employment of these groups exist in the Area.

Employment Prospects — The future economic potential of the Area will depend largely on the number of jobs it can offer. Correlation of the Area's performance relative to that of the whole nation yielded estimates of 1970 employment here under prosperous national conditions. The low estimate is based on the Area's relative performance from 1900 to 1940 and the high projects its most favorable performance from 1930 to 1940:

Employment Estimates

	1940	1970 Estimates		
		High	*Medium*	*Low*
Hamilton County	229,000	346,000	321,000	295,000
Metropolitan Area	289,000	432,000	401,000	369,000

The estimated range can conceivably be exceeded but to do this implies a noteworthy improvement in the ability of the Area to provide job opportunities and attractive living conditions relative to the country as a whole. In fact, to achieve the upper limits will require more consistent and concerted effort on behalf of economic development than has been exerted by the Area in the past. The low estimates reflect the continuance of the same relationship to national progress that has prevailed since the beginning of the century.

As national population growth tends to stabilize, the Area's problem of maintaining its position will become increasingly difficult. However, the task of attaining the totals of the medium or high estimates does not seem to be an impossible one. Achievement of the high estimate in 20 years would require 70,000 additional jobs or approximately 3,500 new jobs every year. The medium estimate calls for 2,000 new jobs each year.

Integration Opportunities — The Area's opportunities for industrial growth by "integration" were canvassed. The term "integration" is usually defined in connection with a single firm as the incorporation under one ownership and management of all the operations involved in processing raw materials to the final product. The meaning of "integration" on a community or Area basis is clear by analogy.

According to the study the Area's industrial structure contains 60% of all major industry classifications. Viewed as a single plant it lends itself to opportunities for sound future development through filling the needs of existing industry for more processing plants or the establishment of additional plants to utilize existing sources of supply.

Many industries in the Area buy semi-processed products and components from elsewhere for further processing and assembly. The volume involved may be found sufficiently large to encourage establishment of local sources of supply. For example, it has been proposed that the great local demand for glass containers might be found to warrant their manufacture locally. Conversely, an enterprise might be established to turn out a product, for example, a special type of paper product such as cups, utilizing existing sources of supply of semi-finished products and components.

Integration with existing labor skills is another possibility. For example, the craftsman heritage of the Area is admirably suited to the manufacture of precision and scientific instruments. Many of these types of industry are not now represented in the Area.

Industry Requirements — Progress in industrial development also calls for the ability and willingness of the Area to meet the specific locational requirements of industry. In the case of a manufacturing enterprise these requirements might range from a suitable, unimproved site or an adequate building at a reasonable price, to an adjustment in the boundary of the switching limits. The function of the Area in these respects is to anticipate the more common of these needs and remove the obstacles to their fulfillment. There are also facility requirements to meet the needs of existing and prospective non-manufacturing industries. Current trends make it mandatory for the central city of the Area to view its economic future in terms of the trade area as a whole.

Southern Trade — In view of the rapid development of the Tennessee Valley and other Southern areas, special effort is indicated to entrench Cincinnati firmly as the metropolitan center for Southern trade, visitors and conventions. Promotional efforts, according to the study, should include campaigns to attract Southern visitors here, and a hospitality campaign to make all of Cincinnati alert to a special welcome for Southern visitors.

Accessibility — A need to knit the trade area more closely to the business and professional services of the central urban area is indicated. This includes not only improved transportation to the downtown district but better facilities for converting the riders to pedestrian shoppers. In view of the gradually expanding character of the service and trade functions, new and improved facilities should be carefully planned to capitalize the potentialities of their combined effect. Income and purchasing power will rise in the Area in the future and the attendant increases in business volume will go to those who are in position to serve it best.

Living Conditions — It has been said that urban growth in the future will depend on the ability to attract persons from outside the Area and that this attraction is founded largely on job opportunities, housing capacity and educational facilities. The visible key to these conditions is the appearance of the city; the quality and efficiency of its thorofares; the vitality of its business areas; the attractiveness of its residential areas; the distribution and maintenance of its park and recreational facilities; and the promise of work in progress such as expressways, new public buildings, slum clearance and redevelopment. These conditions, which are possible to a community thriving economically, in turn react favorably toward the furtherance of economic development.

Community Well-Being — The various indices of community well-being indicate that on most counts the Cincinnati Area is much like other large urban areas. Its most serious deficiency in this catagory is housing, where it has lagged far behind other areas. More positive contributions to community well-being have been made by other factors, notably municipal and utility services, which have been excellent.

On the whole, the economy of the Area was found to have the major characteristics of a sound enterprise, relatively well-balanced and flexible enough to be adapted to changing conditions. No major reorganization was indicated. The problem of improvement presented itself as one of attention to correct certain unbalances existing or imminent, of adding vitality through sound selective growth and progress, and of being ever more alert to adapt to changing conditions.

This implies deliberate and concerted action by the community as a whole to assure vital, sound growth. The increasing complexity of the problems of development requires an organized, positive approach. Moreover, the stimulus for most economic development and its guidance in a balanced, systematic manner must come from the leadership of private individuals.

The problem of economic development in the Cincinnati Area is of such crucial importance and of such grave responsibility that it should not be treated casually. It is doubtful whether spare-time leadership and research are adequate. Only a full-time, appropriately-staffed group can cope with it.

The features of several private or semi-public organizations formed for purposes of economic development in other cities are discussed in the Master Plan reports on Economy of the Area (Chapter V) and on Industrial Areas (Chapter V). These organizations indicate the major outlines for one proposed by the Master Plan for Cincinnati.

Selective expansion should keynote the objectives of this Cincinnati metropolitan organization. The local group should be invested with a broader responsibility than have most similar organizations in other cities. It should be as concerned with development of service

and trade activities as with industrial activities. It should, of course, co-operate with and in many cases operate through existing civic organizations with somewhat more limited objectives.

Population Trends and Estimates

The purpose of all facilities and services in the community is to meet the physical, economic, social, cultural and governmental needs of the population. A study and understanding of the growth, distribution, composition and other characteristics of the population and the trends in such characteristics are therefore basic to all intelligent long-range planning.

It was recognized that in conjunction with the other preparatory studies, a sound statistical basis for the Master Plan required an authoritative analysis of facts concerning population and its trends and reliable estimates of population growth and change in the Area in the years ahead. For this task the services of the Scripps Foundation for Research in Population Problems were engaged.

The report of the Foundation was published in book form in 1945 by the City Planning Commission as the Commission's report on Population. Many interesting sidelights on the history, resources and development of the Area were by-products of the study, which was based chiefly on the 1940 U. S. Census and some estimates of more recent date.

Gains and Losses — Since World War I, the findings of the report emphasized, the growth of Cincinnati and most other cities has been greatly affected by the decline in the birth rate and the drying up of immigration. Future growth in most cities and metropolitan areas is practically certain to be slow.

Since 1870 the Metropolitan Area has nearly always grown faster than the City. The only exception occurred during the 1910-1920 decade when Cincinnati made rather extensive annexations. Since 1920 the more rapid growth of the Area has been large enough to have serious implications.

The Basin Area of the City has been losing population since 1900. From 1930 to 1940 the rate of decline was 7.7%. Areas adjacent to the Basin which in earlier decades were growing, declined at approximately that same rate during the same period. Most other parts of the city gained in population, but chiefly at the expense of the Basin and its adjacent areas.

Since 1920 this outward movement has gone well beyond the City. The part of Hamilton County outside Cincinnati grew at the rate of 3% (contrasted with the City's rate of 1%) from 1930 to 1940. The western townships grew at a more rapid rate than the eastern, but in total numbers the latter gained 18,630 compared with 9,370 for the western.

The municipalities lying wholly within Cincinnati (Norwood, St. Bernard and Elmwood Place) remained practically stationary during the 1930-1940 decade, growing only from 45,460 to 45,645.

On the Kentucky side, Kenton and Campbell Counties which had previously been growing, showed a slight decline from 1930 to 1940 (from 166,925 to 165,057) which carried on into 1943. Without outward migration (apparently largely across the river to Ohio) these counties would have had a natural increase of about 14,000.

From 1935 to 1940, 70% of Cincinnati in-migrants came from other cities. This indicates that urban in-migration is becoming an interchange of population between cities rather than a movement of people from rural areas to the city.

Cincinnati has not had an appreciable foreign immigration since 1890. In 1940 it had 5.7% of foreign born.

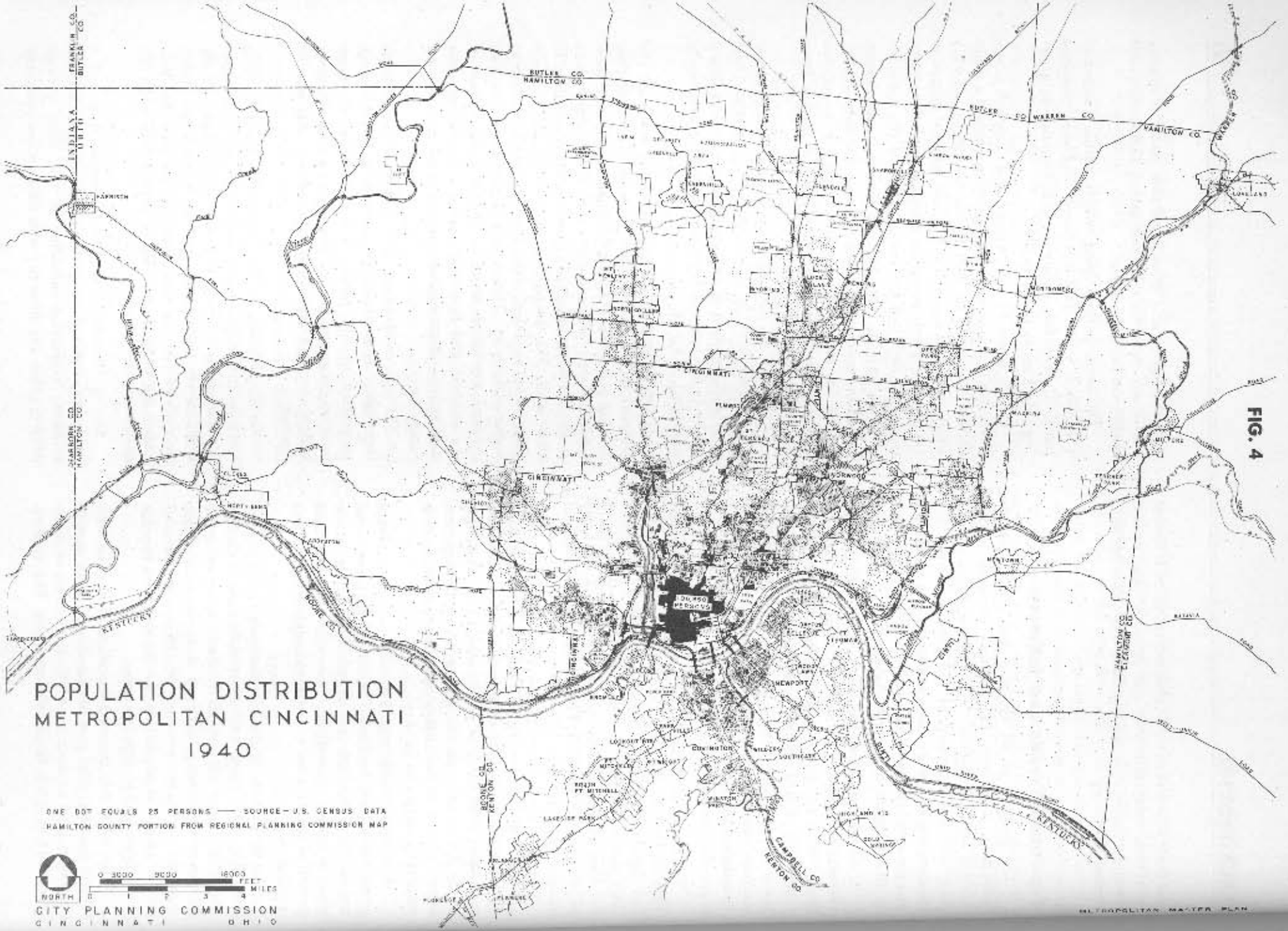
The distribution of population in the Area as shown by the U. S. Census of Population (1940) is graphically illustrated in Fig. 4.

Age Composition — The age composition of the population affects labor supply, social services, recreation, housing and schools. In the Cincinnati Area, as in most urban areas, the proportion of children and young adults to its total population had rather steadily declined up to 1945 while the proportion of middle-aged and old people had increased, with a very marked increase in persons above 65. However, a precipitate increase in the birth rate which began in 1945 as a concomitant of the war-end and favorable economic conditions, may tend to level off the age composition of the Area at some future time.

The age composition is a matter of considerable importance. A metropolitan area with an above average proportion of old people will need relatively more facilities for caring for old people and a larger hospital budget for aged dependents. Its industry may also be affected.

Sex Composition — The City of Cincinnati has long had a smaller proportion of males in its population than the country as a whole and other large cities. In the U. S. the sex ratio (males per 100 females) has always been above 100. In Cincinnati the sex ratio has fluctuated, but exceeded 95 only in 1910 and in 1940 fell to 91.

Size of Households — The Cincinnati Area had a larger proportion of one-person households (8.7%) and a smaller proportion consisting of 5 or more persons (20.6%) than any other city with which it was compared


POPULATION DISTRIBUTION
METROPOLITAN CINCINNATI
1940
ONE DOT EQUALS 25 PERSONS — SOURCE — U.S. CENSUS DATA
HAMILTON COUNTY PORTION FROM REGIONAL PLANNING COMMISSION MAP
NORTH
0 3000 9000 18000 FEET
0 1 2 3 4 MILES
CITY PLANNING COMMISSION
CINCINNATI OHIO
FIG. 4
BUTLER CO.
HAMILTON CO.
WARREN CO.
CLERMONT CO.
BOONE CO.
KENTON CO.
CAMPBELL CO.
KENTUCKY
INDIANA
CINCINNATI
NEWPORT
COVINGTON
FT. MITCHELL
LOVELAND
HARRISON
NORTH BEND
METROPOLITAN MASTER PLAN

in the study. The average size household of the Area (3.45 persons) is lower than that for urban U. S. (3.61) or the other cities. One and two person households are heavily concentrated in the Basin and adjoining neighborhoods. In general the size of households increases from the Basin outward into the rural areas. It is estimated that the average size of the households in the City of Cincinnati (3.35 persons) will decline to 2.9 persons in 1970. This means that more houses will be required to house a given population and foreshadows a greater demand for the apartment type of dwelling.

The Area's Future Population — Estimates of the future population of the Cincinnati Area were, of course, the major objectives of the Scripps study. Such estimates can be made with a variety of assumptions and by various methods. The most useful procedure, however, and the one used, is based on (a) trends of births and deaths, showing how these factors will influence growth, combined with (b) an indication of how a given amount of in-migration will add to the natural increase.

Since it is impossible to know exactly how any past trend will be modified in the future, it is most realistic to show a reasonable range of possibility. This is expressed by calculating "low" and "high" estimates and a reasonable "medium" somewhere between these limits. This method can also be applied to estimates with respect to age, sex, and race composition of future population.

Various estimates on different assumptions were made for the Metropolitan Area, for each county separately, and for the City of Cincinnati. Assuming a "high" birth rate for Cincinnati in the future, with no residents leaving or coming in, the present area of the city will have gained by 1970 only some 12,000 in population. Under the "medium" assumption there would be an actual loss. Obviously appreciable growth of the city itself must depend on net in-migration from outside. Its population may otherwise be increased only by possible annexations of territory not now within the city limits. In other parts of the Area, the birth rates are such that population increases can result without in-migration.

There is nothing inevitable about these estimates and they are not definite forecasts. They show what will happen to the Area's population if certain conditions are fulfilled but there can be no assurance that any given combination of conditions will prevail.

The following results appear for 1970 on the basis of "high", "medium" and "low" birth rates and the assumption that there will be no migration into and out of these areas:

	1940	1970		
		High	*Medium*	*Low*
Metropolitan Area	787,044	870,172	819,574	769,576
Hamilton County	621,987	681,284	639,894	599,607
Kenton County	93,139	108,454	102,786	97,186
Campbell County	71,918	80,974	76,894	72,783
Cincinnati City	455,610	467,529	442,140	421,881

To these figures may be added a "standard unit" of migration. This unit is used only for statistical purposes. It is assumed to be made up of 5,000 persons distributed by age, sex and race in proportions as similar as possible to those of the in-migrants of the past. When one such unit is added for every 5-year interval and the unit is proportioned over the Metropolitan Area, these results appear:

	1940	1970		
		High	*Medium*	*Low*
Metropolitan Area	787,044	925,685	872,497	820,703
Hamilton County	621,987	725,944	682,945	641,305
Kenton County	93,139	114,434	108,507	102,647
Campbell County	71,918	85,307	81,045	76,751
Cincinnati City	455,610	500,748	474,319	453,408

If it is assumed that the Area will have two, rather than one, units of migration in the future these figures result:

	1940	1970		
		High	*Medium*	*Low*
Metropolitan Area	787,044	980,658	925,420	871,830
Hamilton County	621,987	770,604	725,996	683,003
Kenton County	93,139	120,414	114,228	108,108
Campbell County	71,918	89,640	85,196	80,719
Cincinnati City	455,610	533,967	506,498	484,935

If the Area were highly successful in enlarging its job opportunities it might very well attract two or even more units of in-migration. Either the upper or lower birth rates used in the estimates could be exceeded. If the evidence at any time should indicate that this is happening it should be taken into account in revising the estimates.

In the preparation of the community-neighborhood phases of the Master Plan, the population estimates for the whole Area were broken down and applied to each community in the Area. (See Appendix Table I in the Master Plan report on Communities.)

Chapter 3
MASTER PLAN MAP

A copy of the official map which presents the Master Plan in graphic form accompanies this book. This map and the textual explanations, recommendations and references in this volume constitute the Metropolitan Master Plan.

As stated in the chapter on Objectives, the Master Plan sets forth only the general location and extent of future physical developments in the Area. It shows the relationship between the different functional classes of public improvements and privately-owned areas based on estimates of probable needs over a period of years. The overall function of the Master Plan is to plan in a broad way the kind of communities and neighborhoods and industrial districts desired for the future.

It should also be re-emphasized here that the Master Plan, as an instrument of planning, is a guide to the accomplishment of a desired and agreed-upon metropolitan pattern, for use whenever the more definite legislative and administrative measures which have legal effect are taken. It has no overall legal effect on property.

The Master Plan Map, an integral part of the Master Plan, is a delineation of the boundaries and the geographical composition of the Metropolitan Area, and a plan of physical development for that Area. The physical improvements and facilities which make up the Plan are depicted as if they had already been brought into reality.

The Map illustrates the relationships of the various plan elements and land uses as a total picture. Accordingly, no distinction is made between existing features and those proposed. Specific information regarding any single feature may be obtained from the more detailed maps of individual areas or facilities.

The Map does not define exactly the boundaries of various land uses. That is the function of zoning. The major classifications — residential, commercial and industrial — have been indicated in broad outline in color masses. Later these areas will be precised and further differentiated by sub-classifications which include the various types of each of these major categories. This is accomplished in the zoning process. The Map indicates the broad zoning pattern by which an exact zoning study may be guided.

The key to the Map is as follows, as shown in its legend:

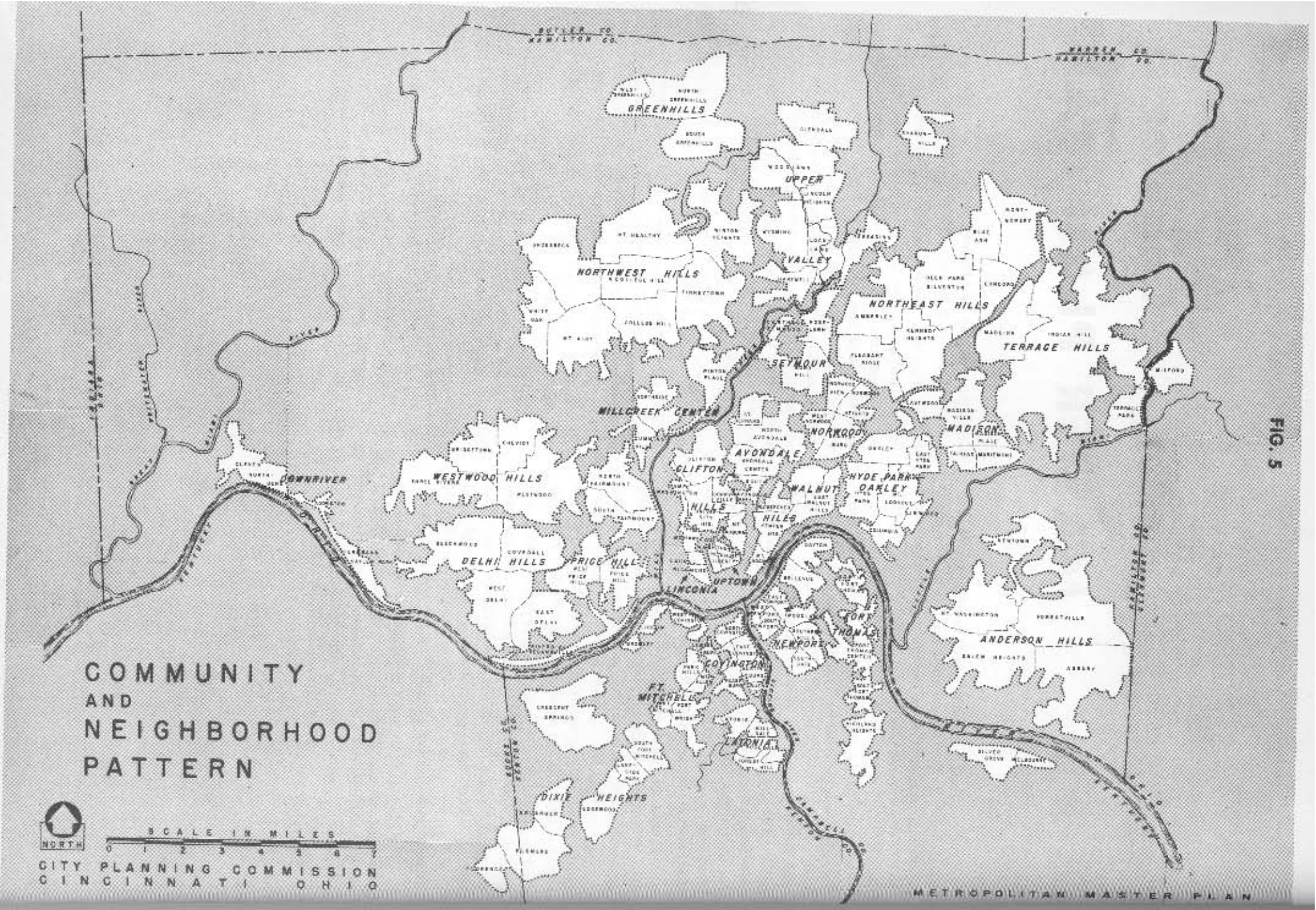
The tone of the entire Map is brown. Communities appear as lighter portions while the darker areas around them show existing corridors, open spaces and sections which are expected to retain their rural character.

Shopping centers and commercial districts are red; industrial areas brown.

The Motorways System — expressways, modified expressways and thorofares — appears as a red network, the most important routes indicated by the heaviest lines.

Public and semi-public areas are green. These include parks and recreation areas, institutions, cemeteries and miscellaneous other uses. The land uses are distinguishable by the varied grid designs.

Elementary, junior and high schools, and airports are shown by black symbols; railroads by track lines.


BUTLER CO.
HAMILTON CO.
WARREN CO.
HAMILTON CO.
GREENHILLS
UPPER
VALLEY
NORTHWEST HILLS
NORTHEAST HILLS
TERRACE HILLS
SEYMOUR
MILLCREEK CENTER
NORWOOD
MADEIRA
AVONDALE
CLIFTON
WALNUT HILLS
HYDE PARK
OAKLEY
WESTWOOD HILLS
DOWNRIVER
DELHI HILLS
PRICE HILL
UPTOWN
LINCONIA
FORT THOMAS
NEWPORT
COVINGTON
ANDERSON HILLS
FT. MITCHELL
LATONIA
DIXIE HEIGHTS
OHIO RIVER
LICKING RIVER
MILL CREEK
CAMPBELL CO.
KENTUCKY
OHIO
COMMUNITY
AND
NEIGHBORHOOD
PATTERN
NORTH
SCALE IN MILES
0 1 2 3 4 5 6 7
CITY PLANNING COMMISSION
CINCINNATI OHIO
METROPOLITAN MASTER PLAN
FIG. 5

Chapter 4
COMMUNITY PLANS

The Community Plans here presented reflect a basic philosophy underlying the entire Master Plan project — the organization of the activities of the Area on the basis of "communities" and "neighborhoods". (Fig. 5.) The plans take into account substantially all of the Master Plan findings and recommendations, applied so far as practicable to each community and neighborhood in the Area. They furnish a general foundation for the more comprehensive and detailed studies of each community which will precede and substantiate the revision of the Zoning Ordinance.

Like the Master Plan Map itself, they set forth the general location and extent of the physical development of the communities over a considerable period of time. They do not attempt to define the business and industrial areas with exactitude nor to regulate the use of the land. That is the function of the Zoning Ordinance.

Their primary purpose is to serve as guides to the departments and boards of the city and other governmental units assisting them in the determination of their own long-range and detailed plans and in the equitable distribution of their efforts.

The plans will also prove helpful to civic organizations and civic-minded individuals in planning for the improvement of their respective communities and neighborhoods.

Realistic plans for "living areas," of course, must reflect to some extent the historic background of the Area's residential growth. While they should not be too strictly bound by the details of past and existing development, they should recognize indigenous factors which have given each community its individuality.

Influenced by the rugged terrain on both sides of the river a number of small towns grew up in the past years where topographic conditions were favorable for settlement. As a result, the Metropolitan Area is a composite of many residential communities. Some of them are still politically independent; others have been absorbed within the corporate limits of the city. But in large part communities in the Cincinnati Area have retained their identities to a greater degree than is the case in most metropolitan areas of comparable age and size. The hills and valleys which have placed physical separations between communities have had much to do with that result.

On the whole this is a fortunate circumstance. It has tended to preserve as the city grew some of the better qualities of small town life easily lost in the full flood of urban expansion. In smaller cities there seems to be more incentive to participate in community activities. A larger percentage of the population goes to the polls; a higher proportion contributes to the Community Chest; relatively more citizens are interested in public and civic affairs.

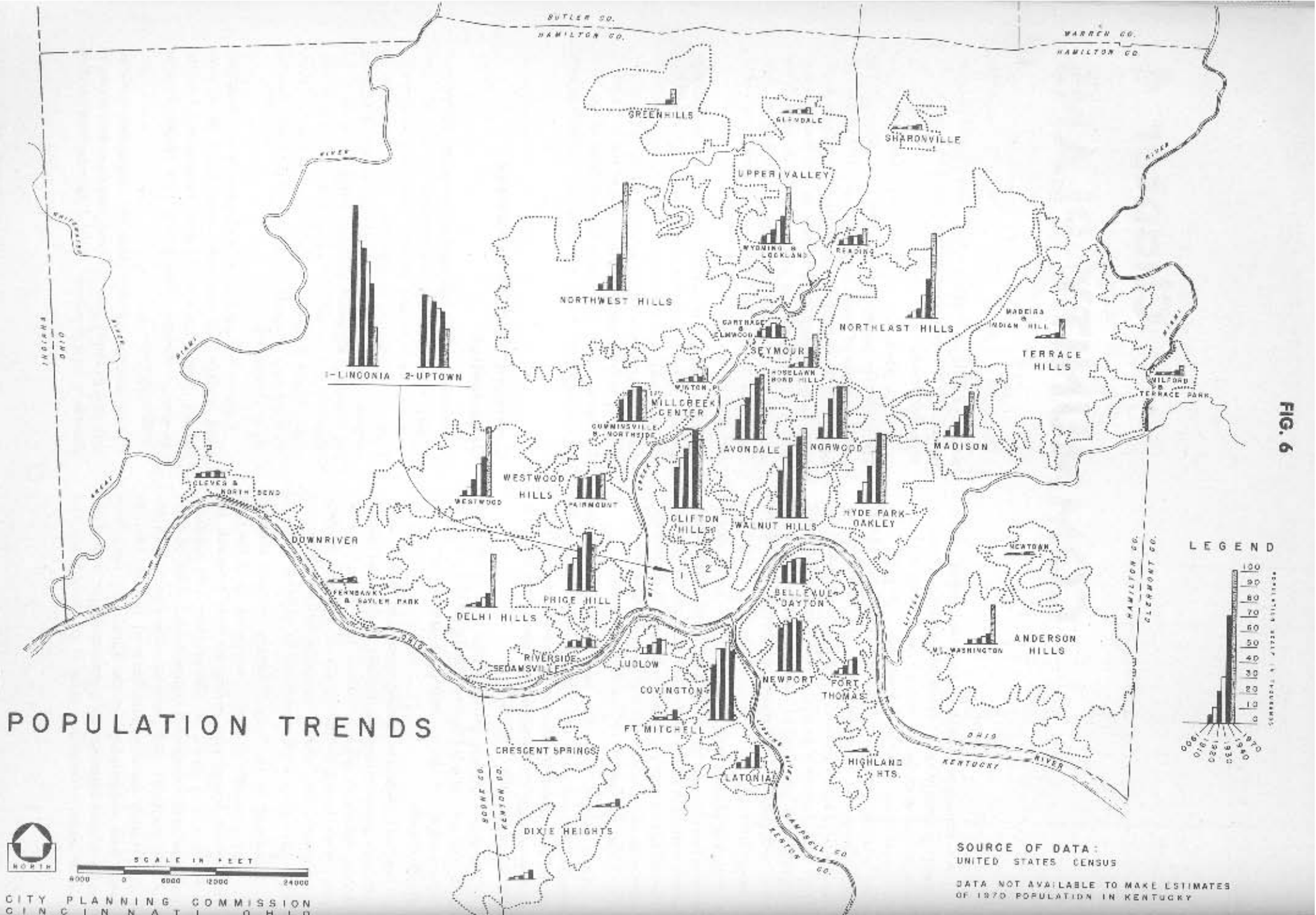
Here in the Cincinnati Area, to a greater degree than in most large cities, residents enjoy the economic and cultural advantages of a metropolis while living in residential localities sufficiently set apart to satisfy the urge for intimacy in home surroundings. One of the purposes of the Master Plan is to recreate and reinforce in the Area the advantages of the self-contained city of medium size.

Community and Neighborhood Organization

The Master Plan will tend to strengthen the present composition by forming an organized "cluster" of "communities," each further divisible into "neighborhoods." Primarily residential in character, each community as proposed is equipped with a full complement of facilities for shopping; for social, civic and religious activities; for education and recreation; and for police and fire protection. These facilities will be comparable to those provided in a properly planned, well-governed isolated city of similar size.

Conscious recognition of a community and neighborhood pattern will facilitate achievement of a more balanced organization of the many services and facilities required in modern urban living. (See chapter entitled "Public Services.")

Organization of the Area by communities is not intended to imply political reorganization, but rather to provide a logical pattern for the decentralized location



POPULATION TRENDS

FIG. 6

SOURCE OF DATA:
UNITED STATES CENSUS

DATA NOT AVAILABLE TO MAKE ESTIMATES OF 1970 POPULATION IN KENTUCKY

CITY PLANNING COMMISSION
CINCINNATI, OHIO

of public service facilities, and to encourage and facilitate group social activities within neighborhoods.

Development of an organized system of residential communities involves a system of belts to separate or define them. The separator belts contain the principal industrial areas as well as existing and potential railroad lines and motorways. They also contain large open areas such as cemeteries, major parks, airports, and the like, and natural features such as rivers, hillsides, and valleys too rugged for development.

In the Master Plan the words "community" and "neighborhood" are used in special, exact senses. They are defined as follows:

A community is composed of a group of people who have a common interest in a residential section of the City or Metropolitan Area and the service facilities offered by that section. Many communities have other local common interests beyond these, including churches, clubs and cultural institutions.

A typical community contains a population of 20,000 to 40,000 and occupies an area between 1,000 and 2,000 acres. It has one junior high school with an accompanying playfield available for community use, and ordinarily one dominant shopping district. A community is made up of two or more neighborhoods.

The typical neighborhood contains a population of 4,000 to 8,000, occupies 400 to 800 acres of land, and has an elementary school with children's playground, additional playgrounds where necessary, one or more small local parks, and one or more neighborhood shopping centers.

The ideal community would consist chiefly of residential development, supplemented only by related types of land use and the required public service facilities. While such a pattern cannot be achieved completely in replanning the living areas of an existing metropolis, it can serve as a model to be approached as closely as possible.

An ideal neighborhood would be bounded but not entered by major traffic streets. In the Cincinnati Area the highly irregular street pattern and space limitations induced by rough topography make it almost impossible to develop even one neighborhood not crossed by at least one thorofare of some importance.

Political boundaries rarely follow logical community and neighborhood lines as established in the Master Plan but where an existing municipal corporation line appeared to be as satisfactory as an alternative location the former was recognized as the community or neighborhood boundary.

Population Considerations

The approximate total of the indicated community residential areas will be adequate for future residential needs, with a reasonable but not extreme factor of safety. This finding is based on Master Plan estimates of expectable metropolitan population by 1970, broken down and applied to each community area as of that year. Estimates were made of the future distribution of population; of the consequences of population increase; and of shifts of residential land use due to such factors as new subdivisions and construction, industrial clearance, and expressway construction in each community. Fig. 6 illustrates the population trend.

Other Determining Elements

The valleys of rivers and streams will continue as separators since the steep side slopes will discourage subdivision. Railroads, industrial areas and prominent open spaces of various kinds make up the boundary elements which complete the picture.

Studies in connection with industrial requirements in the Area reveal certain areas now in residential use that eventually should be cleared for industrial use because of widespread obsolescence, flooding or present infiltration by industry. These areas occur principally in the West End, along the Ohio River bank and in parts of the Mill Creek Valley, particularly Oyler, Cumminsville, Elmwood Place and Carthage. Community boundaries in the Plan reflect these desirable and probable changes.

Consideration of the aforementioned factors produced the community pattern shown in Fig. 5.

Metropolitan Plan Elements Influencing Community Patterns

Motorways — As pointed out in the chapter on Motorways, the expressways should not cut through or disrupt residential communities if at all possible. Their wide right-of-ways and no access from abutting property make them effective buffers between residential areas and incompatible uses. Fig. 7 shows the location of the expressways and modified expressways in relation to the communities and illustrates how every such area in Cincinnati will be served by a strong radial highway to and from the Central Business District. It shows that the Mill Creek and Northeast Expressways are almost ideally located from the standpoint of relationship to residential communities. Except in a few locations it has been found feasible to route these highways between communities within the corridors of non-living areas. The modified expressways will also be in separators so

EXPRESSWAYS AND COMMUNITIES

as to serve through traffic without interfering with local circulation.

Development of the expressway routes will produce an express public transit system which will serve all portions of the Metropolitan Area. The expressways and modified expressways are designed for use by public transit vehicles. The thorofares will act as feeder routes to the various neighborhoods in each community.

Railroads — The railroads do not, for the most part, cause serious interference with community circulation and in general are not objectionable factors in relation to residential areas. There are exceptions in the older valley developments.

Airports — With the exception of the Western Hills Airport, the airport sites are located entirely in separator belts and are satisfactorily accessible from all parts of the Area.

Industrial Areas—There are cases, such as Norwood, Lockland, and Covington, Kentucky, where major industrial intrusions into residential communities have taken place. Other factors, however, are strong enough to cause these intrusions to be admitted within the respective communities rather than having the effect of destroying their unity.

Sewerage and Water Systems — One of the objectives in working out a pattern of communities is to assist in establishing limits for future urban development. A corollary of such action is the establishment of limits in the extension of sewer and water lines and of other necessary community services and facilities.

These objectives are served by the community pattern set up in the Master Plan. The community boundaries assist in determining the limits of urban expansion. The density standards proposed are useful in estimating the size of population to be expected in any given area and the prospective demands upon sewer and water lines.

The basic pattern thus provides a basis for the exact and detailed plans and specifications that must be prepared in connection with extensions of these services. No master plans for either sewerage systems or water supplies were made. Making the necessary detailed studies, plans and specifications is the function of the engineering departments of the agencies which provide the services.

A policy of foregoing water main extensions to undeveloped and remote portions of the county outside of the indicated outer boundary of the developable communities is recommended. Reasonably compact growth of the communities within the metropolitan scheme is more logical and economical than scattered settlements over a wide area.

Central Business District — There is a close relationship between the Central Business District and each community. Transportation between them via transit and motorways must be good. Communities have developed outward from the Central Business District and that District is one of the most powerful influences holding the Metropolitan Area together. With the expressway system in operation the physical distance of a community from the downtown area will not be as important a factor in community development as heretofore.

Factors of Internal Community Organization

Residential Land Use — The largest portion of each community area is devoted to residential use. Residential development usually comprises different types of housing, in some cases a wide range of types. The location and extent of each type appropriate to a given community should be determined as a concomitant of zoning revision. A full complement of the various types from single to multiple-family in varying densities should be available in most if not all of the communities. The proportions of each type in each community will vary. In general, every community should have within it accommodations for young couples, for growing families and for elderly persons. Thus as the family increases or decreases in size over the years with resultant variations in dwelling requirements, it may hope to find appropriate housing accommodations within the same community instead of being forced to move away from friends, neighbors, churches and other associations.

Motorways—Within each community are thorofares of varying importance supplying major circulation needs. These thorofares are considered an integral part of the internal structure of the community. In many cases a single thorofare within the community dominates all others. In some instances the thorofares have little effect on the community structure.

When the full expressway system has been developed it will go a long way toward solving the traffic problem which now vexes our secondary commercial centers. These business areas are now located chiefly along important neighborhood streets. The expressways will relieve these streets of much of the through traffic now congesting them, restore them to the communities for local circulation, and make the shopping centers located on them more accessible for customers of the stores.

Schools — This factor, one of the most important, is treated generally in the chapter on "Public Services."

Play Areas and Parks — The relation of play areas and parks to the residential areas is almost as important

as that of the schools. This subject is treated generally in the chapters on "Public Services" and "Recreation."

Commercial Areas — The Master Plan recognizes three types of commercial areas within communities: the community business district, the neighborhood shopping center, and the local shopping center. (Fig. 8)

The community business district is a commercial district of some size offering a wide variety of goods and services.

The neighborhood shopping center is also a strong feature of the community pattern. In some communities no single commercial center dominates and each of several neighborhood shopping centers is of considerable importance.

The local shopping centers serve a small area within a neighborhood.

NOTE: Plans for "community centers" which combine commercial and civic features, although not presented here, have been made and are available.

General Business — "General business" (such enterprises as household appliance outlets, plumbing, heating and roofing shops, second hand stores, automobile sales and display, dry cleaning plants, used car lots, etc.) is not considered a type of land use serving the individual community as such. It is not, in general, accommodated in the community plans. Requirements for such "general business" need detailed study in connection with revisions of the Zoning Ordinance.

Parking — Parking in connection with shopping areas presents a serious problem. The typical community center is badly congested due largely to parking of cars along the curbs. Inadequate parking space causes stopping, cruising, or extra circulation in and around shopping districts and frequently excessive parking in adjoining residential neighborhoods. In some cases larger stores or community theaters have provided adjacent parking lots. This has afforded a degree of relief but in general the amount of off-street parking space available is far under requirements.

A large part of the congestion now existing in community and neighborhood shopping centers occurs because the stores are located on one street which is not only the focus of local activities but also serves as a through-traffic artery between more outlying communities and the downtown section. In many cases it must also accommodate through regional traffic.

The expressways and modified expressways, as they are put into operation, will have the general effect of siphoning off substantially all through traffic of all kinds from these community "Main Streets" thus restoring them to their respective communities for local use.

The local parking problem will, of course, remain, but it can then be ameloriated if not solved completely, by the provision of local off-street parking facilities through co-operation between local business interests and the city. Authority to municipalities to provide such facilities was granted by Sec. 3939-2 et seq. of the Ohio Statutes, effective September 26, 1947. These sections are quoted in full in the Master Plan report on Parking.

Community Civic Centers—The Plan also recognizes community civic centers. These are usually combined with or contiguous to the commercial centers so far as location is concerned.

The civic centers are planned to contain required public facilities such as branch libraries, health centers, postoffices, police and fire stations and sometimes community center buildings. In some cases efficient functioning of these facilities calls for separate buildings; in others two or more may be combined in one building.

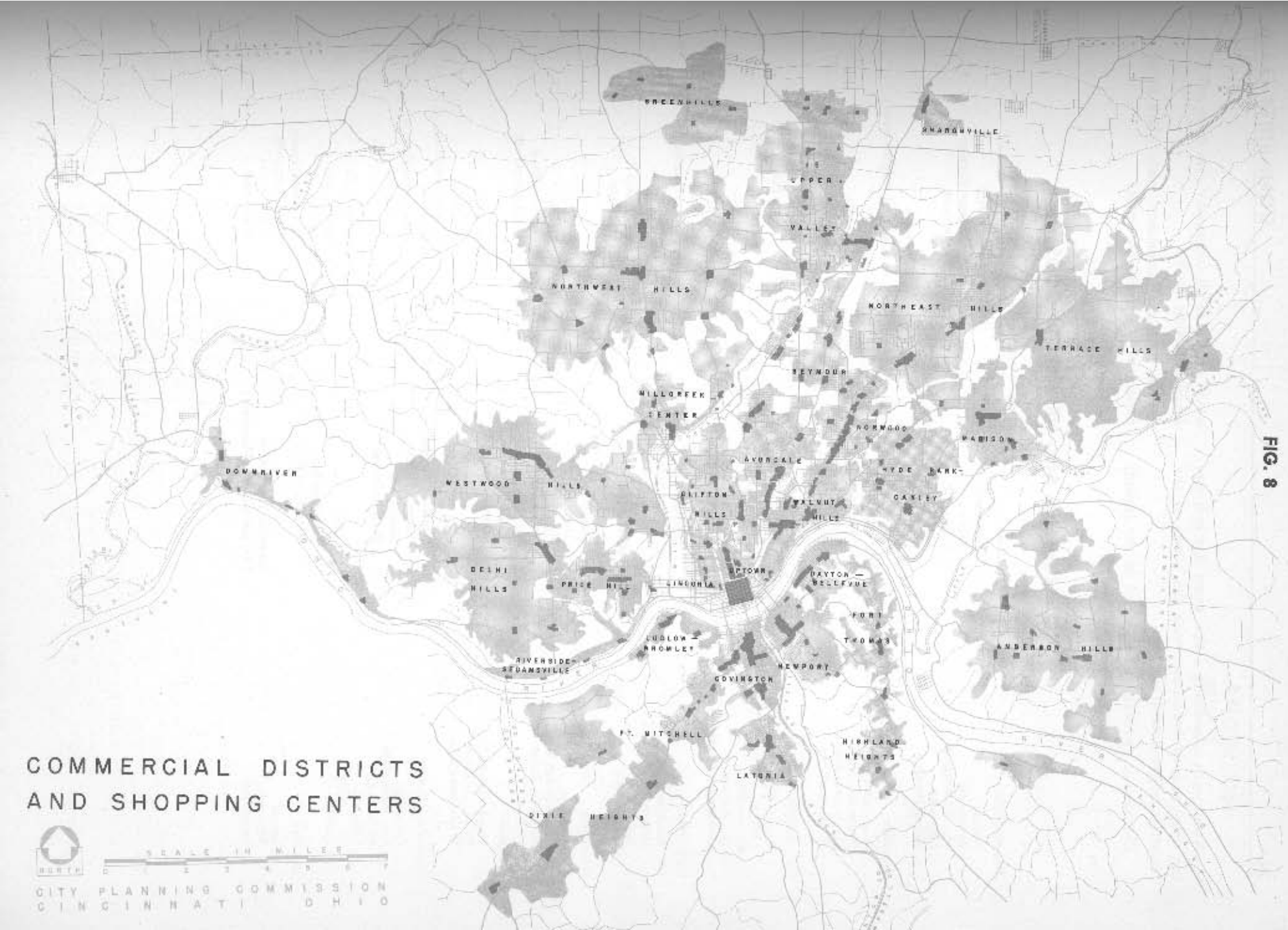
All of these facilities should be centrally located and readily accessible if they are to provide maximum service to the community. It is, therefore, logical to plan a grouping of these buildings. Such a grouping has some of the same advantages as the grouping of principal public buildings in the main civic center of the city.

In the development of community civic centers other buildings quasi-public in nature and of dignified character might be included. Some lodge and club buildings would qualify. Obviously some situations will prove more favorable than others for achieving effective groupings. In a few communities no recognizable opportunity exists for the creation of such a center.

Plans for Individual Communities

Each community was examined with respect to its neighborhood organization, natural boundaries, character of development, present and probable future direction of growth, thorofare requirements, shopping center requirements, and community facilities and services. The best disposition and organization of these elements were studied in relation to each community and to the contiguous separator belts and adjacent communities.

Fourteen maps of communities are reproduced here. In some instances two or three communities appear on the same map. The community area under consideration in each plan is shown in white. Surrounding communities appear in gray. The separators are in green, while industrial areas within separators are in brown. Within the communities commercial and industrial uses are identified by characteristic grids.



COMMERCIAL DISTRICTS AND SHOPPING CENTERS

NORTH

SCALE IN MILES

0 1 2 3 4 5 6 7

CITY PLANNING COMMISSION
CINCINNATI OHIO

FIG. 8

Within each community a thin green line indicates the neighborhood boundaries with the names of the respective neighborhoods in green.

The various symbols are explained in the legend, which applies to all community plan maps and will be found following Fig. 22.

The individual community plans which follow are presented in alphabetical order:

COMMUNITIES AND NEIGHBORHOODS

Anderson Hills
- Asbury
- Forestville
- Mt. Washington
- Newtown
- Salem Heights

Avondale
- Avondale Center
- North Avondale
- South Avondale
- St. Bernard

Clifton Hills
- Camp Washington
- Clifton
- Corryville
- Mt. Auburn
- University Heights

Delhi Hills
- Beechwood
- Covedale
- East Delhi
- West Delhi

Downriver
- Addyston
- Cleves-North Bend
- Fernbank-Sayler Park

Greenhills
- North Greenhills
- South Greenhills
- West Greenhills

Hyde Park-Oakley
- Columbia
- East Hyde Park
- Hyde Park
- Linwood
- Mt. Lookout
- Oakley

Linconia
- Laurel
- Mohawk
- Richmond

Madison
- Eastwood
- Fairfax
- Madison Place
- Madisonville
- Mariemont

Millcreek Center
- Cumminsville
- Northside
- Winton Place

Northeast Hills
- Amberley
- Blue Ash
- Concord
- Deer Park-Silverton
- Kennedy Heights
- Montgomery
- Pleasant Ridge

Northwest Hills
- College Hill
- Finneytown
- Groesbeck
- Mt. Airy
- Mt. Healthy
- No. College Hill
- White Oak
- Winton Heights

Norwood
- Norwood Heights
- Norwood View
- Sharpsburg
- West Norwood

Price Hill
- East Price Hill
- West Price Hill

Riverside-Sedamsville
(An isolated neighborhood)

Seymour
- Bond Hill
- Carthage-Elmwood
- Roselawn

Sharonville
(An isolated neighborhood)

Terrace Hills
- Indian Hill
- Madeira
- Milford
- Terrace Park

Upper Valley
- Glendale
- Hartwell
- Lincoln Heights
- Lockland
- Reading
- Woodlawn
- Wyoming

Uptown
- Liberty
- Over-the-Rhine
- Washington Park

Walnut Hills
- Beecher
- East Walnut Hills
- Evanston
- Kemper Heights
- Mt. Adams

Westwood Hills
- Bridgetown
- Cheviot
- North Fairmount
- South Fairmount
- Three Rivers
- Westwood


ANDERSON
HILLS

COMMUNITY PLAN FIG. 9

ANDERSON HILLS

HYDE PARK
BEECHMONT AVE
CINTI-BATAVIA ROAD
NEWTOWN
NEWTOWN ROAD
CLOUGH
COLUMBIA PKWY
EASTERN AVE
ALMS PARK
AIRPORT PLAYFIELD
LUNKEN AIRPORT
CINCINNATI COUNTY
RIVER
MIAMI
ELSTUN ROAD
KELLOGG AVE
COUNTY CINCINNATI
STANBERRY PARK
CORBLY ROAD
PIKE
M T. WASHINGTON
BEECHMONT
BOGART ROAD
ST. JOSEPH ACADEMY
MT. ST. GREGORY SEMINARY
GUARDIAN ANGEL CHURCH & SCHOOL
FORESTVILLE
CINCINNATI COUNTY
SALEM AVE
LITTLE
EUCLID
GERMAN PROTESTANT ORPHANS' HOME
CLEVES
ROAD
CHERRY GROVE
CINCINNATI UNION
FORESTVILLE
SALEM HEIGHTS
OHIO
CINCINNATI WATER WORKS
COUNTY CINCINNATI
SUTTON AVE
ASBURY
MARY INGLIS HIGHWAY
RIVER RD
BRENT
CONEY ISLAND
OHIO RIVER ROAD
DAM 36
RIVER

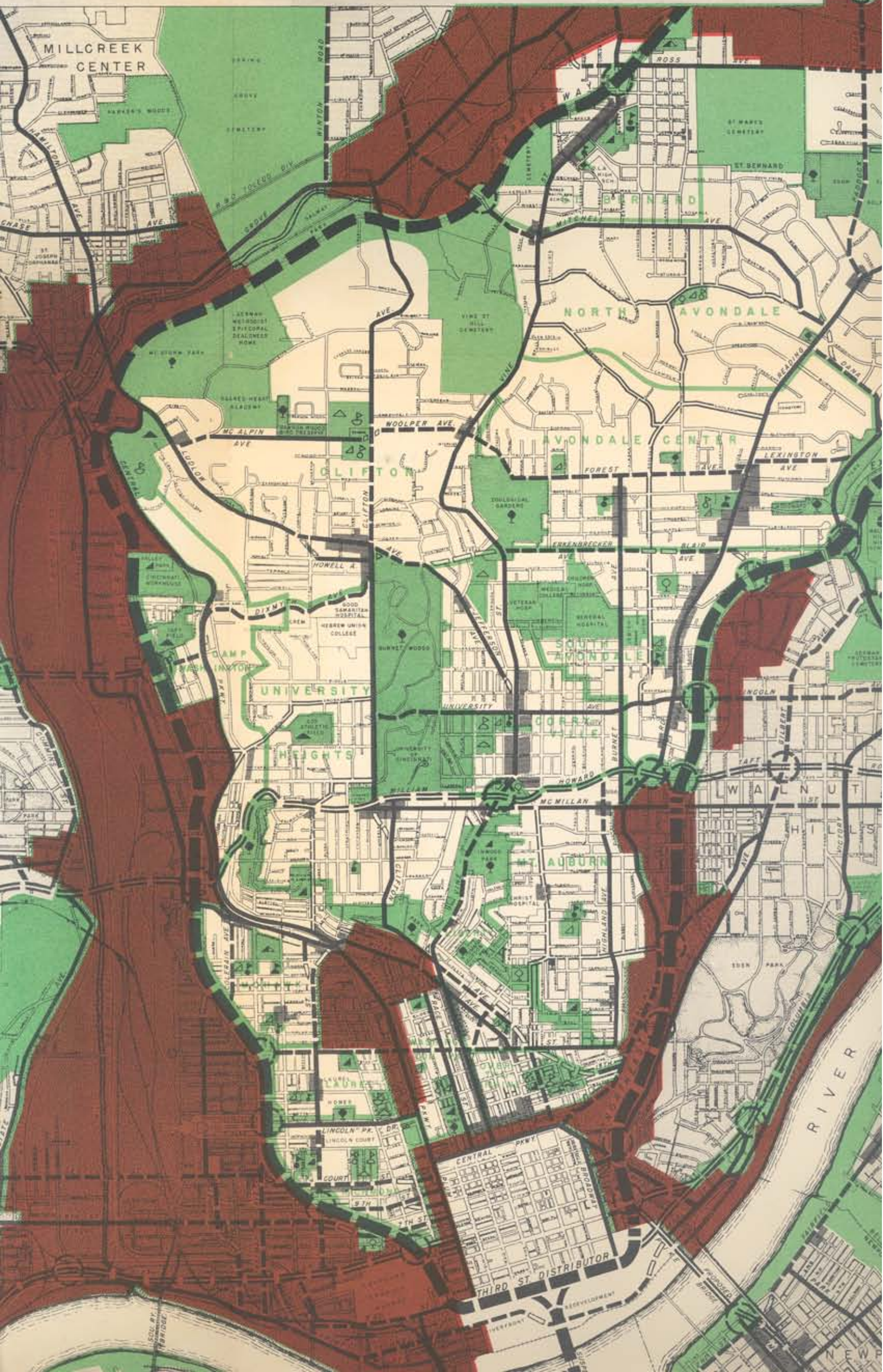
NORTH
SCALE IN FEET
1000 0 1000 3000

CITY PLANNING COMMISSION
CINCINNATI OHIO

AUGUST 1948
METROPOLITAN MASTER PLAN

COMMUNITY PLAN FIG. 10

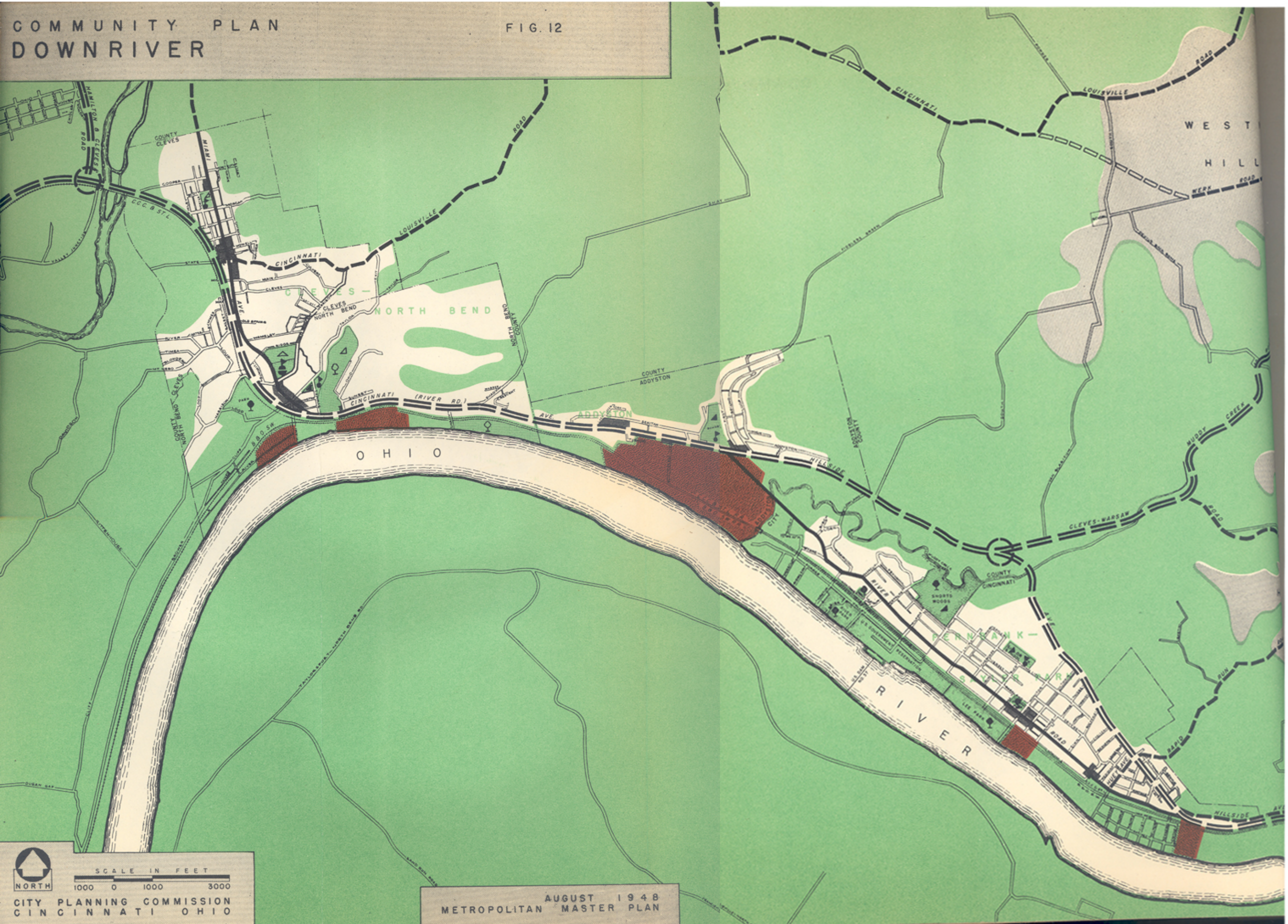
AVONDALE, BASIN & CLIFTON HILLS




DELHI HILLS
PRICE HILL

COMMUNITY PLAN
DOWNRIVER

FIG. 12



COMMUNITY PLAN

FIG. II

DELHI HILLS & PRICE HILL

WESTWOOD

HILLS

BEECHWOOD

COVEDALE

WEST PRICE HILL

EAST PRICE HILL

WEST DELHI

EAST DELHI

OHIO RIVER

PROPOSED RAPID RUN COUNTY PARK

WESTERN HILLS COUNTRY CLUB

DUNHAM HOSPITAL

MT. ST. JOSEPH COLLEGE

CLEVES - WARSAW ROAD

RAPID RUN ROAD

DELHI ROAD

QUEEN CITY AVE.

GLENWAY AVE.

GUERLEY RD.

SUNSET AVE.

QUEBEC RD.

HARRISON AVE.

WESTWOOD AVE.

COVEDALE AVE.

BOUDINOT AVE.

OVERLOOK AVE.

GREENWELL AVE.

ROSEMONT AVE.

ELBERON AVE.

WARSAW AVE.

HILLSIDE AVE.

RIVER ROAD

PIKE ROAD

ANDERSON FERRY ROAD

COUNTY CINCINNATI

NORTH

SCALE IN FEET

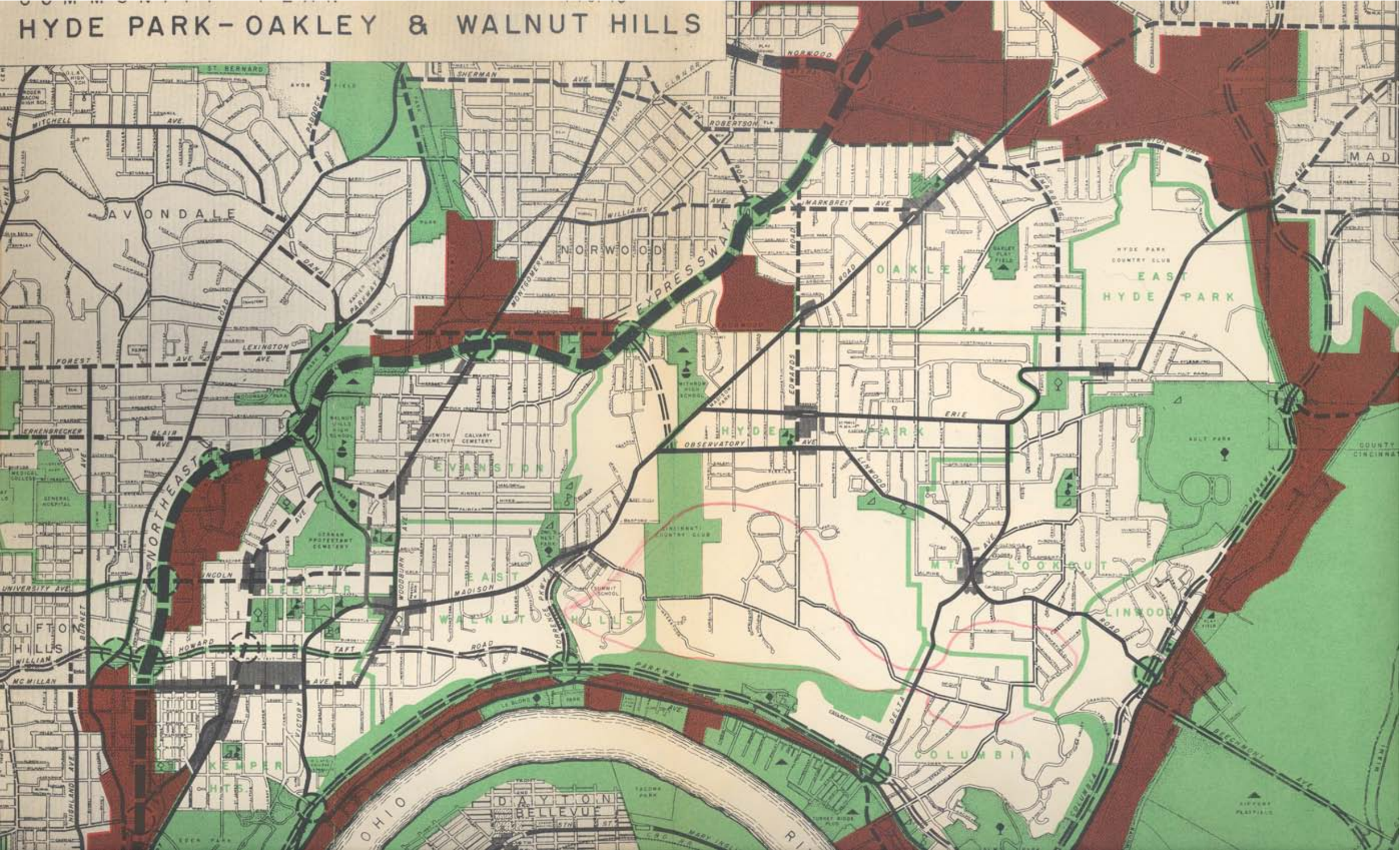
1000 0 1000 3000

CITY PLANNING COMMISSION
CINCINNATI OHIO

AUGUST 1
METROPOLITAN MASTER

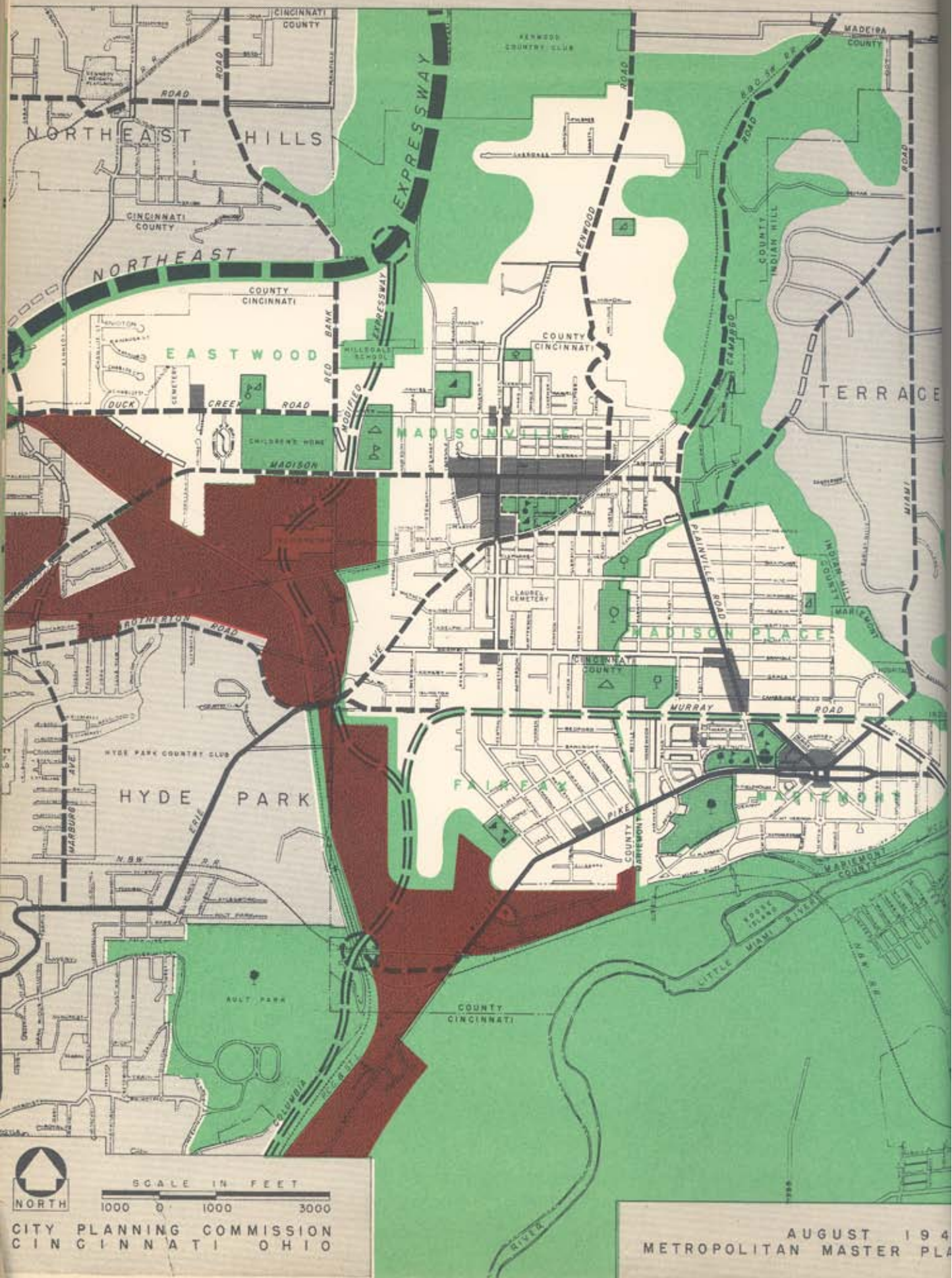
HYDE PARK
OAKLEY
WALNUT HILLS

HYDE PARK-OAKLEY & WALNUT HILLS



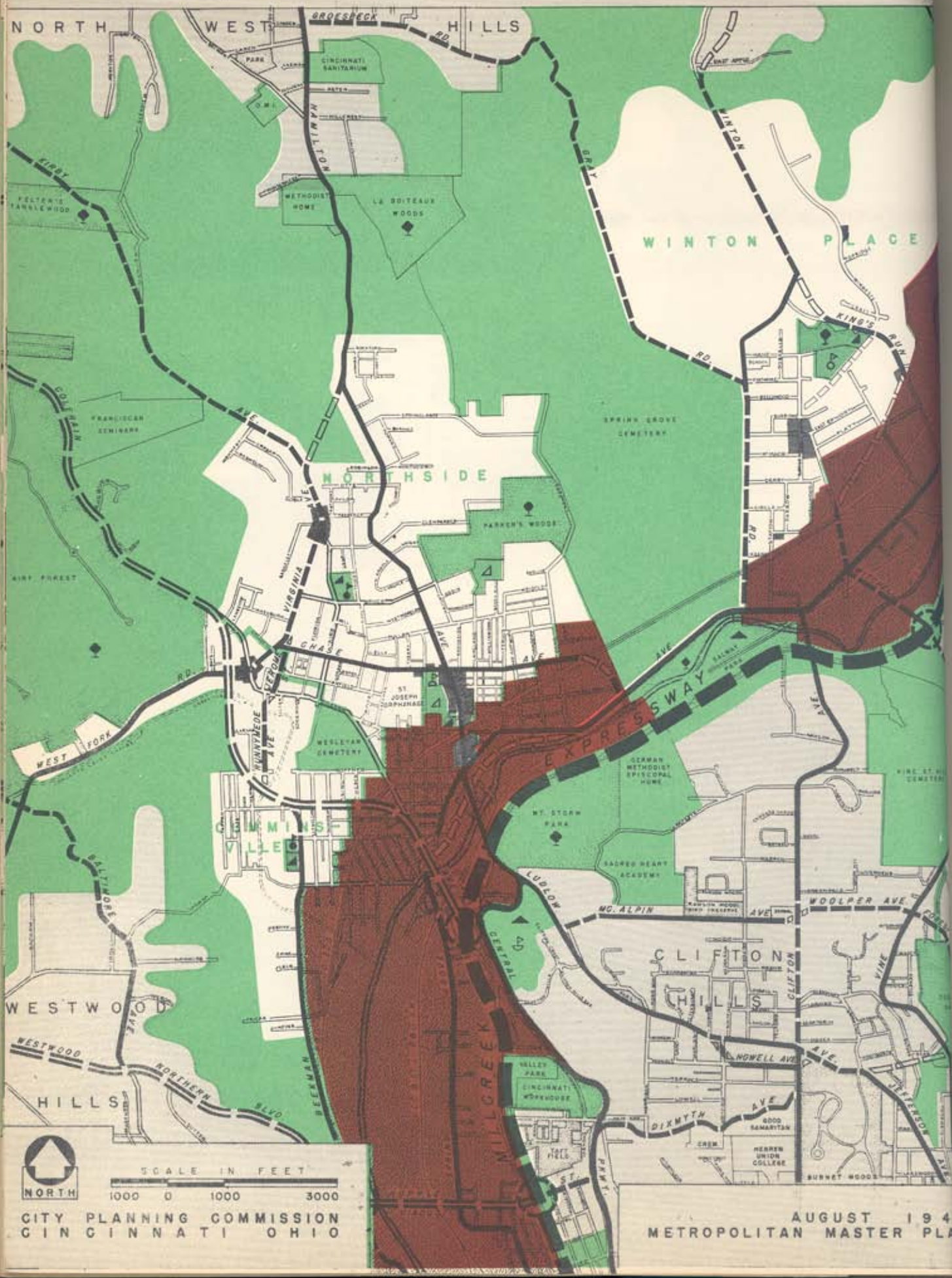
COMMUNITY PLAN
MADISON

FIG. 14



COMMUNITY PLAN FIG. 15

MILLCREEK CENTER



COMMUNITY PLAN
NORTHEAST HILLS

FIG. 16

PROPOSED
CINCINNATI
METROPOLITAN
AIRPORT
REST HAVEN MEMORIAL PARK ASSN.
WOODLAWN
COUNTY
EXPRESSWAY
UPPER
LINCOLN HTS
LOCKLAND
READING
ROAD
COUNTY
READING
GEMETERY
CEMETERY
COLUMBIA
AVE
VALLEY
BENSON
ST.
CONVENT
HUNT
ROAD
FUHRMAN
COUNTY
AMBERLEY
MILLCREEK
LOCKLAND
ARLINGTON HTS
READING
COUNTY
READING
ROAD
GALBRAITH
ROAD
RIDGEWOOD COUNTRY CLUB
COUNTY
AMBERLEY
AMBERLEY
AMBERLEY
COUNTY
PARK
SECTION
AMBERLEY
GOLF MANOR
EY MOUR
HILLCREST
COUNTRY
CLUB
CINCINNATI
COUNTY
SEYMOUR
PLEASANT RIDGE
LOSANTIVILLE COUNTRY CLUB
GOLF MANOR
CINCINNATI
ROAD
FARM
ROAD
WOODFORD
ROAD
NORWOOD
COUNTY
CINCINNATI
COUNTY
PFEIFFER
ROAD
COUNTY
MONTGOMERY
GLENDALE-
MILFORD
ROAD
BLUE ASH
BLUE ASH
MONTGOMERY
MONTGOMERY
INDIAN HILL
ROSSMOYNE
ROAD
EXPRESSWAY
CONCORD
COUNTY
DEER PARK
DEER PARK
COUNTY
DEER PARK — SILVERTON
SILVERTON
ROAD
AMBERLEY
CINCINNATI
MONTGOMERY
KENNEDY HEIGHTS
CINCINNATI
SILVERTON
ROAD
WOODFORD
ROAD
CINCINNATI
COUNTY
SILVERTON
COUNTRY
KENWOOD
KENWOOD
COUNTRY CLUB
TERRACE HILLS
INDIAN HILL
MADEIRA
EUCLID
AVE
MADEIRA
INDIAN HILL
MADEIRA
COUNTY
GIANT
ROAD

NORTHWEST HILLS

HAMILTON COUNTY EXPERIMENTAL FARM

FEDERAL WEST GREENHILLS PUBLIC HOUSING

NORTH GREENHILLS

AUTHORITY

SOUTH GREENHILLS

GREEN HILLS RESERVOIR

ST. FRANCIS SEMINARY

NEW BURLINGTON

MINTON WOODS PROPOSED

DUNLAP SPRINGDALE ROAD

WINTON ROAD

CAMERON ROAD

GREEN HILLS ROAD

CINCINNATI-HAMILTON RELOCATION ROAD

COLERAIN SPRINGDALE ROAD

MC KELVEY RD.

GROESBECK

MT. HEALTHY

N. COLLEGE HILL

ARLINGTON MEMORIAL PARK

HOMESTEAD GOLF COURSE

CLOVERNOOK HOME FOR THE BLIND

CLOVERNOOK COUNTRY CLUB

COUNTY CINCINNATI

FINNEYTOWN

WARDER'S NURSERY

GOOD SHEPHERD CONVENT

WHITE OAK

MT. AIRY

CHURCH OF THE LITTLE FLOWER

CINCINNATI SANITARIUM

POOLE ROAD

COMPTON ROAD

GALBRAITH ROAD

BLUE ROCK ROAD

KIPLING AVE.

NORTH BEND ROAD

GROESBECK ROAD

CENTER WINTON ROAD

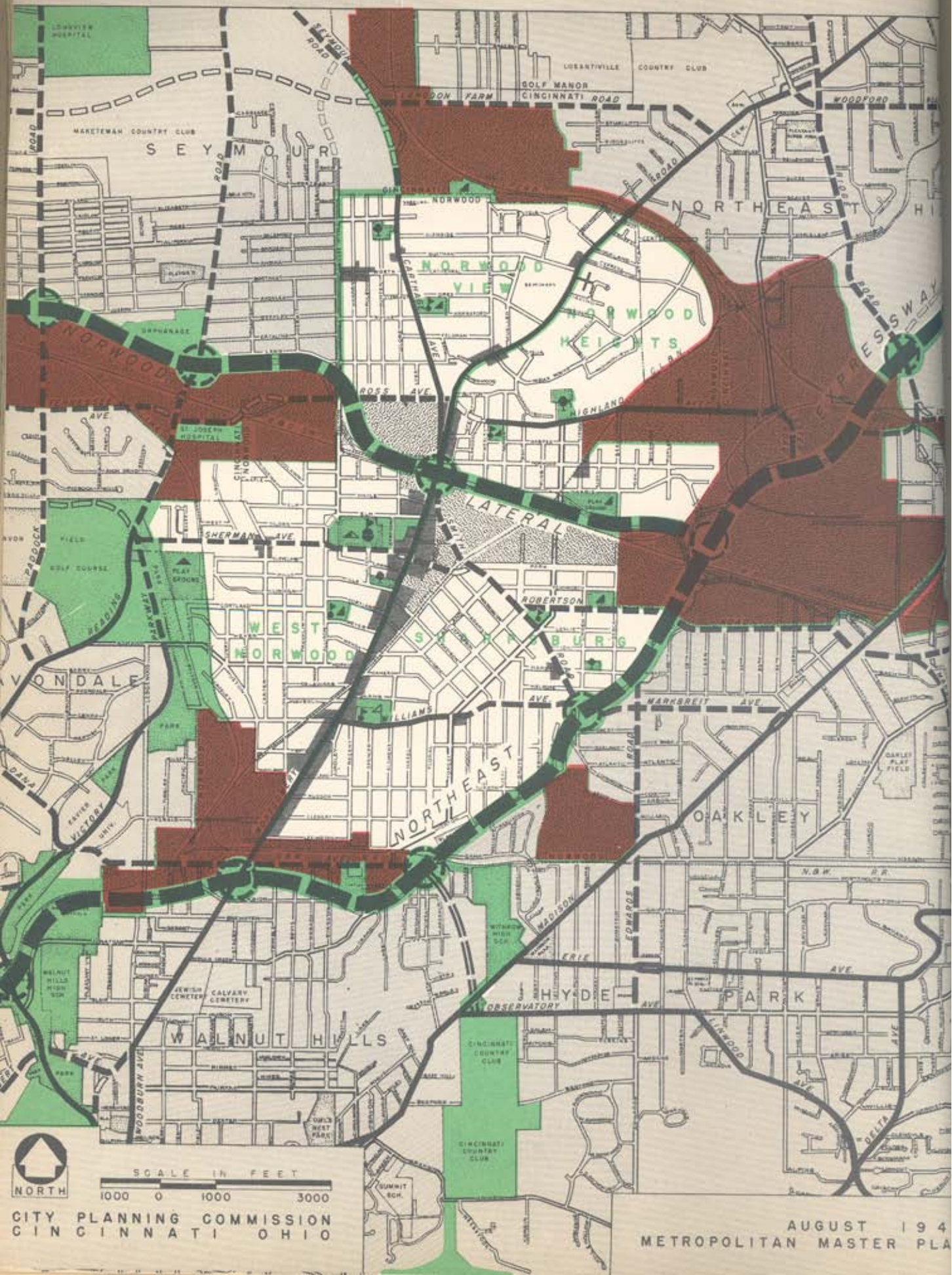
FLEMING ROAD

PROPOSED

COLLEGE HILL

COMMUNITY PLAN
NORWOOD

FIG. 18



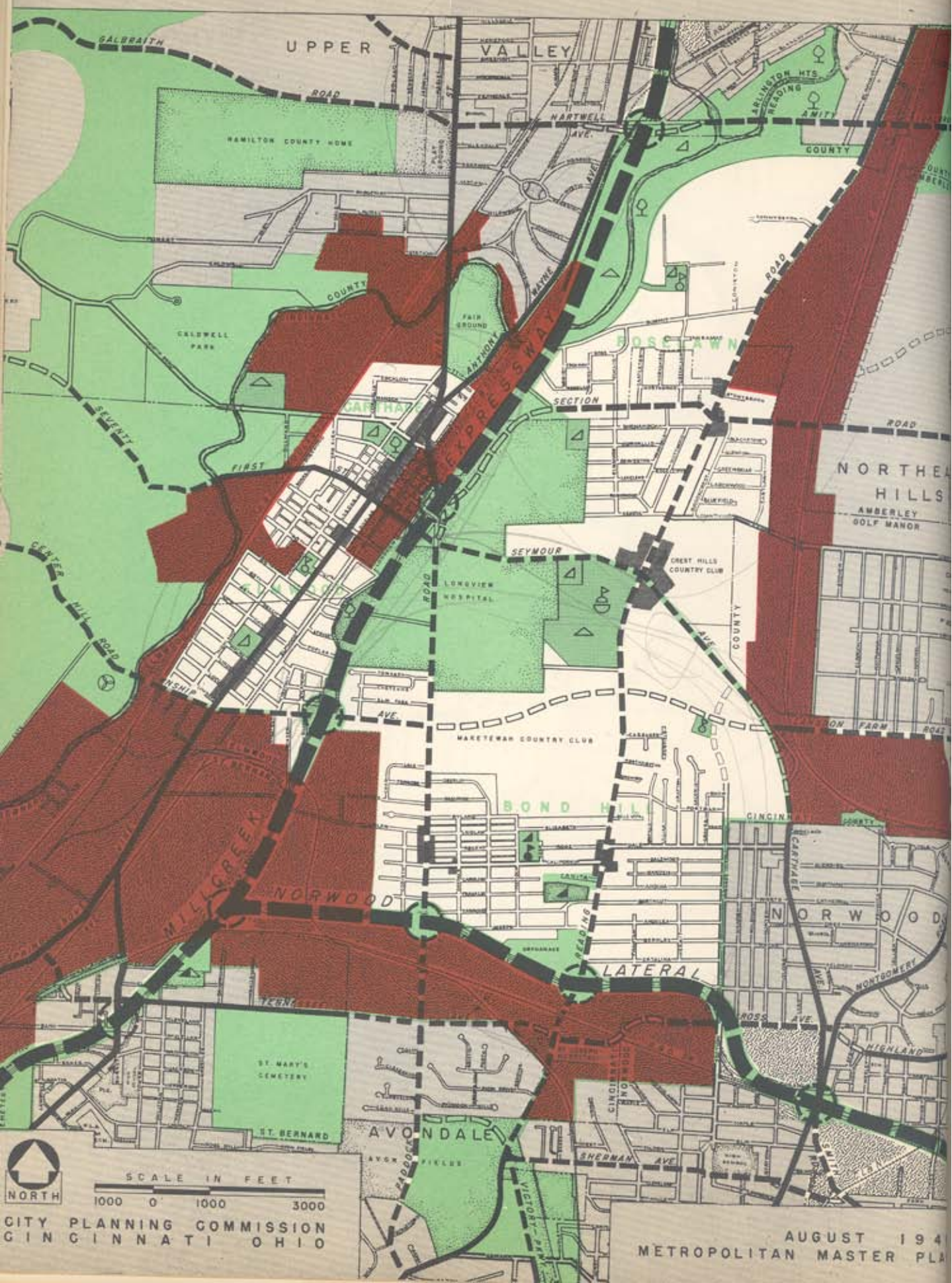
CITY PLANNING COMMISSION
CINCINNATI OHIO

AUGUST 194
METROPOLITAN MASTER PLA

COMMUNITY PLAN

SEYMOUR

FIG. 19



TERRACE
HILLS

COMMUNITY PLAN
TERRACE HILLS

FIG. 20

MONTGOMERY
GLENDALE - MILFORD ROAD
REMINGTON
SPOONY HOLLOW
MONTGOMERY INDIAN HILL
NORTH EAST HILLS
ROAD
MADEIRA ROAD
INDIAN HILL COUNTY
PENNA R R
MIAMIVILLE
GALBRAITH ROAD
MONTGOMERY ROAD
KUGLER MILL
LOVELAND
CAMARGO
INDIAN HILL MADEIRA
CUNNINGHAM
CAMP DENNISON
MILFORD
MADEIRA
EUCLID ROAD
COUNTRY DAY SCHOOL
INDIAN HILL
SHAWNEE RUN ROAD
CAMARGO COUNTRY CLUB
MADEIRA COUNTY
B & O. SW
KENWOOD
COUNTY INDIAN HILL
OLD INDIAN HILL
INDIAN HILL MILFORD
PARK
TERRACE PARK
INDIAN HILL ROAD
PLAINVILLE ROAD
COUNTY MARIEMONT
MADISON
CINCINNATI COUNTY
MURRAY AVE.
PIKE
WOOSTER
PLAINVILLE
PENNA R R
LITTLE
CINCINNATI MIAMI
INDIAN HILL COUNTY CHILLICOTHE RIVER
KROGER HILLS PARK
COUNTY TERRACE PARK
HAMILTON COUNTY CLERMONT COUNTY
NORTH
SCALE IN FEET

COMMUNITY PLAN

UPPER VALLEY

FIG. 21

SPRINGDALE
HOME MISSIONARIES OF AMERICA
CEMETERY
KEMPER ROAD
CARTHAGE-HAMILTON
COUNTY GLENDALE
SHARON
GLENDALE SCHOOL
LYCEUM
GLENDALE
BETHANY HOME
ST EDMONDS
PARK
SHEFFIELD ROAD
COUNTY WOODLAWN
AVENUE
GLENDALE-MILFORD
WOODLAWN
COUNTY WOODLAWN
WOODLAWN COUNTY
ST RITA'S SCHOOL
ROAD
GLENDALE COUNTY
EXPRESSWAY
COUNTY SHARONVILLE
CORNELL ROAD
SHARONVILLE COUNTY
SHARONVILLE
LINCOLN HTS
HILLCREST SCHOOL
WOODLAWN COUNTY
COUNTY WYOMING
WYOMING LOCKLAND
LINCOLN HEIGHTS
SHEPHERD LE
COUNTY LOCKLAND
COUNTY READING
FLEMING ROAD
WYOMING
NORTHWEST HILLS
COMPTON
WYOMING GOLF CLUB
WYOMING COUNTY CONVENT
SPRINGFIELD
MILLCREEK
LOCKLAND
READING
CEMETERY
COLUMBIA AVE.
CONVENT
HUNT ROAD
FUHRMAN ROAD
COUNTY AMBERLEY
AMBERLEY COUNTY
READING COUNTY
ARLINGTON
ARLINGTON HTS.
ARLINGTON READING
GALBRAITH ROAD
HARTWELL AVE.
HAMILTON COUNTY HOME
RIDGEWOOD GOLF CLUB
NORTHEAST HILLS
SEYMOUR
GOOD SHEPHERD CONVENT
COUNTY CINCINNATI
FAIR GROUNDS
RIDGE
PARK
SILVERTON

SCALE IN FEET
1000 0 1000 3000
NORTH

CITY PLANNING COMMISSION

AUGUST 1948

SECTION

WESTWOOD
HILLS

COMMUNITY PLAN FIG. 22

WESTWOOD HILLS

CHEVIOT
BRIDGETOWN
THREE RIVERS
DELHI HILLS
WESTWOOD
NORTH FAIRMOUNT
SOUTH FAIRMOUNT
PRICE HILL
MILL CREEK CENTER

SCALE IN FEET
1000 0 1000 3000
NORTH

CITY PLANNING COMMISSION
CINCINNATI OHIO

AUGUST 1948
METROPOLITAN MASTER PLAN

LEGEND
FOR COMMUNITY PLANS

LAND USE

RESIDENTIAL

COMMERCIAL

INDUSTRIAL

PUBLICLY-OWNED PROPERTY
(WITHIN COMMUNITY)

FACILITIES

MOTORWAYS

EXPRESSWAY — INTERCHANGE

MODIFIED EXPRESSWAY

THOROFARE:

OF SUFFICIENT WIDTH

TO BE WIDENED

PROPOSED

IMPORTANT NEIGHBORHOOD STREET

PROPOSED

AVIATION

EXISTING PROPOSED

AIRPORT-CLASS INDICATED (NUMERAL)

HELIPORT

PUBLIC SCHOOLS

ELEMENTARY

JUNIOR HIGH

SENIOR HIGH

RECREATION

PARK

PLAYFIELD

PLAYGROUND

NOTE : GREEN TONE DENOTES COMMUNITY SEPARATOR
GREEN LINE DENOTES NEIGHBORHOOD BOUNDARY

Chapter 5

RESIDENTIAL AREAS

In the Metropolitan Area and in each of the communities residential uses occupy far larger quantities of land than any other use. The location of residential sections and the density and character of building within them therefore have a profound effect on numerous plan relationships throughout the Area. The Master Plan indicates the probable distribution and desirable pattern of future residential development in the Area.

Estimates of the quantity of land likely to be needed for new housing between now and 1970 were arrived at. Preliminary determinations were made as to where this land can and should be provided to insure sound development within the present urban areas and for future expansion beyond them. Estimates were made of future housing needs in terms of kind of structure, such as the single-family and the various types of multiple dwellings. Such information is essential in the measurement of residential land requirements and serves as a valuable guide in revising the Zoning Ordinance and extending its application.

These data also have an important bearing on policies for the control of subdivisions; on the location, character and extension of thorofares and transit lines; on water, sewer and other utility extensions; on the location and character of schools, playgrounds, fire and police stations, medical centers, branch libraries, postoffices and other public facilities and services, as well as of such uses as shopping centers, churches, etc.

Although the statistical basis of this phase of the Master Plan is the three-county area, the actual territory surveyed for the Residential Areas study includes only those portions of the counties now urban or likely to become so. In some phases the inadequacy of information about the Kentucky counties has limited the Plan to Hamilton County or the City of Cincinnati.

Future Housing Requirements

It was estimated that approximately 135,000 new dwelling units would be required between the date of the study (1946) and 1970. About 62,000 will be needed for the probable increase in households. The remaining 73,000 units will be required as replacements, largely for units in deteriorated areas needing redevelopment. Not all of the deficient units will require demolition as a considerable number can be brought up to standard.

For purposes of making estimates of land requirements for future residential use, the estimated housing units were assumed, on the basis of recent construction trends and present requirements for replacement, to be roughly divisible into 81,000 in one- and two-family units and 54,000 in multiple structures.

On the same basis is was assumed that about 11% of the total construction potential of the Area, or 15,000 units, may be anticipated in Northern Kentucky leaving 120,000 units for Hamilton County.

The Land Available

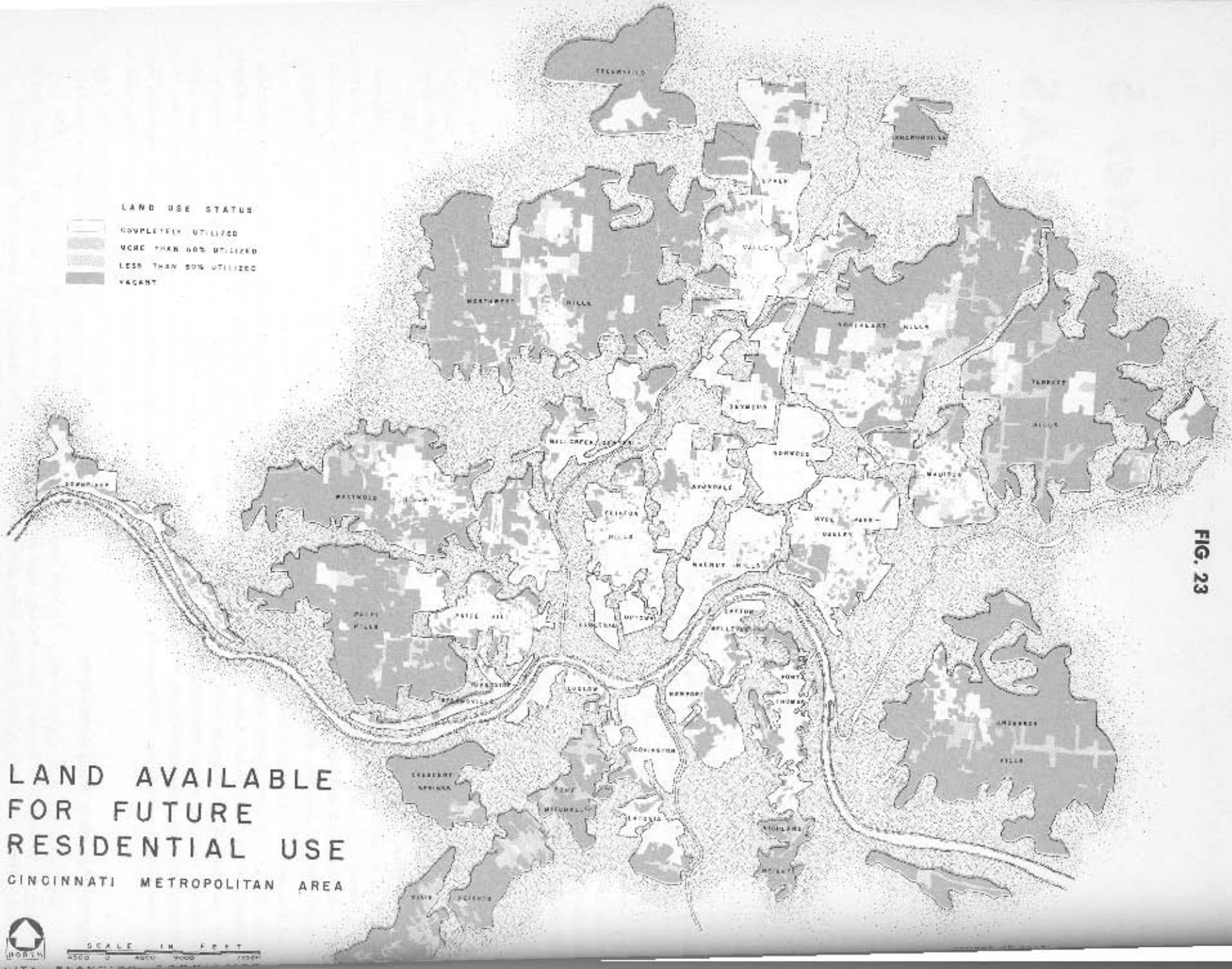
Detailed statistical data on vacant lots and acreage were at hand only for Cincinnati and the urbanized portions of Hamilton County. (See Fig. 23.)

It was estimated that early in 1946 there were 19,065 vacant lots available in the urban area of Hamilton County on existing streets, and 6,176 in subdivisions where streets and utilities have not been installed.

Of the vacant lots having improvements, 12,988 were within the City of Cincinnati and 6,077 outside its corporate limits. An earlier survey shows about three out of five to be "good" as far as topography is concerned, the remainder ranging from "poor" to "fair."

In the Area as a whole, future residential development does not therefore appear to present a land problem although there is need for new vacant lots with improvements. However, as many cities have been brought close to bankruptcy through premature subdivision, the absence of an oversupply of lots may be regarded as evidence of sound local practices in land development.

Within the city limits there are relatively few large tracts of vacant acreage left for subdivision. Accordingly it will be difficult to locate more than a very few large-scale projects on vacant land in the city proper. Large-scale satellite residential community developments are likely to seek outlying areas — the only places where



LAND AVAILABLE FOR FUTURE RESIDENTIAL USE

CINCINNATI METROPOLITAN AREA

FIG. 23

land can be accumulated in tracts large enough and low enough in price to make such ventures attractive investments.

Redevelopment of blighted areas might furnish some relief but few large areas are available from this source. Some 1,585 acres (1,135 acres within Cincinnati and 450 elsewhere in the county) might be obtained in this way. In spite of hilly topography there is in the county a large amount of good, fairly level acreage well suited to development.

Geographical Distribution

The final questions considered were: how much housing can reasonably be expected to go to each of the various communities? where should it go to promote a desirable pattern of well-served and stable communities and neighborhoods?

To approach answers to these questions a geographical distribution of the total estimated new construction was attempted, allocating to each community the number of structures and dwelling units of various kinds which might reasonably be expected to be built in each. (These estimates appear as Table 17 in the Master Plan report on Residential Areas.)

Density Standards

In making this distribution consideration was given to the minimum land use density standards to be observed in connection with new building. In estimating net residential land requirements in the Area, it was found necessary to assume a formula of population density pending the adoption of density standards in connection with the revision of the Zoning Ordinance. Setting official density standards is a function of that Ordinance.

The limitation on height of buildings and the requirements for yards, courts, etc., in the present Zoning Ordinance were not considered sufficient as these requirements do not prevent or control the crowding of a large number of families into a building which complies with such requirements.

The formula used for the estimates was based in part on a study of desirable standards and in part on a review of recent advanced practice of builders in the Area, and is as follows: *New single family residences should have a lot of at least 6,000 square feet. Multiple family structures should have at least 6,000 feet of land for the first dwelling unit, and at least 1,500 square feet of land for each additional dwelling unit.*

Expansion of this formula yielded the following minimum standards as to lot size per structure, land area per dwelling unit, and dwelling unit density per net acre, for structures of the size indicated:

Dwelling Units per Structure	*Minimum Lot Size (Sq. Ft.)*	*Land Area Per Dwelling Unit (Sq. Ft.)*	*Maximum No. of Dwelling Units per Net Acre*
1	6,000	6,000	7.2
2	7,500	3,750	11.5
4	10,500	2,622	16.4
8	16,500	2,062	20.6
25	42,000	1,680	25.6
50	79,500	1,590	27.0
100	154,500	1,545	27.8

Emerging Population Pattern

Estimating the 1970 population by communities involved translation of the housing pattern into a population pattern. (See Fig. 6.) The estimates are shown in Appendix Table 19 in the Master Plan report on Residential Areas.

It is thought that the bulk of future growth in population in the Metropolitan Area will occur outside the present limits of Cincinnati, Covington and Newport. The substantial construction anticipated within these cities may not be accompanied by corresponding growth in population. New construction inside the city limits may be offset to a great extent by necessary demolition and the rebuilt areas may therefore have a lower density of population. In addition, fewer persons may occupy the average dwelling unit in accordance with the trend toward smaller sized households. These indications may be modified by the introduction of new types of residential buildings, housing legislation, reversals of trends, and other factors. In the remainder of Hamilton County and in the outlying parts of the Kentucky area, most of the new building will be a net gain.

It is anticipated that the direction of growth in the urban area of Hamilton County will swing from the eastern to the northern and western communities in accordance with land availability and accessibility, and the growing industrialization of the Upper Mill Creek Valley. Construction of the Mill Creek Expressway will accentuate this trend. Growth, however, will occur in all outlying communities.

The greatest growth in population will take place in the major peripheral communities. Northwest Hills and Westwood Hills are expected in the long run to experience the greatest growth and to become the largest communities in the Area, each having over 60,000 potential population. These general areas present particularly good opportunities to plan transportation, shopping centers, and other services in anticipation of such development.

Northeast Heights, due for faster initial growth, may level out at about 35,000, with Price Hill and Upper Valley achieving about this same size or less.

Mt. Washington's 1970 population appears unlikely to exceed 15,000, while the probable maximum for Indian Hill-Madeira may be set at 7,500.

For the most part, only moderate increases or decreases are anticipated in the built-up portions of the urban area lying generally between the Basin and the peripheral communities. Exceptions are Bond Hill-Roselawn which is expected to double in population, Hyde Park-Oakley which may grow by a fifth and Madisonville-Mariemont, the growth of which is expected to approximate 50% over the present population.

The reverse side of the picture is found in the "old neighborhoods" — the Basin and the older sections outside of it. The Basin itself, if properly redeveloped, would decrease to less than half its present population. Even if the trend of the last three decades were continued it would lose as much as 27% of its 1940 population. With the exception of Riverside-Sedamsville, the older communities outside the Basin are expected to decrease to a lesser extent.

Between these two extremes are the middle-aged sections, such as Avondale-St. Bernard, Clifton, Cumminsville, Norwood and Walnut Hills, where numerically at least little change is expected. Changes of course will be taking place but they will be in the composition and character of the population and in the types of residential construction.

Neighborhood Conditions and Their Treatment

Even the construction of the estimated 135,000 dwelling units, including the portion contemplated in redeveloped areas, will not give Cincinnati a satisfactory supply of housing unless the existing supply is kept in sound and usable condition.

An appraisal of general housing conditions in each of the 5,500 residential blocks in Cincinnati and the surrounding urban area of Hamilton County was made, based on the block summaries of the 1939-1940 Real Property Survey. On the basis of data on structural condition and sanitary facilities it was estimated that in 1940 about 63,000 dwelling units, or about 34% of the total, were deficient in one respect or another. These units needed major repair, or sanitary facilities, or both. Many additional units while reported to be in good condition were found in locations that were generally unsatisfactory.

Some 56,390 units (some of which were not themselves substandard) were located in deteriorated areas, i.e., areas in which there was a high degree of concentration of physically substandard units and in some cases undesirable environmental conditions such as congestion, noise, dirt, traffic hazards, and mixture with industrial and commercial buildings and junk yards. (See Fig. 24.)

Classifications of Condition

The classifications of condition shown on the map were based on the data taken from the 1939-1940 Real Property Survey, and are defined as follows:

Deteriorated (Class 1) blocks include all blocks with a mean average rental value of $15 or less per month, and with 60% or more of the total dwelling units needing major repairs or lacking a private bath, and a median year of construction prior to 1905.

Deteriorated (Class 2) blocks include all blocks having a mean average rental under $20 and not in Class 1; and those with $20 to $25 rentals, having a median year of construction prior to 1905 and with at least 60% of the units needing major repairs or lacking a private bath.

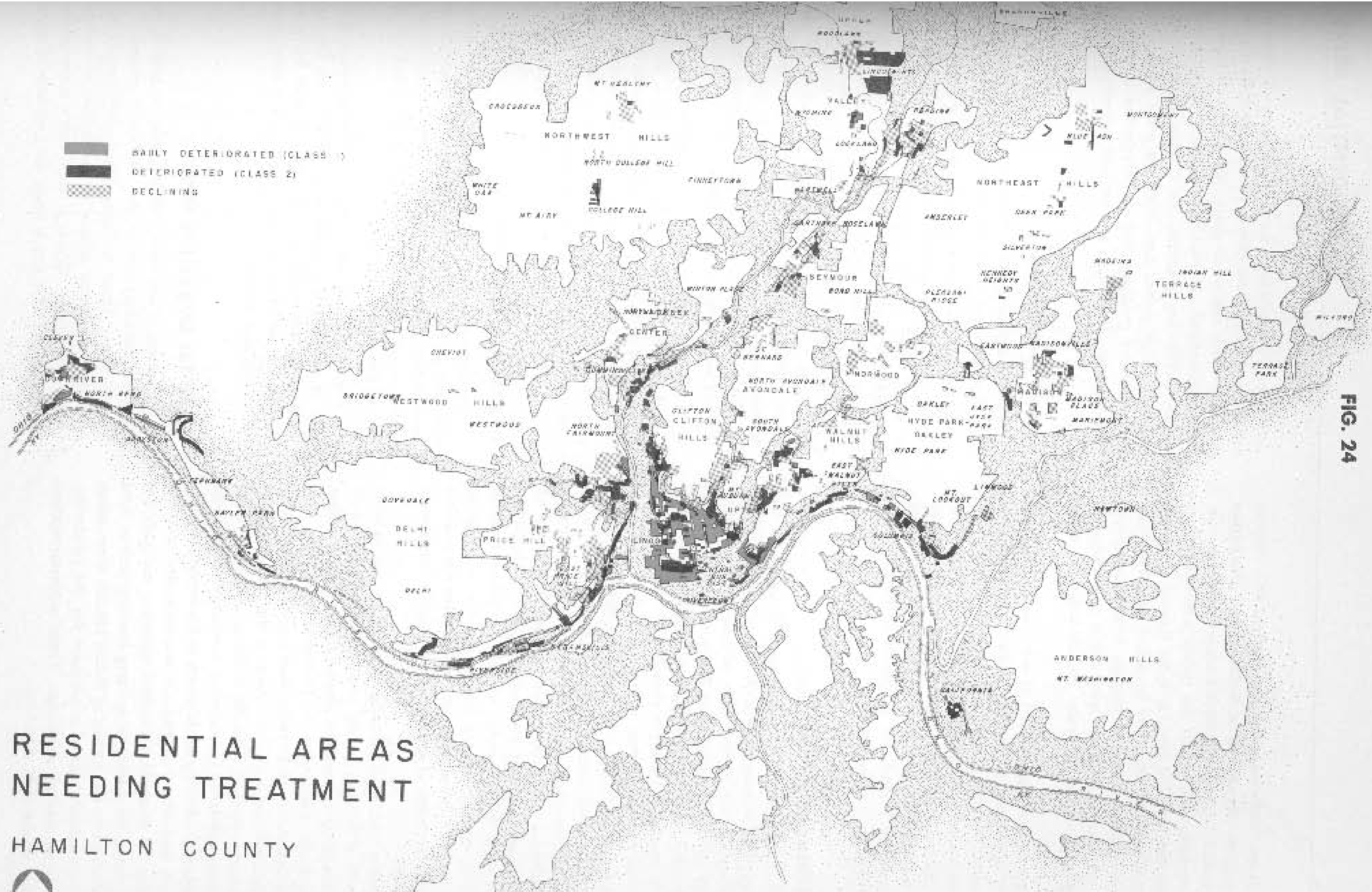
Declining blocks include all $20 to $25 blocks not in Class 2; plus blocks of $25 to $30 mean average rental not classified as fair or good blocks.

Fair or good blocks (not specifically designated on the map, Fig. 24) include $25 to $30 blocks with fewer than 40% of the units lacking private baths, fewer than 40% needing major repairs and a median year of construction no earlier than 1920. This classification also includes *all* blocks having a mean average rental of $30 or more.

Deteriorated and Declining Areas

Fig. 24 shows as Deteriorated Areas (Class 1) those which are in such deteriorated condition as to call for clearance at the earliest possible date. Deteriorated Areas (Class 2) are relatively less deteriorated and will need redevelopment before 1970. Declining Areas while not needing complete clearance and redevelopment still need drastic treatment.

Fig. 25 shows the areas for which redevelopment is recommended, as well as those for which rehabilitation is proposed. Localities to be redeveloped for residential use are differentiated from those allocated to future non-residential uses. Graphic distinction is not made between those portions of the redevelopment areas in need of immediate action and those where delay might be justified by the condition of the buildings themselves. The demarcation of these areas provides only a general guide for further more detailed analysis and study of each locality as a "redevelopment project."



RESIDENTIAL AREAS NEEDING TREATMENT

HAMILTON COUNTY

NORTH

SCALE IN FEET
4500 0 4500 9000 13500

CITY PLANNING COMMISSION
CINCINNATI - OHIO

SOURCE OF DATA:
1940 REAL PROPERTY SURVEY
NONE AVAILABLE FOR KENTUCKY

METROPOLITAN MASTER PLAN

The term "redevelopment" as used in this chapter means complete demolition of buildings and restoration of the cleared land to the market under whatever controls have been adopted by the public authorities concerned for the specified area. It is the type of treatment prospectively to be authorized by urban redevelopment legislation such as failed of passage in the Legislature in 1947. A number of states have urban redevelopment laws and the subject is under consideration in many others.

Comparison of Figs. 24 and 25 will indicate that there has been some generalizing of outlines. In some cases Deteriorated (Class 2) and even some Declining Areas have been included in the tentative redevelopment areas. This is the result of planning analysis in which general environmental conditions and the effect of various developmental and land use proposals involved in the Master Plan were considered.

Rehabilitation Areas

There are many other neighborhoods in which old buildings predominate, in which commercial or industrial structures are mixed with residential and where there are various other signs of deterioration, but where the good still outweighs the bad and restoration to sound health is possible. These are classified as "rehabilitation areas" and are also shown in Fig. 25.

The treatment needed in these rehabilitation areas will vary but will include such measures as demolition of the worst structures, removal when possible of adverse non-residential activities, repair and modernization of residences, reduction of overcrowding and the introduction of new playgrounds, schools or other features needed to restore lagging interest in the localities as places to live. In some cases the complete demolition and redevelopment of small parts of neighborhoods may be needed.

A new municipal housing code based on rational standards of housing quality and strictly enforced would be a valuable instrument in promoting the rehabilitation of residential properties. In December, 1947, the Cincinnati Committee to Expedite Housing recommended to City Council that it initiate action on the preparation of such a code, separate from the building code, to provide minimum standards for existing dwellings with respect to conditions affecting health, such as inadequate sanitary facilities and overcrowding. It recommended also the adoption of comprehensive and objective methods for determining the quality of existing housing such as have been devised by the American Public Health Association, and the establishment of a program for the condemnation of substandard dwellings. These recommendations are steps in the right direction.

Physical rehabilitation involves removal of elements which have an adverse effect, plus the introduction of elements which restore livability and faith and pride in the neighborhood. In part the necessary measures will require public expenditures for improvements or the enforcement of public law, but to a great extent they are matters of guidance and encouragement to the private activities of residents and property owners there.

Lesser Treatments

There are several other types of treatment needed in some localities but which are not referred to in Fig. 25.

In some middle-aged neighborhoods a higher than average proportion of residential structures is beginning to show signs of deterioration. The approach here should be, through organized effort, to induce owners of property to renovate and modernize their buildings.

Some neighborhoods are in essentially good condition today but need the continued protection of adequate zoning, careful planning of further residential development and the location of new facilities such as expressways, railroads, etc. This problem concerns mainly the various planning commissions.

Where new neighborhoods are beginning to develop the objective can be accomplished in part by proper planning of public improvements and exercise of suitable control over proposed private developments. In part, it requires stronger planning and developmental controls than are available at present.

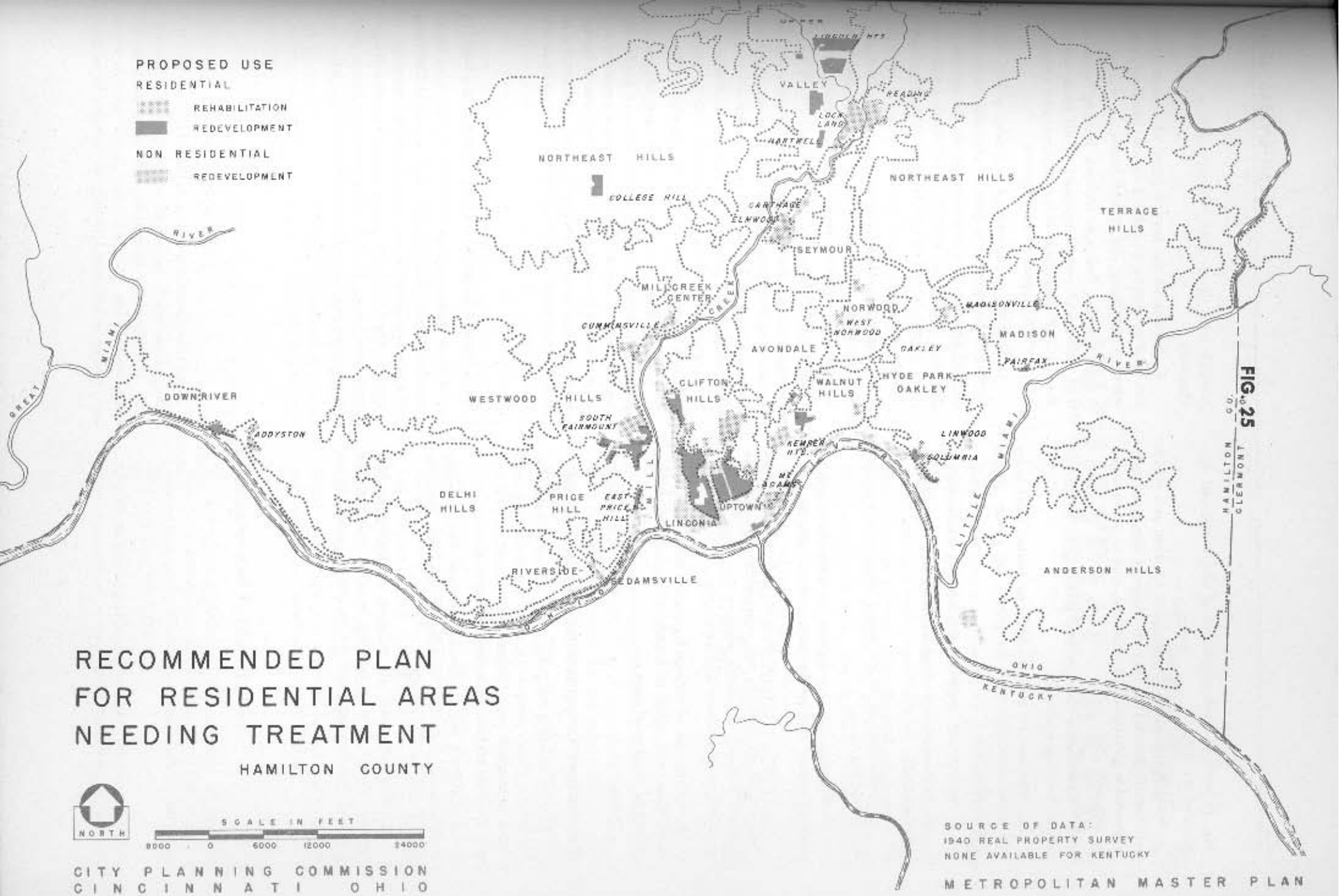
Legislation Required

For redevelopment new state legislation is required and only a part of the land which can be assembled can be used for residential development. Clearance activities also carry with them the problem of rehousing the displaced low-income families.

Aside from the annexation of new territory, if the city is to receive a substantial portion of the total new residential building in the Area it must be by way of efficient use of its available land, and redevelopment of its blighted areas.

Need for Organized Effort

A variety of activities will be needed in coming years to reach the objectives of the residential phases of the Master Plan. These activities, which lie in many fields, must be consciously related to each other as to nature, scope and timing. There is need for a more intensive and comprehensive attack upon the problems of expand-



RECOMMENDED PLAN FOR RESIDENTIAL AREAS NEEDING TREATMENT

HAMILTON COUNTY

NORTH

SCALE IN FEET

8000 0 6000 12000 24000

CITY PLANNING COMMISSION
CINCINNATI OHIO

SOURCE OF DATA:
1940 REAL PROPERTY SURVEY
NONE AVAILABLE FOR KENTUCKY

METROPOLITAN MASTER PLAN

ing, preserving, and rehabilitating the residential sections of the Area.

Some of the things which must be done and which will not be done unless they are properly organized with appreciable governmental assistance, may be summarized as follows:

1. Continuous research and planning in all phases of the housing problem.

2. Measures to assist builders to market their units on terms consistent with the purchasing power of the public generally.

3. Continuous study of local housing conditions.

4. Redevelopment of areas deteriorated beyond hope of restoration.

5. Rehabilitation of declining areas which cannot be cleared for years.

6. Housing for low-income families displaced by redevelopment and public improvement activities.

7. Review and revision of codes and ordinances and their supplementation by new enactments so as to assure rational housing standards without imposing arbitrary restrictions on builders and developers.

8. Correction of various legislative deficiencies, Federal, State, and local, to meet the needs of the many phases of residential land use.

Permanent Organization Recommended

Finally, to bring the program to a head and develop its various phases adequately, there is a continuing need for a permanent organization with adequate staff and with powers and activities which should include:

1. Carrying on continuous inquiry into housing market conditions and making its findings available periodically to the public.

2. Working with all persons, organizations and agencies in the field of housing in order that the sum total of housing activities be as nearly consistent as possible with the general program, both in volume and character.

3. Serving as the central point of contact between the local governments and the various State and Federal agencies in housing and related fields.

4. Assisting builders, realtors, lending institutions and public and private agencies of all kinds active in the field, advising them as to the kinds and amounts of action which appear to be required.

5. Seeking to discourage building activity which appears to be excessive in light of apparent requirements or prejudicial to the development of the general program, or conversely seeking to stimulate action where needs appear to exceed contemplated private and public construction.

In its function of co-operation and co-ordination, such an organization should have purely advisory powers at least until sufficient experience has been attained to demonstrate the feasibility of such an approach.

Finally, since the housing market of the urban area cannot be broken into separate economic and geographic compartments, it would appear desirable where agreeable to the local governments having jurisdiction, that the organization make its assistance and co-operation available throughout the entire Metropolitan Area.

The continuation of such a steering organization which would have a broad perspective on total housing developments, is probably one of the most essential steps in attempting to meet the complex problems of housing inherent in planning, developing and redeveloping desirable residential areas throughout Metropolitan Cincinnati.

Cincinnati Committee to Expedite Housing

Closely following the foregoing Master Plan recommendations City Council appointed a Special Committee of Council to form an emergency housing committee. As a result, the Cincinnati Committee to Expedite Housing came into being. Council appropriated sufficient funds to maintain a small staff with offices in City Hall.

Chapter 6
INDUSTRIAL AREAS

The economic future of the Area rests to a large extent upon the strength of its industries because people live where they can work. Adequate land must therefore be reserved to take care of the present and future needs of industry, not only to maintain and supplement employment opportunities accessible to the residential areas but to assist in the retention of a tax base for the support of essential public services.

In providing for industry, however, one of the objectives of the Master Plan is the substantial separation of the areas devoted to industry from those devoted to residential uses. The actual accomplishment of this separation of course, will be one of the functions of the revised zoning ordinances of the Area.

In the allocation of land for industry and in the gradual separation of industrial and residential areas the topography presents peculiar problems. Nature and history have joined forces to limit the land suitable for manufacturing. The Area is one of hills and valleys and transportation has followed the major valleys. Beginning many years before the inception of zoning, manufacturing establishments have scattered rather widely over the three counties. Nevertheless, much of the industry has concentrated into natural industrial districts chiefly in those valley sections where there is a combination of level land and railroad facilities favorable to its development.

In actual fact, however, residential and business uses have pre-empted a large proportion of these lowland areas and in so doing have further restricted the amount of suitable land available for industry. The inauguration of zoning in 1924 did little to stem this trend and the zoning ordinances still permit residential development in areas zoned for industry.

Survey of Industrial Sites

For the Master Plan a detailed survey was made of the land now used by industry. Eighteen industrial districts or areas were delineated for the study. They were defined largely upon the basis of present concentration of industry without reference either to municipal corporation lines or to industrial districts officially designated as such by present zoning.

Since railroads are essential to a large proportion of manufacturing industries and the logic of railroad development has to a great extent dictated the shape of the overall industrial pattern, Fig. 26 shows the eight railroads serving the Area. The eighteen districts outlined only for purposes of analysis are not shown. All except one of the districts—the upper West End—are served by one or more railroads. In each case the industrial districts stretch out for a considerable distance along the railroad tracks. The routes of the proposed expressways are also included in the map.

Industry in the Area

There are approximately 1600 manufacturing establishments in the Area. They occupy about 3800 acres of land in some 1400 sites. Of this total only about 250 acres are in Northern Kentucky. In Cincinnati proper there are about 1300 manufacturing plants occupying 1170 acres.

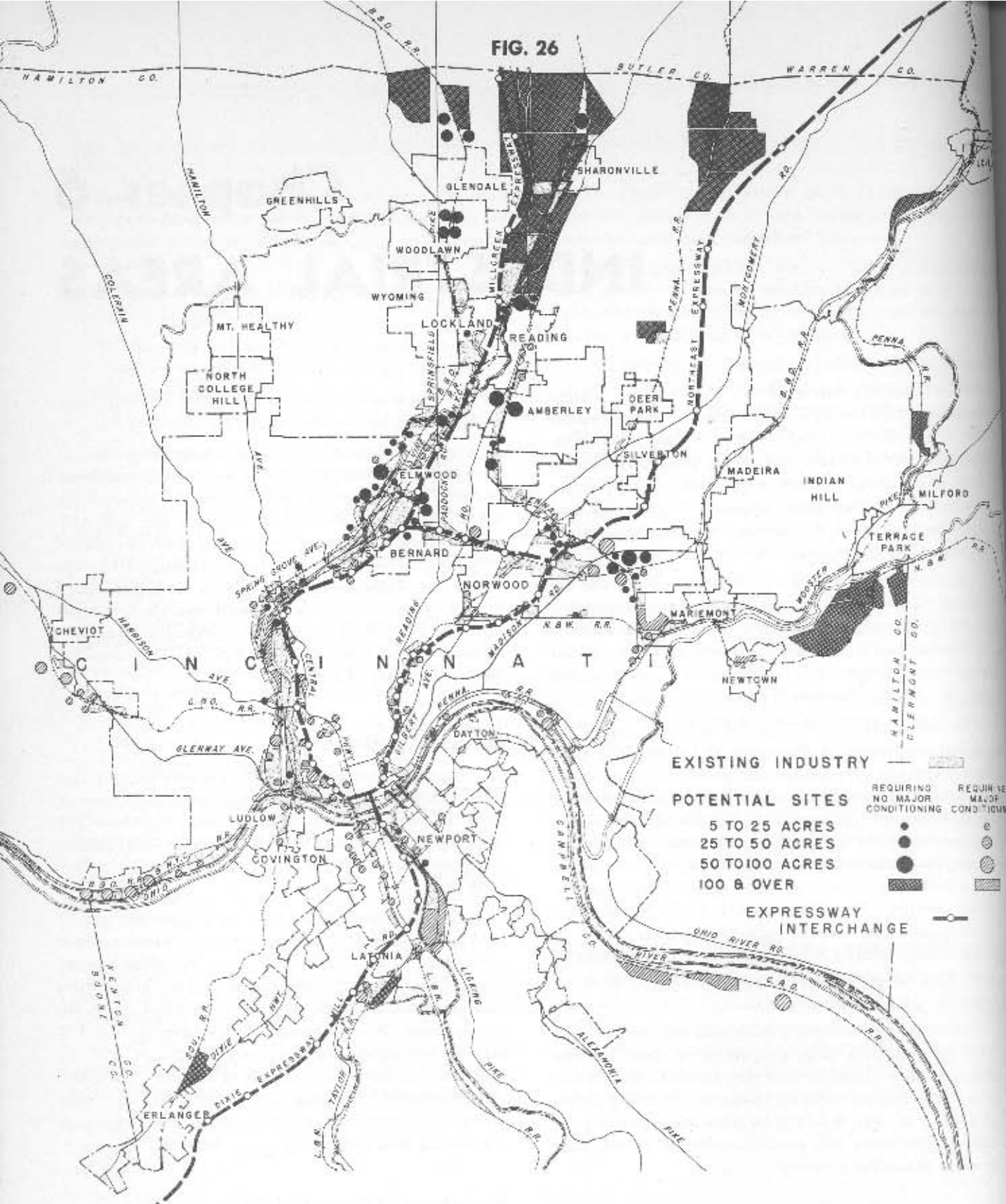
Small sites are characteristic of the present use of land by industry. The typical site in the Area is about one-quarter of an acre in size. Only 20 establishments have sites exceeding 25 acres and only 85 others have sites between 5 and 25 acres. On the other hand, there are 563 occupied sites of one-eighth of an acre or less, 173 between one-eighth and one-fourth of an acre, and 174 between one-fourth and one-half of an acre. The trend toward one-story buildings with parking lots and other facilities for employees, however, means that larger sites are coming into relatively greater demand.

Inventory of Potential Sites

A realistic approach to the problem of reserving land for future industrial use in the Area also called for determination of the amount of additional land suitable and available for industry.

To be both suitable and available the land must meet the requirements of industry—physically, in regard to

FIG. 26



EXISTING INDUSTRIAL AREAS AND POTENTIAL SITES

SHOWING RAILROADS AND EXPRESSWAYS

NORTH

SCALE IN FEET

6000 0 6000 18000

CITY PLANNING COMMISSION
CINCINNATI OHIO

METROPOLITAN MASTER PLAN

topography, size of site, sub-soil conditions, availability of ground water, etc.; locationally, from the point of view of nearness to railroads, highways, utilities and labor supply; and economically, in terms of price, ease of acquisition, taxes, and possible restrictions upon its use. Finally, to assist in realizing the major objectives of the Master Plan, it must be so located that its development for industry will not interfere unduly with desirable community patterns.

The inventory of potential industrial acreage included only sites one-half acre in area or larger, characterized by reasonably level topography, with direct access to rail and highways, or at the most one-quarter mile removed therefrom, and having reasonable access to public services, utilities and labor supply. The sites were surveyed with respect only to physical suitability and accessibility. Such factors as price and divided ownership were not taken into account.

Data on the location and characteristics of each individual site in the survey, as of January, 1946, are presented in detail in Appendix Table A in the Master Plan report on Industrial Areas.

Potential Acreage and Sites

The survey brought out that there is in the Area a potential total of 10,876 acres of unused land with the characteristics above specified. Of this total, 6,849 acres in 100 potential sites are now physically suitable in that they are at present vacant or in open uses, are not attached to existing plant properties, and do not need major grading or filling, clearance or flood protection. The remaining 4,027 acres in 395 sites need major conditioning to make them physically suitable for industrial use. Not included in the total of 10,876 acres, there are (a) 854 acres of unused land on present sites of existing industries and (b) an undetermined quantity of acreage in sites of less than one-half acre.

Acreage Not Requiring Preparation — The acreage *not requiring* prior preparation is distributed as follows: City of Cincinnati 755 acres, remainder of Hamilton County 5,292 and Kenton and Campbell Counties 802; total 6,849. In terms of size these sites are distributed as follows:

Size of Site	*Cincinnati*	*Remainder Hamilton County*	*Kenton and Campbell Counties*
½ to 5 acres	84	11	24
5 to 25 acres	18	10	0
25 to 50 acres	6	3	0
50 to 100 acres	3	8	2
100 acres and over	0	17	4
Total sites	111	49	30

This aggregate amount of land (6,849 acres) in open, usable sites in the Area is sufficient to meet present and foreseeable future requirements and to offer manufacturers a reasonable choice of size in sites. However, the various site sizes are not evenly distributed throughout the Metropolitan Area and accordingly the choice with respect to the location of certain site sizes is definitely limited, particularly in Cincinnati proper.

Although there are scattered sites within Cincinnati large enough to accommodate all but the exceptionally large plant layouts, the choice has already become so restricted as to force some industries seeking larger tracts to look outside the city proper within the Area. Considering not only new plants but possible relocation of some existing plants, the losses to the City's future tax base may become substantial.

The distribution of smaller sites of less than five acres is such that a reasonable choice is permitted throughout the Area. Nevertheless there are relatively few sites larger than an acre in size on either side of the river within three miles of Cincinnati's Central Business District. Many sites in the Basin area of Cincinnati possess all the desirable features of in-town location but are now precluded from industrial use because they are occupied by slums and are costly and difficult to assemble. Redevelopment legislation such as was introduced in the Ohio legislature but failed of passage in 1947 would make it feasible for the city to acquire and clear these areas and assign them to their most appropriate uses.

While there are a few of the larger sites of 25 to 100 acres in size and suitable for industrial use within the city limits, the very large tracts of open land of 100 acres or more are all outside the city limits, 12 to 15 miles from the Central Business District.

In the long run two alternatives, both difficult, appear open to the City for the provision of larger sites: (1) to make usable through flood protection, filling and grading, or clearance, as each site may require, certain large tracts within the City now unsuitable for industry, or (2) to annex areas outside the City that contain large sites suitable for industrial development.

Acreage Requiring Preparation—The potential acreage *requiring* major measures to make it usable for industry is distributed as follows: City of Cincinnati 1,398 acres; remainder of Hamilton County 2,324; and Kenton and Campbell Counties 305; total 4,027.

Over one-half of this 4,027 acres consists of land subject to flood and is found in sites of large acreages along the Ohio River in Ohio and Northern Kentucky, and up the Little Miami River. While it appears unlikely that the sites along the Ohio will ever be protected by a

flood wall they can be made safe for industrial use by private protection measures such as elevation above flood stage through filling or the erection of dikes or other protective barriers.

Existing examples are the local protection works provided for the power plant of the Cincinnati Gas & Electric Company at the foot of Rose Street in the West End, the Cincinnati Terminal Warehouse in lower Central Avenue, and the main pumping station of the Cincinnati Water Works at Eastern Avenue and Torrence Road.

Approximately 1,400 acres of this potential acreage requiring major conditioning consists of land which needs grading or filling operations.

Future Requirements

Precise prediction of future demands for industrial land is impossible, depending as it does on many variable factors not the least of which is the Area's success in creating an economic climate favorable for industrial growth. Considerations underlying Master Plan estimates are: the amount of land already in industrial use; additional requirements of existing industry; trends in industry's land requirements; land available for expansion on existing sites; national and local population and industrial outlook at the time of making the estimates, and land requirements for existing industry that may be displaced by proposed public improvements.

In the three counties 3,793 acres of land are presently used by industry; in the eighteen industrial districts delineated for the Master Plan 2,926. Industrial growth in terms of land requirements will probably be moderate. Public improvements may displace some industries but 100 acres is probably a generous offset to this displacement. For relief of congestion in crowded industrial districts, which can be achieved only in part, about 600 acres of additional land might be sufficient.

In the face of these considerations, while it cannot be said specifically how much additional land industry will use in the next quarter of a century, it seems unlikely that the amount will exceed 1,000 acres.

Future demand for industrial land in the Area could be more or may well be considerably less, depending largely on the future attractiveness of the City and its Area to industry as compared with other cities. Within the City there are 755 acres suitable for industrial use but considered as separate sites they do not provide a wide locational choice. There is obvious need for making land now physically unusable in the City suitable for industrial use, for reserving all potential sites within the City for possible future use and for keeping the better located large sites outside the city limits in such open uses as will preserve the land for possible future industrial demands.

Present Industrial Zoning

An analysis of present zoning emphasizes the importance of preserving the limited amount of potential industrial land within the City and of making provision for additional land outside the city limits.

There has been no co-ordinated metropolitan zoning up to the present time due chiefly to the lack of zoning power in the unincorporated Hamilton county areas and in parts of the Kentucky counties. To some extent industry has developed in places where there is no zoning to control its location.

Under recent state legislation the unincorporated areas of Hamilton County now have the right to adopt zoning following certain requirements of law which are in process of being complied with. A county zoning commission and staff, created by the same Act, have already prepared zoning maps.

Land in the City now zoned for industry amounts to about 12,000 gross acres but this includes extensive areas which industry cannot use. In some cases the difficulty is topographic; in other instances block after block is densely built up with obsolete structures, predominantly residential. From this gross total also must be deducted land occupied by railroads, railroad yards, streets and other public ways within the industrially zoned areas.

Zoning for Exclusive Industrial Use

The necessity for zoning definite areas within the City for exclusive industrial use is now apparent. Under the present Ordinance land zoned as industrial can be used for other purposes such as residential and commercial. In this Area where the remaining land suitable for industry is limited, there is a need to protect potential industrial land from occupancy by any other use which can just as well, if not better, be located on other land. All substantial structures, other than for industrial uses, should be excluded from industrial districts, and only such open or extensive non-industrial uses or light structures permitted as would not preclude or seriously hamper ultimate industrial development.

Unless this is done or the land reserved for industry by other means, the gradual encroachment by uses other than industrial will continue to shrink the supply to the point where limited choice and high prices will definitely discourage the industrial expansion and development of the City.

Such exclusive zoning is also essential to the furtherance of one of the basic objectives of the Master Plan—the effective consolidation of the industrial activities and achievement of the separation of the Area's production facilities from its residential neighborhoods.

Organized Industrial Land Program

There is a demand in the Area for some form of positive approach which can deal with or encourage and guide the solution of the various problems of industrial land development as a whole, whether these problems are subject to public or private solution and whether they deal with land, buildings, water supply, or transportation. Presumably, if some type of organization were set up to meet this need, it would work with all-groups now interested in these problems. The need for this organized approach is made evident by several considerations.

Assistance to industries with their site problems is now somewhat haphazard. There is no area-wide organized legal, financial, and technical assistance available to firms seeking sites, particularly smaller firms. Even information concerning potential sites is widely scattered. It would be helpful if information pertaining to potential sites were co-ordinated at one contact point which could, in turn, refer firms interested in specific sites to the respective owners, real estate brokers, railroads, municipal officials, etc., concerned with those sites.

There are numerous potential sites in present slum areas which should be cleared and reserved for industrial development. The cost and difficulty of assembling many small holdings into tracts of usable size prohibits the majority of companies from such an undertaking. Even with permissive legislation organized help will be required—assembling, preparing, and leasing or otherwise conveying sites, before actual redevelopment takes place.

There are other difficult problems such as assurance of adequate ground water supplies, transportation improvements, grading, filling, flood protection, etc. some of which need joint action by public and private interests. It is important that there be a program to assure the required action by all parties.

Cities in increasing numbers are taking a planned approach, followed by definite action, with respect to their industrial development. Cincinnati must encourage such development if it is to compete. The need for action is evidenced by the fact that a number of Cincinnati concerns have recently located expansion of their operations in other cities. The Area has enough industrial land to meet its long-term requirements but there is no existing medium through which the actual meeting of industrial land requirements can be guaranteed.

Quasi-public community industrial foundations and governmental authorities elsewhere have (1) developed planned industrial districts; (2) provided capital financing for new or expanding industries; (3) constructed suitable industrial buildings for industrial occupancy, and (4) made a contribution to the solution of problems having a definite bearing on the community's industrial growth pattern.

A positive industrial land policy and a suitable instrument to carry out that policy aggressively are needed.

Recommendations

1. Full use should be made of zoning powers to help insure that land will be available to meet the future requirements of industry in Metropolitan Cincinnati. Full use of zoning power involves extension of zoning control to those parts of the Area where it does not exist at present, and revision of existing zoning ordinances with the view of making them more effective in helping to preserve for future industrial use those tracts now, or prospectively, suitable for industry.

2. A great deal of land now zoned industrial but which because of its unsuitability for industrial purposes cannot be so used should be designated for other uses.

3. The delineation of possible new industrial districts where such districts do not now exist, should be given consideration.

4. Ohio and Kentucky should both pass adequate redevelopment legislation which will permit their municipalities to clear blighted areas and to prepare them for other uses including industry.

5. Officials in charge of flood control and other projects which will make suitable for industrial use tracts in the Mill Creek Valley, Little Miami Valley and other areas, should give appropriate weight to the potentialities of these tracts for that purpose. In appraising the desirability and urgency of projects the potential increment in value of such tracts should be included among the estimated benefits.

6. The recommended zoning revisions may not be altogether effective to accomplish the purposes in view. They should be supplemented by a more positive approach. It is recommended that a semi-public, privately capitalized organization be set up to cope directly with the problem of assuring that an adequate supply of suitable industrial sites will be available to industry at reasonable prices.

Chapter 7
MOTORWAYS

The people of the Cincinnati Metropolitan Area own more than 200,000 motor vehicles which they drive a total of one billion, six hundred million miles a year over city and county streets. Street cars and buses of the Area carry 165,825,000 riders annually. On an average working day 115,000 people travel into the Central Business District. In 1920 there was one motor vehicle to every fourteen people in the Area. By 1940 there was one for every four, a more than three-fold increase. In that period the built-up area of the three counties increased from 330 to 520 square miles. Population increased from 629,000 to 787,000.

Such figures point up the well-known fact that the life of a modern city runs on wheels. Every year it is more and more dependent on the free movement of people and goods over an ever-widening urban territory. Each year more people use more cars more frequently to travel greater distances.

That is the nub of the traffic problem of modern Metropolitan Cincinnati.

People want to get from everywhere to everywhere at all times by the shortest and quickest route. No street system could be devised that would completely satisfy such a demand. But a system of highway and street facilities can be planned and then developed over a period of years that will enable most of the people to travel quickly and conveniently to the more important destinations and provide reasonably good facilities for the remainder.

Few cities have street systems adequate to meet demands of present-day traffic. The cost involved in changing the typically haphazard urban street pattern into an efficient system of motorways inevitably reaches staggering figures. A Motorways Plan for a metropolitan area can therefore be developed only after the most careful analysis of all significant factors.

It is not enough that such a plan be designed efficiently and economically from the standpoint of engineering considerations alone. Because the basic system of motorways plays so important a part in shaping the character and location of development in the Area, it is essential that the Motorways Plan be co-ordinated with all other types of land use and with all forms of transportation.

Topography and Tradition

Within the Cincinnati Area the existing major street pattern is as inadequate and obsolete as is the case in most large cities. Some of its dominant characteristics however are the result of significant environmental factors. These are discussed in some detail in Chapter I of the Master Plan report on Motorways.

A metropolitan highway system is based fundamentally on traditional routes of land transportation. In most cases these have been strongly influenced by the chief topographic features encountered. Early trails sought the easiest and least obstructed routes to their destinations. Accordingly hills, valleys and rivers were largely responsible for the original location of these routes. The same features have also greatly influenced the economy and practicability of later improvements and modifications in the street system.

Historical development and topography indirectly influenced the highway pattern in another way. The Cincinnati Area on both sides of the Ohio River grew as a succession of small towns located where topographic conditions were favorable. Eventually many of these on the Ohio side were annexed to the central city. Some have grown together until there is no apparent line of demarcation between them.

The rivers of the Area are as important as the hills in shaping the highway pattern. The Ohio River is crossed here by four highway bridges within a space of one and one-quarter miles. Two of them connect Cincinnati with Covington and two with Newport. The next bridges are 69 miles upstream at Maysville, Kentucky, and 87 miles downstream at Madison, Indiana. However, work on a new toll bridge to be known as the Dearborn County Bridge, which will span the Ohio River at Lawrenceburg, Indiana, is about to begin. It will require approximately two years to build.

In addition to its locational effect on the highway system, the Ohio River also presents the problem of floods. However, only a few times has high water seriously threatened cross-river traffic. In 1937 the 80-foot stage which in places reached Third Street inundated approaches to one or both ends of all four bridges.

Present Street Pattern

The internal travel pattern of the Area has grown out of the residential community structure which demands highway connections between communities and the central city and to a lesser extent from one community to another. In almost every case expanding communities have straddled the main routes with local business districts located at intervals along the way. Extension of the residential areas farther and farther out along the main lines has created cumulative travel movements resulting in heavy traffic volumes as the routes approach the downtown section.

Where routes converge or where an important shopping center is strategically located as a gateway to outlying communities or where there is a combination of such factors, traffic congestion becomes serious.

Within the Metropolitan Area the irregular pattern of streets is the result of expanding neighborhoods astride the main feeder routes that have reached out in all directions over the available usable land. These feeder routes form the framework of the street system and are now described briefly to indicate their relation to the present traffic flow.

Radial Routes—From the Central Business District as a hub, seven routes now radiate to the west, north and east. Four vehicular bridges connect Cincinnati with three main radial routes into Kentucky.

Price Hill, the due westerly community in Cincinnati, is served by (1) Sixth Street and (2) Eighth Street; the northwest communities by (3) Central Parkway; the hilltop communities north of the Basin by (4) Vine Street, with Clifton Avenue as a branch route and Highland Avenue as a lesser assisting route.

The northeast hills are reached by (5) Reading Road and (6) Gilbert Avenue, in combination with Victory Parkway. The eastern hills are served by (7) Columbia Parkway with its branch routes—Torrence Parkway, Madison Road, Delta Avenue and Kellogg Avenue.

An additional principal route, partaking of the characters of both a radial and a circumferential route, made up of Freeman and Spring Grove Avenues and Springfield Pike, parallels the Mill Creek Valley and serves this entire industrial complex.

Across the Ohio River the Dixie Highway serves the communities southwest of Covington, and Madison Avenue those to the south, while Alexandria Pike reaches the highland communities south of Newport.

These arteries make up in large part the present Federal and State Highway Systems in the Cincinnati Area.

Crosstown Routes—The only continuous route in the Cincinnati Area from the eastern to the western part of Hamilton County is Galbraith Road. It has two extremely hazardous crossings, one with the Pennsylvania Railroad east of Reading Road, and the other with the New York Central. Elimination of the latter crossing is part of the Millcreek Expressway project now under construction as far south as Paddock Road.

The Cincinnati By-Pass (U.S. 50) runs around the north edge of Hamilton County with a jogging alignment and frequent changes in direction.

William Howard Taft Road serves as a crosstown route between Columbia Parkway and the Western Hills Viaduct.

The only other route which can be designated as approximately continuous is made up of a combination of streets with a series of jogs—Ludlow, McAlpin, Woolper, Forest and Lexington Avenues, Victory Parkway, Dana Avenue and Duck Creek Road or Vista Avenue.

There is no really satisfactory through east-west Federal or State highway. This lack of good crosstown routes is attributable primarily to the natural barriers of hill and valley, but lack of demand until recent years for such crosstown routes and failure to plan in the early days, are contributary causes.

Gradients

The influence of the Area's topography is also reflected in the range of grades encountered in the streets and thorofares leading from the Basin to the residential areas on the hilltops. These routes have gradients of from 5% to 10%. Along various portions of Reading Road there are 5% grades, on Gilbert Avenue 6%, Vine Street 7%, Clifton Avenue 8%, and Highland Avenue 9½%. Sycamore Street's long hill has an average grade of 10%, discouraging its use for heavy traffic.

On the Kentucky side routes leading from the Basin to the highlands, where the chief newer residential communities are located, have ranges of grade similar to those on the Ohio side.

Right-of-way and Pavement Widths

Existing street right-of-way widths in Metropolitan Cincinnati vary from 20 feet to 250 feet.

Downtown city streets are generally from 60 to 66 feet wide between property lines, measurements which date back to 1824 when highway widths of State roads were set at 66 feet, county roads at 60 feet and township roads at 40 feet.

Such widths are adequate only for a pavement of four lanes—two moving and two parking. There are a few notable exceptions among earlier streets such as some portions of Gilbert, Clifton and Spring Grove Avenues, originally laid out 100 feet wide. Grand Avenue to Ft. Thomas also has a right-of-way of 100 feet.

More recently the need for wider right-of-ways has been recognized in such routes as Columbia Parkway (80 feet), Lincoln Park Drive (140 to 230 feet) and Ferguson Road Extension (100 feet).

Downtown Cincinnati Streets

The Basin Area, the oldest section of Cincinnati, is laid out with a grid system of streets 60 to 66 feet wide. The main quadrangle, containing the Central Business District, is bounded by Central Parkway on the north, Broadway on the east, Third Street on the south, and Plum Street on the west.

Central Parkway varies in width from 126 to 146 feet; Broadway from 66 to 100 feet.

Typical downtown blocks are approximately 400 x 400 feet. Wide street plazas are Fountain Square, 139 feet wide, and Government Square, used as a bus terminal, 130 feet wide.

Sixth Street, between Elm and Central, is 120 feet wide but contains market buildings in the center. Court Street, between Vine and Main, is 126 feet wide and is used for street marketing and middle-of-the-street parking. Garfield Place (Eighth Street) is 126 feet wide with a park area in the center.

Present System Already Inadequate

The combination of route position, gradients and right-of-way widths especially through built-up areas makes the present system inadequate even for current traffic. In many locations improvement of the existing routes would be too expensive to be practicable. As an alternative, a comprehensive long-range plan is needed, involving improvement of some existing routes and provision of some new ones.

Statistical Basis of the Plan

Throughout the study which preceded the development of the Motorways Plan constant use was made of the various traffic reports, surveys and counts of the past years. Among these are: Report on the Plan of Main Thorofares for Hamilton County, by the Regional Planning Commission (1936); Traffic Survey by the City Planning Commission (1938); Traffic Survey by the Division of Traffic Engineering, City of Cincinnati (1941); the Transportation Survey for Cincinnati and Northern Kentucky Metropolitan Area, conducted by the Ohio and Kentucky State Highway Departments and the U. S. Public Roads Administration in co-operation with the City of Cincinnati (1945); and additional traffic counts at intersections conducted from time to time by the Division of Traffic Engineering, City of Cincinnati.

The most recent, the 1945 Transportation Survey, was made by the origin-and-destination sampling method. It consisted of personal interviews, involving 25 questions concerning travel habits. The Survey contains a wealth of material for further use when detailed plans for specific portions of the Plan are being developed.

Extensive data of other types from which traffic trends could be derived were also available and were extensively consulted, notably automobile registration figures, and population records and forecasts.

Chapter II of the Master Plan report on Motorways goes into some detail of the various groups of data upon which the estimates of traffic increases and future flows are based, traces the dominant traffic volumes, the sources and concentrations of congestion, and discusses the influence of automobile registration and population trends. For more details the original surveys and reports must be consulted.

Traffic Increase Estimates

On the basis of the estimated increase in registration and the increase in driving, it appears that a general increase of 40% through the Basin periphery and 80% through a circular cordon line ranging from five to seven miles from Fountain Square can be anticipated by 1970.

Vehicular volumes across the Ohio River will probably increase normally during the next 25 years by 25% to 30%. It can be expected in view of the policy of the State of Kentucky to free the bridges from toll charges, that as soon as all the bridges are free bridge traffic will revert to its original distribution and that expanded volumes will conform more nearly to the pattern of 1941 and prior years.

Master Plan studies anticipate a high percentage of the increase in Hamilton County's population up to 1970 will be distributed in the outer ring of communities. These communities will absorb the greatest part of the redistribution and displacement of population from areas to be redeveloped for industry or for residence at lower densities, from areas subject to periodic flooding, and

through dispossession resulting from public improvements such as expressways and airports.

All of these considerations tend to substantiate the estimates of traffic increases of 40% around the outside of the Basin and 80% through the peripheral communities.

Traffic Relief Measures

Because motorways are a dominant factor in the development of metropolitan areas many efforts to improve them have been made over the years. Some relief to traffic congestion has resulted but within urban areas serious problems remain.

Many traffic relief measures have been introduced in Cincinnati. These include improvement of pavements, both in width and type, increasing curb radii and "cutting through" short sections of streets to permit continuous movement for longer distances. As a large increase in number of vehicles made additional safety measures essential, traffic lights and various types of regulatory signs were installed.

The 1925 City Plan included a system of thorofares, involving both new routes and improvement of existing streets. Due to the narrowness of downtown streets one-way traffic was recommended and, in most instances, put into effect.

Then came restrictions on the location and length of time of parking. In 1946 parking on all streets from Fourth to Seventh and from Main to Race on week days from 7 A. M. to 6 P. M. was prohibited.

Widening of streets has been tried. Although widening is sometimes necessary it would be financially prohibitive to rely solely on this expedient and experience has demonstrated that the benefits are usually not commensurate with the cost.

Recognition of the Urban Traffic Problem

With respect to the national highway system traffic counts have shown that routes traversing large cities are the primary bottlenecks. It is now known that the vast majority of the vehicles have their origins and destinations within the metropolitan areas themselves. The problem therefore cannot be solved by constructing bypass routes. It must be met by developing a system of motorways to permit greater freedom of movement for vehicles *within the metropolis*. This point of view is now vigorously supported by the Federal Public Roads Administration, whose position is exemplified by the following quotation from a recent article in *American Highways* by Thomas H. McDonald, U. S. Commissioner of Public Roads:

"It is hopeless to attack this problem of city traffic congestion by palliative measures, such as street widening. One well-designed 4-lane expressway will accommodate the same number of vehicles at nearly twice the average speed as will five 40-foot ordinary streets on which parking is prohibited and under favorable conditions of traffic control for the intersecting streets. Under unfavorable conditions it will require eight typical city streets 54 feet wide on which parking is permitted to serve the volume of traffic that may be handled more efficiently on one 4-lane expressway. The limited-access highway is the only means of coping with urban congestion, so far as moving traffic is concerned. Parking facilities must be made an integral part of the overall plan. This city problem is so serious as to demand the full co-operation of State, urban, and Federal highway officials."

Recognition by State and Federal governments of their responsibility to assist in solving urban motorways difficulties should be far-reaching in its effect. Their studies take into account the effects of transportation on land use and the need for co-ordination with proposals of planning agencies.

Federal legislation now stipulates that appropriations be made available for urban highways on a matching basis with State funds; one-half for construction and one-third of the right-of-way costs. The ratio of participation by the State of Ohio and by local governments has not yet been established on a fixed basis.

There is general agreement that the coming volume of traffic cannot be handled satisfactorily unless highways in urban areas are designed and constructed to provide the maximum free flow without interference from lateral movements. These conditions are fulfilled only in the most highly developed type of motorway—the expressway.

The Motorways Plan for the Area is therefore built around the concept of the expressway with its fundamental principle of uninterrupted traffic flow.

National Interregional Highway System

In 1941 the President of the United States appointed a National Interregional Highways Committee to recommend a continental system of highways. In 1944 the Committee produced its report and plan (House Document No. 379) for such a nation-wide system. Previously, there had been various proposals to construct several parallel transcontinental routes, with others running north to south. The Interregional Highway Plan, however, is based on the more logical policy of a national network which provides continuity of routes but aims primarily to interconnect the principal cities of the nation.

The Interregional Highway Plan contemplates eventual achievement of safe, uninterrupted flow of traffic, free from crossings at grade and from direct access to abutting property, and other characteristics of freeways, or expressways.

Cincinnati Area's Links in the System

The Cincinnati Area is crossed by three links of the National Interregional Highway System, (1) U. S. 25 from Detroit through Toledo, Dayton, Cincinnati, Lexington and Atlanta to Florida, (2) a route from Cleveland through Columbus, Cincinnati, Louisville and Nashville to the Gulf States, and (3) U. S. 52 between Cincinnati and Indianapolis.

The third link, as a full expressway, was added to the proposed National Interregional Highway System by the U. S. Public Roads Administration after the Cincinnati Metropolitan Area Motorways Plan was completed.

The Motorways Plan of the Area proposes routing U. S. 52 over Westwood-Northern Boulevard and Harrison Pike as a modified expressway. Even moderate development along an existing highway makes difficult its conversion into a full expressway. Therefore the U. S. 52 route should have considerable further study with a view to possible extensive relocation.

Types of Motor Routes

NOTE: *Since the completion of the Master Plan the American Association of State Highway Officials and the U. S. Public Roads Administration have officially adopted "freeway" as the term to describe what is herein designated as "expressway." The latter term was adopted to designate the kind of motorway described herein as "modified expressway."*

The Motorways Plan was developed on the basis of three types of major routes — the expressway as defined in the National Interregional Highway System, the modified expressway and the thorofare.

The expressway, or freeway, the backbone of the system, is designed for safe, fast, uninterrupted vehicular traffic flow. Its chief characteristics are:

1. No direct access permitted from abutting property to the express traffic lanes. Where required, there is provision of an independent parallel and usually one-way paved roadway along one or both sides of the express lanes to give direct access to abutting property.

2. Two or three paved lanes for traffic moving in each direction, separated by a continuous median strip.

3. Prohibition of parking or stopping on traveled lanes.

4. Route locations desirably between or skirting, rather than cutting through predominantly residential communities and neighborhoods.

5. Use by all kinds of rubber-borne vehicles normally permitted, including public transit vehicles, provision being made for stops by the latter without interfering with the flow of traffic on the express lanes.

6. Elimination of crossings or intersections at grade, by constructing grade-separated interchanges with other important motorways, such interchanges providing for ramps, accelerating and decelerating lanes, etc., to permit continuous traffic flow.

7. Right-of-way widths variable up to 350 feet depending on location and cross-section requirements.

8. Through built-up areas where frequent crossings are unavoidable, depression or elevation of the express lanes to facilitate the carrying over or under the expressway of non-interchange cross-streets for which continuity is essential.

The modified expressway is one whose potential traffic volume does not appear to justify all of the expressway features. The first five characteristics will usually apply. Right-of-way will vary up to 250 feet. In other words, the modified expressway approaches the standards of the full expressway to whatever degree is justified and feasible.

The thorofare is a route of major importance which by virtue of its geographic position, continuity and width, is capable of handling heavy volumes of traffic and of serving as a route to destinations on lesser streets. Expressways and modified expressways form the basic network of the motorways system but they must be supplemented by a network of thorofares as feeders and to provide for the movement of local traffic, thus to complete the pattern.

Thorofares perform several types of services: (1) they facilitate traffic movement between communities and neighborhoods; (2) they offer access between residential areas and places of employment when these are not too far apart; (3) they act as routes for internal circulation within the larger communities themselves, such as from residential neighborhoods to the local shopping centers; and (4) they operate as feeder routes to expressways and modified expressways.

Interregional Routes Important Factors

The routes of the proposed National Interregional Highway System that traverse the Area were major factors in determining the design of the Motorways Plan. Starting with the assumption that these interregional routes are to be built in the years ahead, it was recognized

that the Plan must be so located and designed as to gain maximum benefits from them for the Area. Four major considerations were involved: traffic relief, land use, cost, and engineering.

To provide maximum traffic relief the expressways must be so routed as to drain off heavy traffic movements from existing overloaded thorofares. They must also be so located as to serve concentrations of industrial and commercial activities which generate large volumes of vehicular traffic.

Cost, of course, is an important consideration but it should be measured in terms of all benefits and must not be permitted to cause sacrifice of maximum functional efficiency or furtherance of desirable community development. Where there are alternate choices that route should be favored which will remove from the tax duplicate the least amount of valuable property, fit in best with sound land use, and not involve unjustifiable cost for construction.

Expressway locations naturally must consider engineering design factors such as minimum gradients and curvatures in relation to topography and existing structures. Large trunk sewers, existing and proposed, must be considered as well as relationship of the route to possible flood levels.

Study of the relative importance of traffic streams within the Area between various points of origin and destination disclosed that the heaviest concentrations of radial movements are to and from the north and northeast. This means that the two interregional highways in those directions will be in position to serve not only the relatively minor volume of through traffic but will also accommodate the heaviest flows of metropolitan traffic. The third interregional highway between Cincinnati and Indianapolis, later added to the national program, also coincides with a major traffic stream.

The extension of major routes as expressways through cities is recognized as one of the most important features of the new plan of national highway development. The U. S. Public Roads Administration concluded in its 1946 report that the most serious traffic problems are now in and near the cities. Provision of routes that will make possible a free flow of traffic on main routes through cities is essential not only to complete the national system but to prevent strangulation of the economic life of cities. Speeding up the flow of great volumes of traffic and increased safety are other aims cited in favor of the program.

A diagrammatic consolidation of the motor traffic flows on the principal existing routes in the Area and the manner in which these flows will be affected and diverted by the expressway is shown and discussed on pages 40 and 41 in the Motorways Report.

The Expressway or Freeway System

The Metropolitan Motorways Plan is shown in Fig. 27.

Expressways must be conveniently accessible to residential communities but insofar as possible should not cut through or disrupt them because an expressway's wide right-of-way and prohibition of access from abutting property tend to make it an appreciable barrier to community continuity. By the same token, an expressway is an effective buffer between a residential area and uses incompatible therewith.

As major trunkline traffic routes, therefore, the best location for expressways is in the separator belts between communities. So located, expressways also serve most conveniently the major industrial districts which should be located in these separator belts.

A study of existing communities and the separator areas revealed that route locations meeting these specifications existed in the Area and they were used in planning the proposed routes of the expressways. The logic of these locations can be confirmed by the discussion of this subject on pages 41 and 43 of the Motorways report and the maps referred to therein.

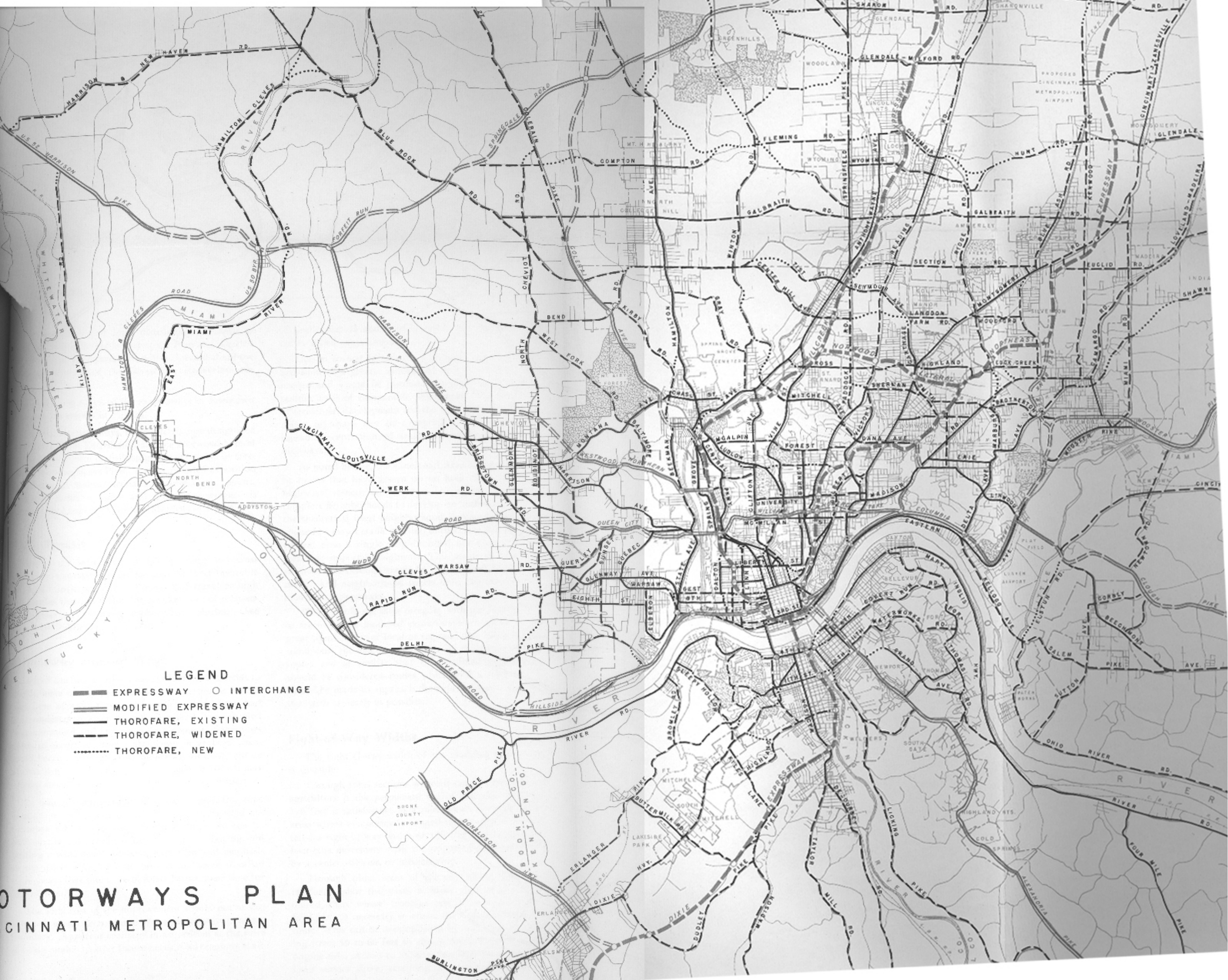
The name *Millcreek Expressway* is used to identify that portion of the future inter-regional highway which will serve as U. S. 25 within Hamilton County. The general location of this route has been established by the State Highway Department as far south as Paddock Road. A substantial part of the section from Glendale-Milford Road to Hartwell was built during wartime as the main access route to the Wright Aeronautical Corporation plant. Construction of the section from Hartwell Avenue to Paddock Road is under way.

The Cincinnati-Columbus Interregional Highway which will replace U. S. 22 within Hamilton County is designated in the Plan as the *Northeast Expressway*.

There is to be considerable interchange of traffic between these two expressways, particularly between the lower Mill Creek industrial area and the northeast, and between the Norwood area and the north. This has been provided for by what has been designated as the *Norwood Lateral Expressway* which connects the two, using approximately the old Rapid Transit route. Final location of this route will require detailed study of line and grade.

The joint route proposed for U. S. 25 and 42 in Kenton County is identified as the *Dixie Expressway*.

The junction of the Mill Creek, Northeast and Dixie Expressways north of the Ohio River and immediately south of the Cincinnati Central Business District requires a special facility. An interchange to provide for both



OTORWAYS PLAN

CINNATI METROPOLITAN AREA

Y PLANNING COMMISSION
N C I N N A T I — O H I O

through movement and local distribution of traffic is necessary. Such a facility is part of the Plan and is called the *Third Street Distributor*. It will be located along the northern boundary of the Riverfront Redevelopment Area.

The proposed routes of the expressways in downtown Cincinnati are shown in Fig. 28.

The major expressways, their interchange designated as the Third Street Distributor, and the Norwood Lateral constitute the system of full-fledged expressways or freeways in the Motorways Plan. A more detailed exposition of the general routes, access and interchange points, anticipated traffic volumes and their cross-sections, is contained in Chapter IV of the Motorways report.

Public Transit

Due to the separation of all opposing and cross movements, expressways provide a facility very favorable for rapid transit operation. Freedom of travel at high speed makes them available for development of economical express service using rubber-tired vehicles. (See chapter on Public Transit.)

Expressway Right-of-Ways

One of the factors which has made it most difficult to remedy some of our present traffic congestion is insufficient right-of-way. Costly widening projects have had to be undertaken after the adjacent land was occupied by concentrated and expensive development. Sometimes efforts to secure a wider right-of-way have been abandoned because of high cost. Sufficient width should be purchased to allow for adjustment, need for which may develop from experience after the facility is in use.

To quote Commissioner McDonald again, this time from an article in *Roads and Streets*: "Cities need expressways so badly that they are worth almost any cost . . . Half of the cost, often more, must go to buying and clearing a wide swath of land, with plenty of emphasis on the word wide, as is to be seen on some so-called expressways that today are obsolete before their time for lack of width."

The total cost of the improvement should not be lost sight of when determining the right-of-way purchase boundary. Apparent economy in acquisition at the price of being unable to meet future needs is no economy at all.

Modified Expressways

Effective as the expressways or freeways will be in relieving congestion and providing for future traffic, they will have to be supplemented by additional arteries of similar nature and only relatively less significant—the modified expressways.

Due to several factors the Cincinnati Area requires provision of a greater mileage of such routes than are needed and would be justifiable in some other metropolitan areas of comparable population. The dispersal of residential development and the wide spacing between major highways due to topographic difficulties have caused concentration of traffic on comparatively few highways.

As noted before, the Cincinnati Area is characterized by towns that have grown up on both sides of radial highways, sometimes on ridges too narrow to permit complete neighborhoods to develop on both sides. While the theoretical ideal neighborhood is bounded but not crossed by major traffic arteries, in this Area it is difficult to find even a single neighborhood not crossed by at least one important highway. This makes it most imperative that through traffic be siphoned off from community and neighborhood streets onto expressways and modified expressways.

While not in the same category with the expressways or freeways, the modified expressways are of almost as great significance for local or regional use. From a local standpoint the relative functions of the two types of routes are so similar that the modified expressways should be considered routes which over a long period should be made to approach the expressways in physical standards as nearly as possible.

Right-of-Way Widths

The right-of-way width of the modified expressway is variable.

Through rural sections where it can be assumed that agriculture is the permanent use of the adjacent land, 120 feet is satisfactory as a minimum. Through urban areas where exceptionally rugged topography is encountered a right-of-way width of 100 feet may be used for four-lane movement with the opposing lanes separated by a center division or median strip.

Through older areas of the city where stores and residences abut the street a wider right-of-way is required than where frontage use is not practicable. Widening is necessary to create the higher standard of route. This can be accomplished by widening an existing street 50 to 60 feet to absorb the full depth of lots on one side. Access to existing frontage use is provided by a service drive, reserving the main pavement for moving vehicles.

Where an existing route is relocated in areas of future residential use and an entirely new right-of-way is necessary, a width of 212 feet is generally desirable.

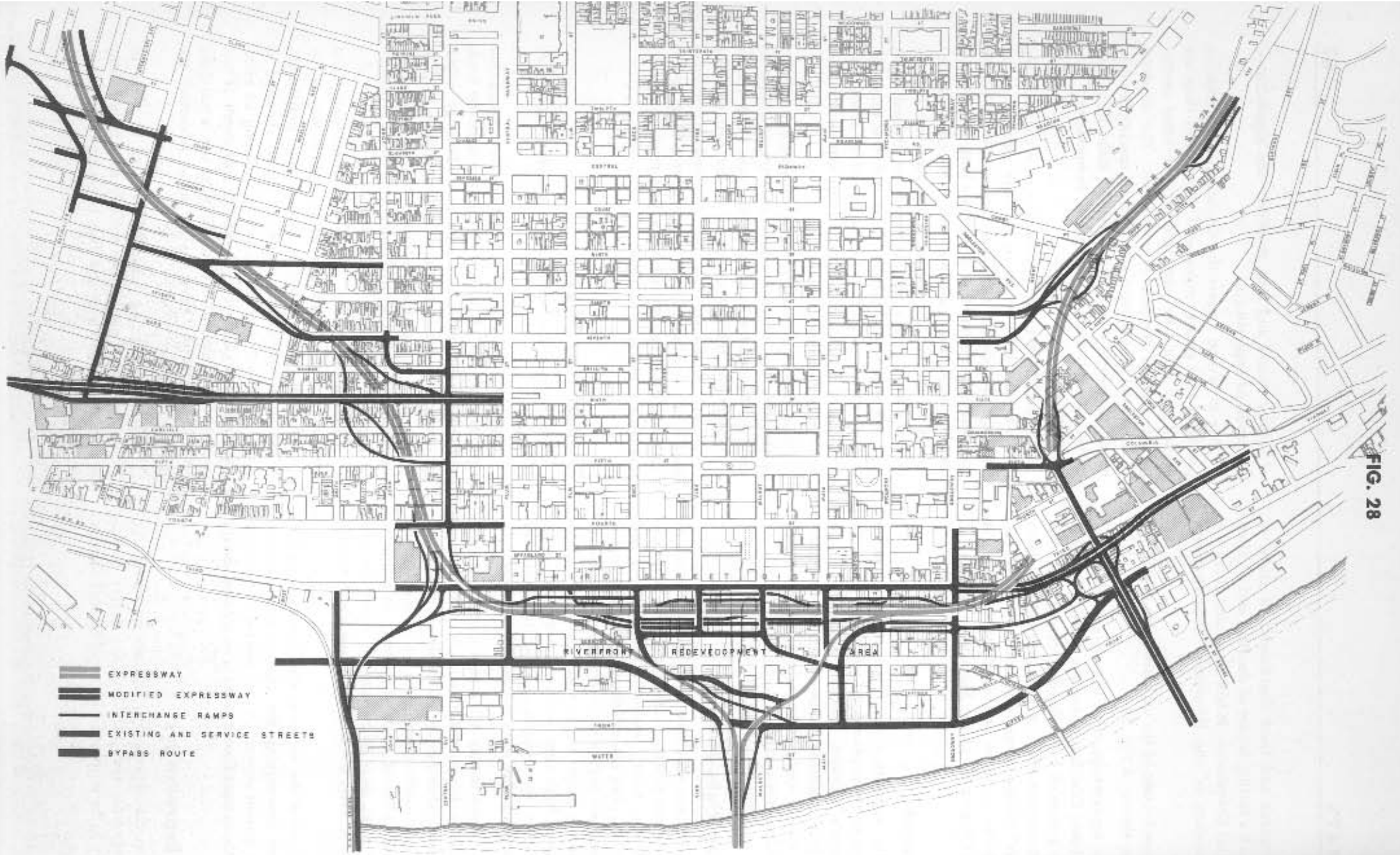


FIG. 28

EXPRESSWAYS IN DOWNTOWN CINCINNATI

In certain areas where residential development can be anticipated on one or both sides, right-of-way acquisition may be cut to 172 or 132 feet. Later, if needed for service streets, the 40 feet on each side can be acquired by dedication in the process of subdivision control.

Existing Routes

Because of topographic conditions some portions of existing routes are now functionally very much like modified expressways.

Columbia Parkway is one of the best examples. By continued betterment and physical changes such as are recommended in the Plan, it can become physically and functionally a modified expressway. To some extent River Road, Westwood-Northern Boulevard, Colerain Avenue, and portions of Alexandria Pike in Kentucky, fit into the modified expressway category.

Among the proposed modified expressways falling short most from the physical standards of such an expressway is William Howard Taft Road which because of its strategic position is one of the most important crosstown routes in Cincinnati. Potentially it has considerable regional importance. Its improvement is included in the Motorways Plan.

Recommended Routes

The Modified Expressway System is comprised of seven radial routes and two circumferential routes. The Redbank Modified Expressway is a short connecting route between the Columbia Modified Expressway and the Northeast Expressway. It is not included in the following list. Six of the radials are on the Ohio side of the river and one in Kentucky. Listed clockwise from the river they are:

1. RIVER ROAD MODIFIED EXPRESSWAY — Sixth Street-River Road-Hillside Avenue—U. S. 50.

2. QUEEN CITY MODIFIED EXPRESSWAY — Western Hills Viaduct-Queen City Avenue-Muddy Creek Road.

3. WESTWOOD-NORTHERN MODIFIED EXPRESSWAY—Hopple Street-Westwood-Northern Boulevard-Harrison Pike—U. S. 52.

4. COLERAIN MODIFIED EXPRESSWAY—Colerain Avenue-Hamilton Pike Relocation—U. S. 127.

5. COLUMBIA MODIFIED EXPRESSWAY—Columbia Parkway-Wooster Pike—U. S. 50.

6. CLOUGH MODIFIED EXPRESSWAY—Beechmont Avenue-Clough Pike-Cincinnati-West Union Road.

7. ALEXANDRIA MODIFIED EXPRESSWAY — Saratoga Street-Alexandria Pike—U. S. 27 Kentucky.

8. WILLIAM HOWARD TAFT MODIFIED EXPRESSWAY — Crosstown (William Howard Taft Road.)

9. CINCINNATI BYPASS MODIFIED EXPRESSWAY—Springdale Road - Kemper Road - Symmestown Road.

A detailed discussion of each of these modified expressways, their status as existing routes, their conversion under the Plan, and their proposed cross-sections will be found in Chapter V of the Motorways report.

Roadside Development

The proposed expressways and modified expressways should be attractively developed to the extent consistent with safety and efficiency. Their wide right-of-ways permit avoidance of steep cuts and ditch-like gutters so that with proper surface treatment maintenance can be reduced to the minimum.

They afford opportunities for the planting of shrubs and trees to produce a pleasing appearance and where needed, to screen out unpleasant views. Many sections of the expressways and modified expressways are located between communities in valleys or along hillsides where the scenery is inherently attractive.

Given such conditions these routes will have much of the esthetic quality formerly associated with "parkways," which traditionally were regarded as ways for pleasure driving. No provision is made in the Motorways Plan for "parkways" as such. Where the major routes are properly designed, meeting expressway standards, their use by heavy, slow-moving commercial vehicles is neither a hazard nor a hindrance to other traffic.

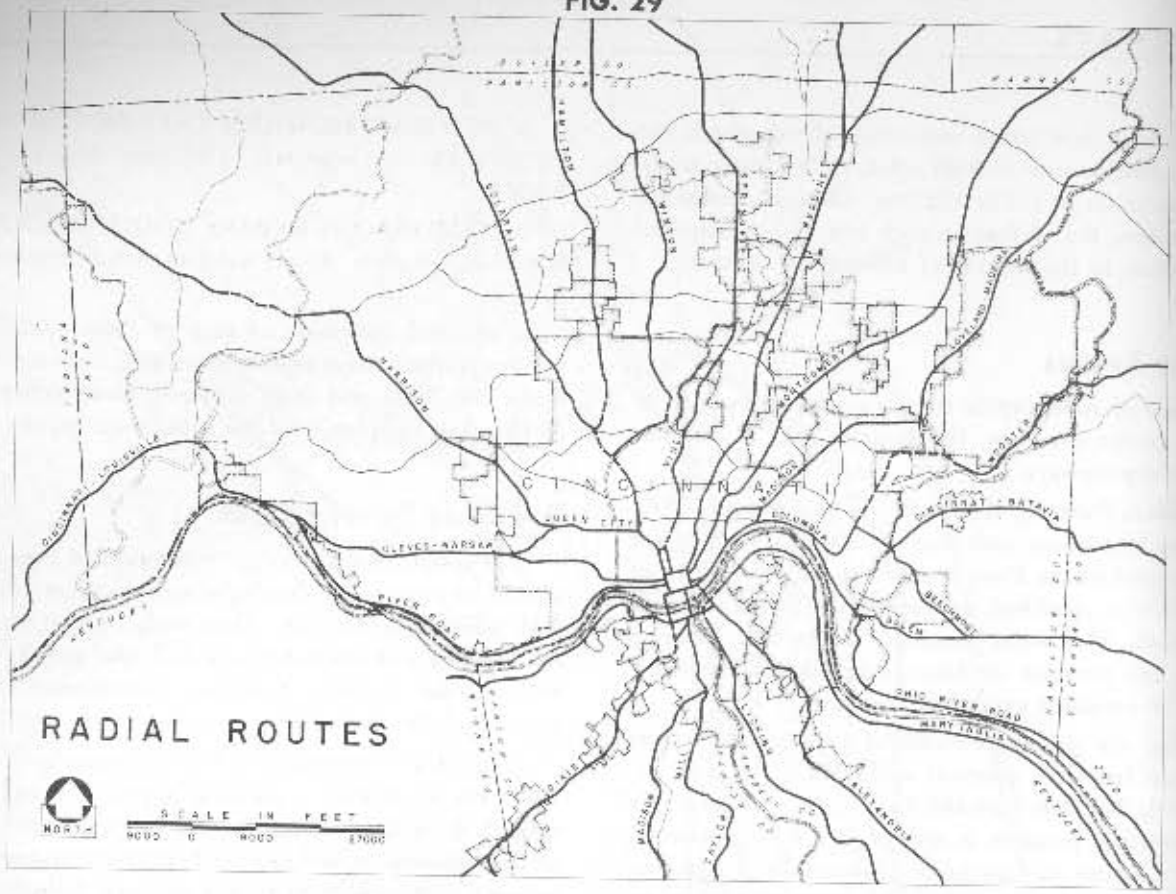
The expressways are intended to serve all types of motor vehicular traffic. They should, however, provide roadside amenities just as if they were labeled "parkways." Consideration should be given to suitable distribution of roadside parks and parking turnouts to take advantage of scenic views, to provide convenient and pleasant resting places for drivers and for the protection of abutting property.

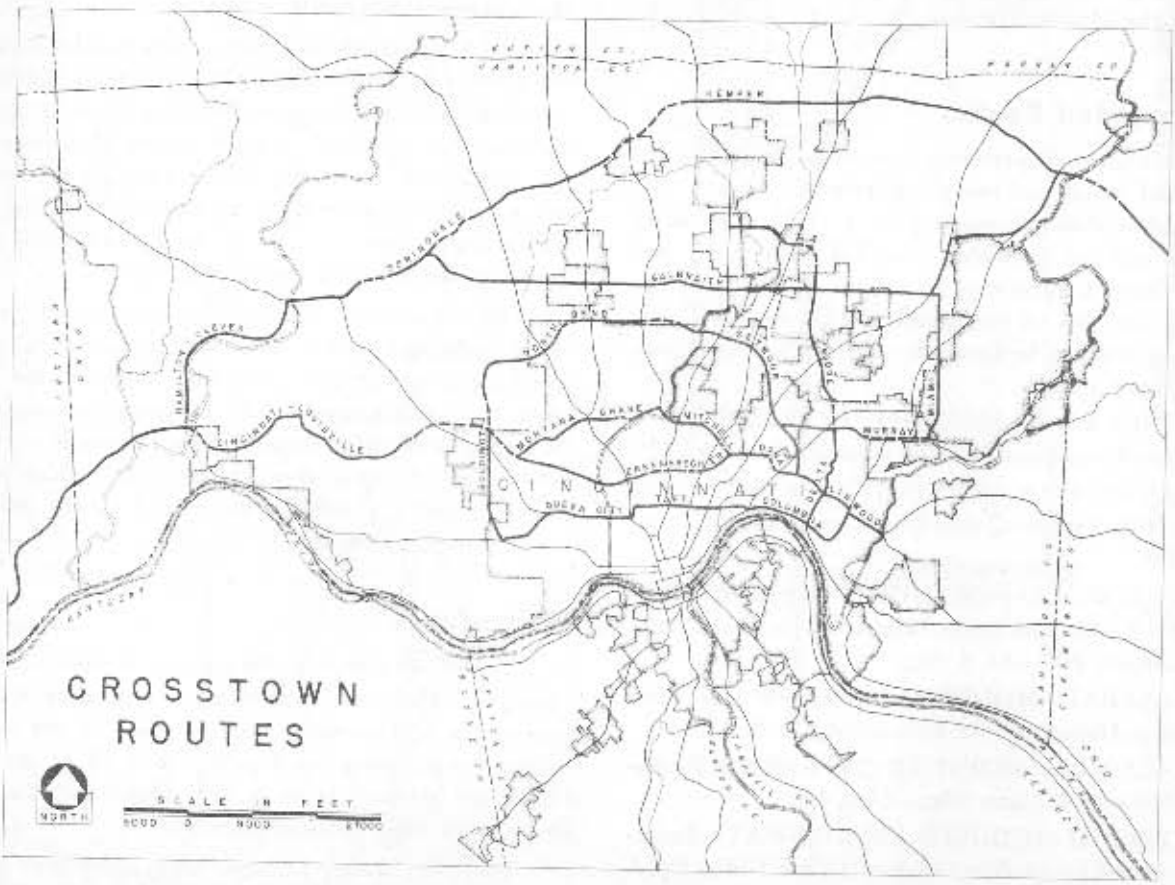
Thorofares

Thorofares complete the pattern of major traffic circulation. Those making up a basic primary system of routes, as well as some parts of some of the modified expressways, appear in Fig. 29. Not all of the thorofares are primary as to traffic volume but are shown because of their route importance.

They vary widely in importance. This may be illustrated by comparing West Fork Road with Reading Road or Spring Grove Avenue with respect to strategic loca-

FIG. 29





THE PRIMARY THOROFARE SYSTEM

CINCINNATI METROPOLITAN MASTER PLAN

FIG. 30

PLAN OF THE BASIN

NORTH

SCALE IN FEET
400 0 400 1200 2400

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CINCINNATI OHIO

LEGEND

LAND USE
- RESIDENTIAL
- COMMERCIAL
- INDUSTRIAL
- DOWNTOWN QUADRANGLE
- PUBLIC PROPERTY
- PUBLIC AREAS THAT DEFINE COMMUNITY BOUNDARIES

FACILITIES
- MOTORWAYS
  - EXPRESSWAY
  - MODIFIED EXPRESSWAY
  - THOROFARE OF SUFFICIENT WIDTH TO BE WIDENED
  - PROPOSED
- PARKING
  - LOT
  - STRUCTURE
- PROPOSED SCHOOLS
  - ELEMENTARY
  - JUNIOR HIGH
  - SENIOR HIGH
- PROPOSED RECREATION
  - PARK
  - PLAYFIELD
  - PLAYGROUND

METROPOLITAN MASTER PLAN

tion or traffic loads. The former carries approximately 1,000 vehicles daily while each of the other two carries over 30,000. But each is a thorofare by virtue of required community service, continuity of route, access to other roads, and other reasons.

A rather large rural area around Metropolitan Cincinnati is satisfactorily served by the rural road system. Because no great concentration of population is expected in these areas no close network of thorofares is necessary. Many of these roads, particularly through areas of rugged topography along the Great Miami River Valley and in the Kentucky rural area, will continue to serve such traffic as uses them.

From the standpoint of continuity, traffic demands and route locations, the primary routes shown in Fig. 29 warrant right-of-way widths of 100 feet.

Other Thorofares

The primary system shown in Fig. 29 must be supplemented by other thorofares to complete the traffic circulation system of the Area. These thorofares, while not less important from the community standpoint than the primary routes, are for the most part shorter, with lighter traffic volumes and less prominent route locations. For them, right-of-way widths of 80 feet are recommended. The complete system is shown in the Motorways Plan, Fig. 27.

Thorofares and Streets in the Basin Area

The whole Basin Area has a terminal character and as a result there is general traffic interchange and circulation. Streets begin to function as thorofares, as defined in the Master Plan, beyond the edge of the quadrangle bounded by Third Street, Broadway, Central Parkway and Plum Street.

Fig. 30 shows the thorofare plan of the Basin area.

Downtown Streets

The plan for future streets in the entire downtown area presents a problem involving three fundamental factors: (1) the impact of the expressways, (2) public transit, and (3) parking facilities. The factors of Public Transit and Parking are covered in separate chapters carrying those titles, in this volume.

The expressways are extremely important to the complete solution of the downtown traffic problem. While they can be expected to afford superior access to the downtown section and relieve present thorofares, they could add materially to the problem of downtown congestion if parking facilities are not adequately provided.

In 1941, a time of general peak volumes, all of the north-south downtown streets below Seventh Street from Plum to Broadway were used to capacity during peak hours. East-west streets, west of Vine and from Third to Central Parkway, excluding the latter, carried 54,300 vehicles against a theoretical aggregate capacity of 63,680 vehicles.

The Third Street Distributor will pull traffic from Fourth and Fifth Streets, freeing east-west streets through the south portion of the Central Business District. The expressways will attract a proportionate amount of present north-south traffic and correspondingly relieve north-south streets.

Because of the intersection peculiarities and alignment of Eighth and Sixth Streets at Elm, Fifth Street at Vine, and the physical layout of Fountain Square, the capacity of the east-west streets involved is at a minimum at these locations. These conditions will be relieved by the Third Street Distributor. On the north side Central Parkway has ample capacity.

The expressways will also cause some freeing of north-south streets to the north of the business district. One difficulty in the downtown area now is that no northbound street without car tracks is operated one-way north through the business district, similar to the operation of Race Street as a one-way south street. Race Street is adequate in width to handle its additional future function as the south-bound approach to the Suspension Bridge.

Main Street, recommended to be made one-way north, will need to be widened at least as far north as Fourth Street to accommodate a descending ramp slot to receive transit vehicles for the proposed express transit terminal under Government and Fountain Squares. (See chapter on Public Transit.)

Another present difficulty is the narrowness of Seventh Street, east of Main. Widening of this stretch, with a ramp to the Gilbert Avenue Viaduct, is now under way. This widening, recommended in the Motorways Plan, will enable eastbound traffic on Seventh to continue across Sycamore and Broadway directly.

The expressways will allow the downtown area to empty much more quickly around the edges. The elimination of street cars, as proposed in the Transit Plan, will likewise increase speed and flexibility of movement. Ample parking facilities around and close to the perimeter of the Central Business District will decrease the traffic that now circulates through it in the peak hours.

Recommendations of the Plan for changes in downtown street traffic operation through designation of additional one-way streets will provide some immediate relief, pending completion of the expressways. These

one-way changes involve public transit vehicle routings which must be taken into consideration. They are detailed in the chapter on Public Transit.

Railroad Grade Crossings

Through the Mill Creek Valley grade crossings of the B. & O. and New York Central Railroads present a problem which has been examined in the study of railroad needs for the Area and which is treated in the chapter on Railroads in this volume.

Motorway Recommendations

Appendix G in the Motorways report, which has been officially made a part of the Master Plan of the Cincinnati City Planning Commission, contains a tabulation of all the Master Plan recommendations for the improvement of the Area's motorways system. The motorways are listed alphabetically by name and the various sections of each subject to improvement are listed separately. The existing and proposed right-of-way widths, pavement widths, and the number of lanes for moving traffic are shown for each motorway and for each section.

Steps Toward Effectuation

A program for carrying the Motorways Plan into effect must be long-range but certain essential features should be scheduled for earliest possible accomplishment. Concurrence with the general location of the expressways is required by the Ohio and Kentucky State Highways Departments. Then should follow preparation of engineering studies of each route.

Agreement relative to the Third Street Distributor and its relationship to the Dixie Expressway as well as to the other Ohio River crossings must also be established.

There should then be legal reservation of the needed right-of-way for all expressways by all of the governmental units or agencies concerned. The choice of routes is rather limited and at certain key points practically no alternative is feasible.

As the approximate width required for expressways is 330 feet no substantial portion of their right-of-way can be acquired by subdivision control. The subdivider could be expected to dedicate some portion of their width but the remainder must be purchased. The necessity of preserving routes through undeveloped areas accentuates the desirability of establishing alignments and right-of-way widths without delay.

The proportionate financial responsibility of each governmental unit for completion of the expressways should be determined by agreement as soon as possible.

To round out the program for State and Federal highways the City and Hamilton County should work out an agreement with the State of Ohio for the modified expressway system. Such concurrence will establish the basic pattern of the Motorways Plan and right-of-ways can then be protected.

In the past the City Council of Cincinnati has adopted legislation establishing right-of-way lines of streets proposed for widening. This program should be expanded to include various widenings and connections indicated in the Motorways Plan.

Chapter 8
PUBLIC TRANSIT

On an average day approximately one million vehicular trips are made through the Metropolitan Area, about 40% of them in public transit vehicles. The percentage is higher in the great daily mass movement of people between the residential communities and the downtown area. Dependence of the people upon public transit in their daily activities makes its role a vital one.

As public transit uses the public streets, the Public Transit Plan has a close relationship to the Motorways Plan. Certain facilities proposed in the latter are the bases for recommendations in the Public Transit Plan.

Present Transit System

Cincinnati and its environs are served through a network of surface street car and bus lines. As newly-populated areas have developed the route pattern has been extended through the installation of bus lines. The four bridges across the Ohio River are all used in some degree. Kentucky transit vehicles cross into Cincinnati where they have their terminals. None of the Cincinnati system's vehicles cross into Kentucky.

The Metropolitan Area is served to a very large extent by the Cincinnati Street Railway Company on the Ohio side of the river and the Cincinnati, Newport and Covington Railway Company on the Kentucky side. These two systems are supplemented by several bus systems operating to nearby cities beyond the Metropolitan Area.

At present service in various degrees of convenience to patrons is available to about 85% of the Area. The portions remaining unserved are those in which the population density is too low to make transit service economically justifiable.

Downtown Routing

Public transit now enters the downtown area from all sides and filters through it in a multiplicity of loops of varying lengths. Vehicles of the Covington Division of the C. N. & C. Railway Company run from the Suspension Bridge directly into the off-street Dixie Terminal via an overpass over Third Street. In general intercity and local vehicles are routed to their terminals by the most direct route now available.

An undesirable feature of the downtown routing of public transit vehicles is the many turning movements at intersections of heavy pedestrian traffic. This is particularly conspicuous on Vine Street at Fourth, Fifth and Sixth Streets. Other heavy pedestrian movements occur along Race and Walnut Streets from Fourth to Seventh Streets inclusive. The heaviest combined public transit movements occur on Walnut and Main Streets north of Sixth Street.

Terminal Facilities

In the downtown area street car and trolley bus routes terminate in loops. Bus routes, with two exceptions, terminate in Government Square at exposed loading zones marked on the pavement.

Vehicles of the C. N. & C. Railway Company and its subsidiary Dixie Traction Company make limited stops south of Fourth Street and with few exceptions use the two levels of the Dixie Terminal. There is on-street loading on Broadway at Third and Fourth and at mid-block zones on streets flanking the terminal block.

Buses of the Ohio Bus Lines discharge at loading zones used by Cincinnati Street Railway buses and terminate their routes in the Greyhound Bus Terminal at Fifth and Sycamore. The Ohio Valley Transit line uses space at 513 Sycamore Street as its terminal. Except for buses of the Trailways System which has its own terminal near the northeast corner of Fifth and Sycamore, intercity buses use the Greyhound Terminal at the southwest corner of that intersection.

Relation to Community Development

The Master Plan recognizes the desirability of improving existing communities and assisting in the proper development of new comunities. Recommendations covering their various aspects have been made with the purpose of encouraging stability and better living conditions within them. Public transit must offer convenient service to all the residential areas.

The automobile and bus have enabled community development to proceed at a greater distance from the central city. When a neighborhood begins to develop a public transit route assists in spreading such development toward community proportions. This influence of public transit carries with it the responsibility of offering commensurate service to the spreading population.

The public transit rider is interested in speed and convenience of service in his daily rides between home and city. This means as much express service as possible particularly to the well-populated outlying communities.

Future Population Distribution

The distribution of the increased population expected by 1970 among the various communities is discussed in the Residential Areas report. The population of the first tier of communities outside the Basin can be assumed to be stabilized or stabilizing. Over the last ten years the Kentucky counties show a similar trend toward stabilization.

There are ten general areas north of the Ohio River which can accommodate major increases in population: Delhi Hills west of Price Hill; Westwood Hills; Northwest Hills north of Mt. Airy and east of College Hill; Greenhills; Upper Valley (particularly the Wyoming area); Seymour, Northeast Hills; the Mariemont Area in Madison community; Terrace Hills (particularly Indian Hill); and Anderson Hills south and east of Mt. Washington.

Further concentration of population in these outlying communities will require increased express transit service.

Use of the Expressways

The Motorways Plan, discussed in the chapter on Motorways, contemplates a system of expressways and modified expressways. Development of these proposed routes will afford high-capacity traffic arteries for fast travel to serve all portions of the Metropolitan Area. The thorofares will act as feeder routes to the various neighborhoods in each community.

The expressways and modified expressways are designed for use by public transit vehicles. Turnouts for buses and protected platforms for passengers can be incorporated in the design. These types of stations are warranted where heavy transfer movements occur. Sketches of a station so equipped appear as Fig. 6 in the Motorways report. At points of light transfer movement buses might move by means of the interchange ramps onto the adjacent street outside the expressway to a stop, and return to the expressway by the same means.

Expressway design will permit operating speeds as high as 50 miles per hour. This approach offers rapid transit potentialities in Cincinnati beyond any scheme previously proposed.

Requirements of Local Service

The local routes (in general those whose area of origin is within about four miles from Fountain Square) should operate on the downtown streets in such a manner as to contribute to the efficient functioning of that area. This means, in general, 1) continuing conversion to rubber-tire operation; 2) provision of an off-street express terminal, and 3) elimination of as many turning movements as possible at downtown intersections.

Rubber-Tired Operation

The motor car has the advantage of flexibility of movement. Both the trolley bus and the gasoline bus load and unload at the curb, eliminating the hazardous loading platform.

The Cincinnati Street Railway Company and the Cincinnati, Newport and Covington Railway Company have already converted many street car routes to rubber-tire operation. The former recently outlined a tentative timing program for practically complete conversion over a period of years. A schedule of this kind, contingent upon such governing factors as street paving and construction, financing, and progressive needs for new equipment, must be flexible. The lines already converted have demonstrated the merit of the plan. On the south side of the river, only one street car line remains.

Terminal Facilities

For rapid operation express transit routes require an off-street terminal, preferably grade-separated. A practical location for such a terminal is a lower level under Fountain and Government Squares. This location is suitable in relation to 1) downtown destinations, 2) the open area of the two squares involved, and 3) accessibility to the expressways via the Third Street Distributor. A terminal of this type is discussed later in this chapter.

The sizeable Kentucky portion of the metropolitan system requires a terminal in the Cincinnati downtown area and the Dixie Terminal which now serves most of its vehicles is well located from the standpoint of service. Future expansion of the system and possible congestion of the Dixie Terminal would call for additional facilities.

The Rapid Transit Project

Consideration was given in the Master Plan to possible use of the so-called Rapid Transit Project, built in part years ago, which consists of a graded and drained rapid transit right-of-way and covered subway along Mill Creek Valley from St. Bernard to Central Parkway and Walnut Street.

Following an exhaustive analysis published in full as Chapter III in the Public Transit report, it is recommended that this project be converted to other uses and arrangements made to develop detailed plans for expressways and to provide for their use by public transit buses. In the meantime, express bus service over existing streets can be expanded and possibly improved.

Express Routes

The routes for which express service is contemplated are primarily those whose tributary areas are so situated that they may take fullest advantage of the expressway sysem. Significant increases in population in outlying communities have created a demand for public transportation at greater distances from the downtown area. This trend will continue.

Public transit vehicles must now use the congested radial thorofares to reach the more distant communities and considerable extra time is consumed. This encourages the potential public transit rider to use his automobile even though he travels on the same thorofares and thereby adds to traffic congestion.

The proposed express transit system is shown in Fig. 31.

During rush hours when loading justifies express operation these lines would be routed as shown. Leaving the downtown terminal the typical express vehicle would go directly onto the expressway via the Third Street Distributor. It could make stops at a few strategically located bus turnout stations where connections with the local or crosstown routes could be made on the upper level. After leaving the expressway upon reaching the tributary area, the vehicle would operate as a local.

Kentucky Express Service

In the Kentucky communities express service is offered on two express routes between Cincinnati and Dayton and Ft. Thomas. This service is on a limited stop basis. Express service should be considered for Southgate when the population of that area reaches greater concentration. The Dixie Expressway will offer unexcelled express service to the Latonia, South Fort Mitchell and Erlanger areas. Later appreciable growth in the Park Hills and Fort Mitchell area might require express service.

Non-Rush-Hour Operation

While express bus operation is warranted during rush hours, it is not necessary on certain lines in base or non-rush hours. During these periods one or more of the longer express bus routes could be kept in operation on the expressways with privilege of transfer to local lines or express shuttles.

Prior to construction of the expressways, express service can be offered to an increasing number of patrons by extending the present practice of limiting the stops on the longer lines. This type of service has been familiar in Cincinnati since 1926.

Fare Policy

It may be necessary to charge slightly higher fares for future limited-stop bus service on the expressways than those prevailing for local rides. This is to be expected because of the intensive peak demands characteristic of such service.

Local Routes

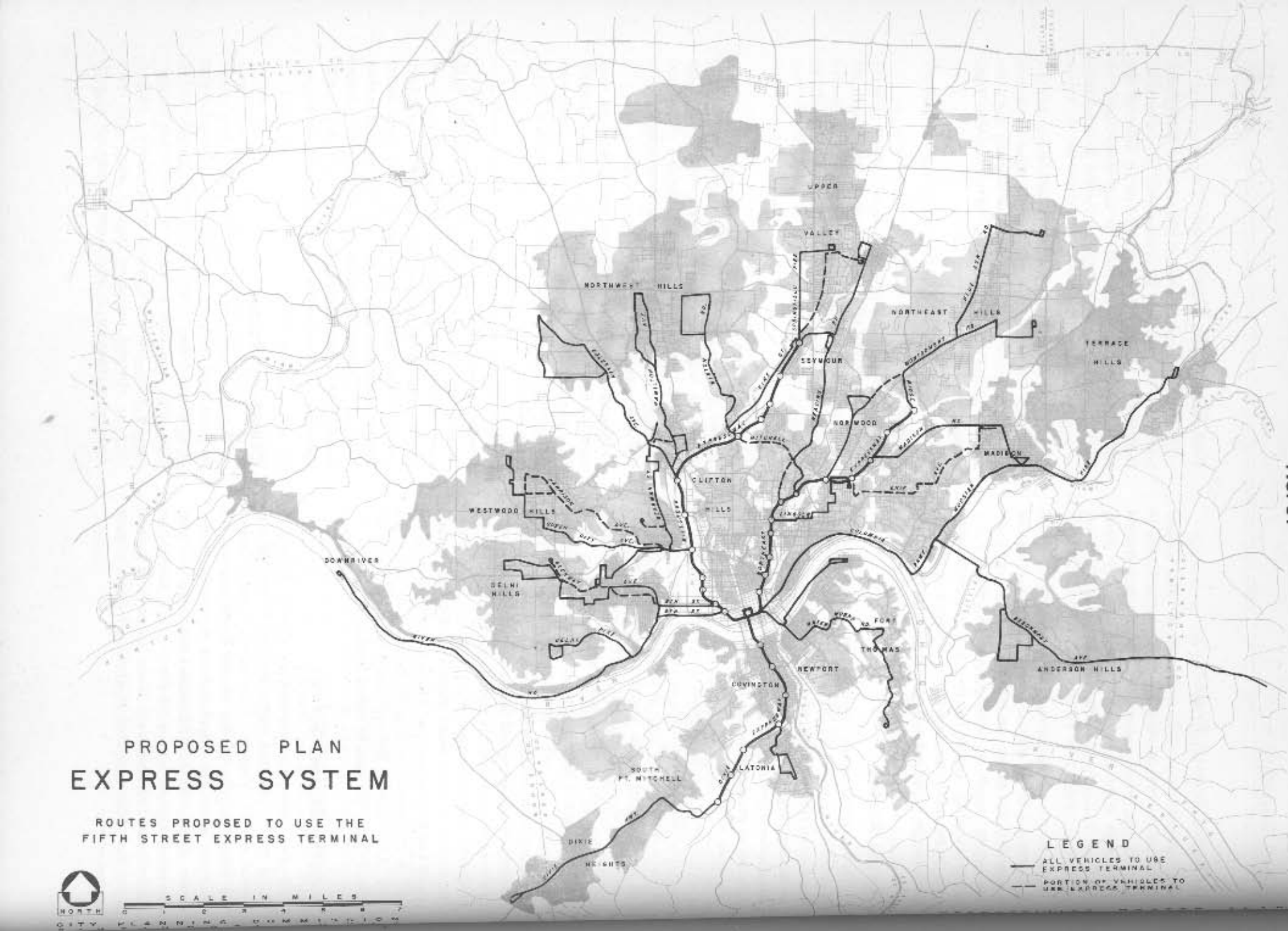
The express system must be complemented by a system of local routes. As not all transit riders are destined for the Central Business District, these local routes meet the need for travel between other origins and destinations.

Express service is not warranted within the area three or four miles from the Central Business District. This applies particularly where there is a continuous concentration of population along the routes from downtown outward.

Local routes cannot maintain operating speeds comparable to those using the expressways. But through the removal of substantial volumes of traffic from the local thorofares by the expressways, and by the elimination of such congesting factors as curb parking, poor pavements, and street car tracks, local transit will make better average speed than at present. The conversion of trolley lines to rubber-tire operation, particularly to gasoline buses, will permit modification of terminal loops in suburban communities for wider spread of service.

Crosstown Routes

A transit system in a large metropolitan area cannot be considered complete without a well-planned system of crosstown routes. These have three primary functions. First, they must offer a convenient connection between two or more important radial transit routes. Second, they are essential for short trips of inter- and intra-community character, in which respect they are of great



PROPOSED PLAN
EXPRESS SYSTEM

ROUTES PROPOSED TO USE THE
FIFTH STREET EXPRESS TERMINAL

CITY PLANNING COMMISSION

FIG. 31

FIG. 32

CIRCULATION SCHEME FOR TERMINAL TRANSIT

NORTH

SCALE IN FEET
0 200 600 1200

CITY PLANNING COMMISSION
CINCINNATI OHIO

METROPOLITAN MASTER PLAN

service as access to schools, industrial districts, etc. Third, they provide service to parts of the Metropolitan Area located at some distance to either side of a major radial route.

Cincinnati now has four major crosstown routes: Crosstown Trolley Bus; Clifton-Hyde Park Bus; Cumminsville-Oakley Bus and Oakley-Pleasant Ridge Bus. In addition there are three short crosstown routes, the Montana Avenue, Price Hill-Cheviot and McHenry Road buses, all of which serve Westwood Hills and act also as shuttle buses.

Crosstown routes must function either as long routes or as a series of short routes. This depends on the riding habits involved. In the case of short routes they act as shuttle routes.

Properly integrated crosstown and radial route schedules are essential to maintain a uniform quality of service over the entire metropolitan system. During rush hours transit patrons expect to make transfers to the more heavily travelled crosstown routes with a minimum of waiting time.

Metropolitan Bus Service

Metropolitan transit service usually consists of buses scheduled on one-half to one hour headways for distant satellite communities. At periods when loading intensifies extra sections are added to regularly scheduled trips. The areas through which these movements occur are rural and the local system does not reach them. As population grows demand arises for more complete service and local service is called for. The local system continues to spread; various lines are extended and new routes added.

Many of the outlying villages within the Metropolitan Area or within its influence have such a small population or are so remote that they would be as effectively served by an intercity metropolitan type of service as by a local service.

Intercity Bus Service

Modern interregional or intercity bus lines now connect all major cities and most of the smaller towns served by good highways. Their operational features involve tickets, personal baggage, express and the like.

It is proposed that intercity buses be routed over the expressways and modified expressways. To make it unnecessary for them to leave the expressways to pick up or discharge passengers they will use the same turnout stations provided for city express buses. Their use of these same turnout stations will make the crosstown local service available to such passengers. Licensed cab stands for convenient local transportation might also be available.

Parking lots could be developed in conjunction with the transit stations, particularly those a considerable distance from the downtown business district, for the convenience of such patrons as would drive their automobiles to an express station and continue their trips on express vehicles.

Express Terminal

The development of an express transit system, the conversion of vehicles to bus operation, the concentration of destinations downtown, and mounting street traffic congestion require better transit terminal facilities than the surface streets alone can offer. The Master Plan recommends that an underground terminal be built under Fountain Square and Government Square.

A possible design for such a terminal is shown as Fig. 15 in the Public Transit report. It consists of a lower level at which the buses load and unload, and a mezzanine level for movement of passengers to and from loading platforms. A highly desirable feature, which will considerably reduce sidewalk congestion, is the system of direct connections from the mezzanine level to various large buildings in the vicinity.

An access tube is required by the terminal in Main Street so that vehicles may enter from Third Street, and an exit tube in Vine Street to Third Street. Each tube should be of two-lane width to facilitate movement. The circulation scheme is shown in Fig. 32.

The terminal need not be restricted to express vehicles. Local vehicles have quick access to the Main Street portal via Sycamore or Broadway and west on Third. Exit would be either to Race or Elm Street.

The two-lane portal in Main Street would require the widening of that street between Third and Fourth. Widening the right-of-way preferably on the east side would also provide two clear lanes on each side of the portal on the Main Street surface for vehicles passing the portal structure.

As Main Street would be a principal entrance for vehicular traffic into the downtown area and parking facilities further north along Main and Sycamore Streets, consideration should be given to widening Main Street to Fifth Street in conjunction with the widening between Third and Fourth Streets.

Terminal Concessions

Without detriment to terminal operation and as a revenue producing measure pedestrian traffic along the mezzanine level would encourage the location of shops and display windows here.

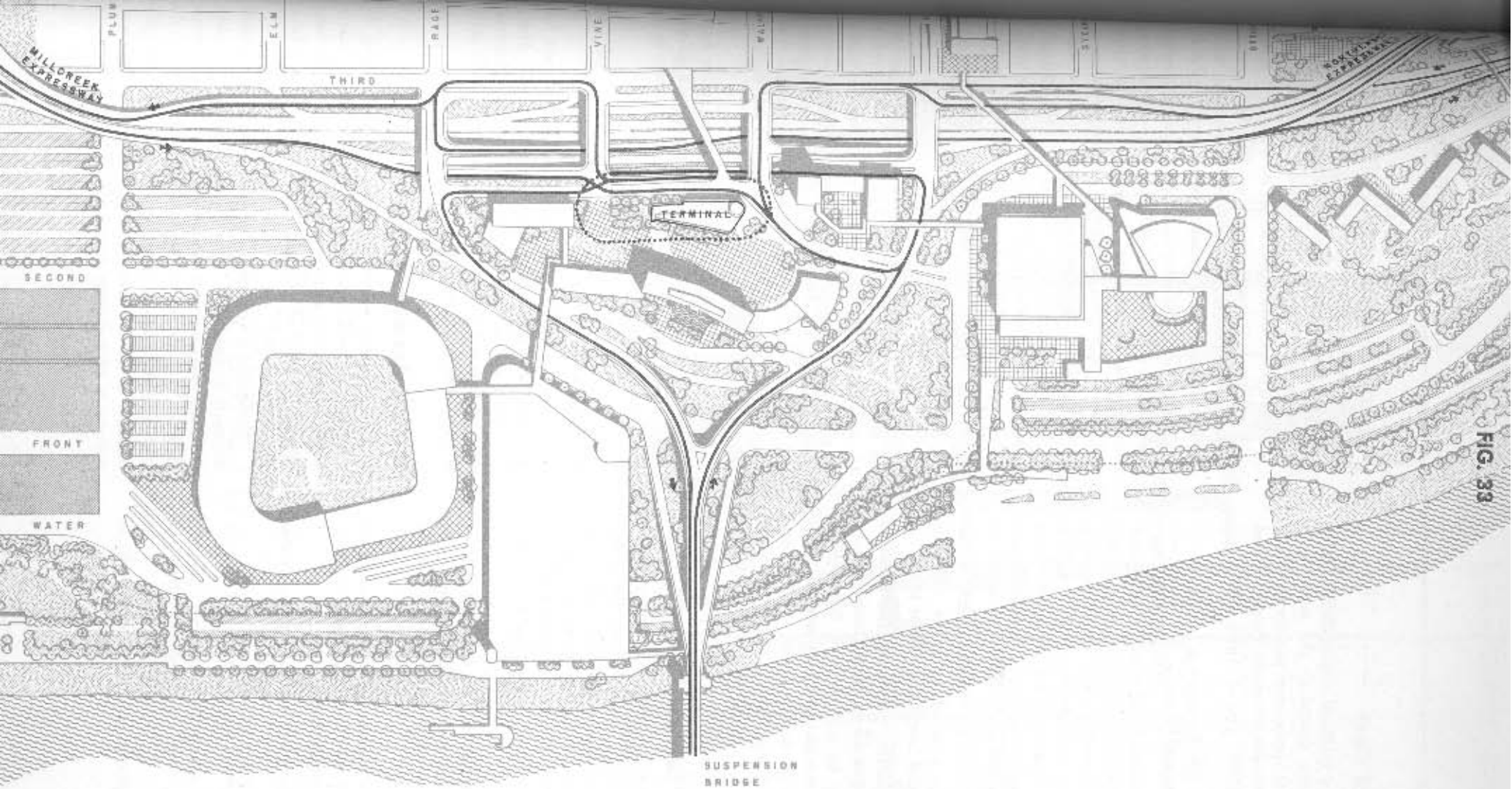


FIG. 33

INTER-CITY BUS TERMINAL ROUTING

NORTH

SCALE IN FEET
0 100 200 400 700

CITY PLANNING COMMISSION
CINCINNATI OHIO

DOTTED LINES INDICATE UNDERSURFACE MOVEMENTS

METROPOLITAN MASTER PLAN

Estimated Terminal Cost

It is estimated that a terminal appropriate for the transit needs of the Area, including the subway approaches, mezzanine level, pedestrian passageways, and the street terminal improvement would involve a cost of approximately $6,000,000. (As of April, 1948.)

Intercity Bus Terminal

An intercity bus terminal is proposed in the Riverfront Redevelopment Plan as a part of the central building group. It would be located south of the Third Street Distributor between Vine and Walnut, within a short distance from Fountain Square. These buses would use the expressways and patrons would reach their final local destinations by local surface buses routed to and from the terminal.

The terminal can be planned to utilize both the surface level and the Third Street Distributor level.

The lower level or loading area is reached by buses via a down-ramp from Main Street. After loading, buses proceed on an up-ramp to exit on Vine Street. The ground floor will accommodate waiting rooms, ticket offices, etc., at an elevation slightly higher than present Third Street. The operational routing scheme is shown in Fig. 33.

Ultimate Plan for Surface Routing

Some lines now using the downtown streets will be handled on the expressways. These will use the underground terminal. This arrangement will reduce the number of transit vehicles on the downtown streets but will not eliminate them entirely. A plan has been evolved for the remainder of these surface transit vehicles.

Such a plan by its very nature, developed as it is on the basis of several assumptions, should be considered flexible. Assumptions on which it is based should be kept in mind.

Fig. 34 illustrates the recommended plan and shows the routing and transit flow volume. The plan is predicated on the following assumptions:

1. That all street cars will be replaced by rubber tired vehicles.

2. That the expressways will be built and used by express transit vehicles.

3. That projected changes in the street system will be made.

4. That the Underground Express Terminal will be in operation.

The Plan contemplates the adoption of the proposed extensions of the one-way street system, the widening of Seventh Street between Main and Broadway and the new ramp connection to the Gilbert Avenue Viaduct.

Of the 702 transit vehicles per hour (including Kentucky vehicles) 325 will operate on the surface streets. This plan will distribute them over a number of streets to eliminate excessive concentration on any single street.

As illustrated the proposed route system comprises a series of long loops. This will eliminate turning movements in the central core. Movement at intersections with heavy pedestrian movements is straight across the intersections with minimum interference to other traffic.

The long central loop in Walnut and Vine Streets is shown routed into the area proposed for redevelopment. This loop will service the proposed central building group of the Riverfront Redevelopment Plan.

All Price Hill buses are routed in a wide loop east on Fifth to Main, north on Main to Ninth and west on Ninth. Northeastern loops entering on Reading Road are routed to Fourth, west on Fourth to Vine, north on Vine to Central Parkway thence returning to Reading Road. Vine Street would have the greatest number of vehicles. With elimination of street cars and operating as a one-way street without turning movements at Sixth it should be considerably less congested and the traffic flow much smoother.

Highland and Auburn Avenue lines retain loops similar to present routing except that when Liberty Street is widened these vehicles should continue north on Main to Liberty and thence turn east.

Shuttle Service

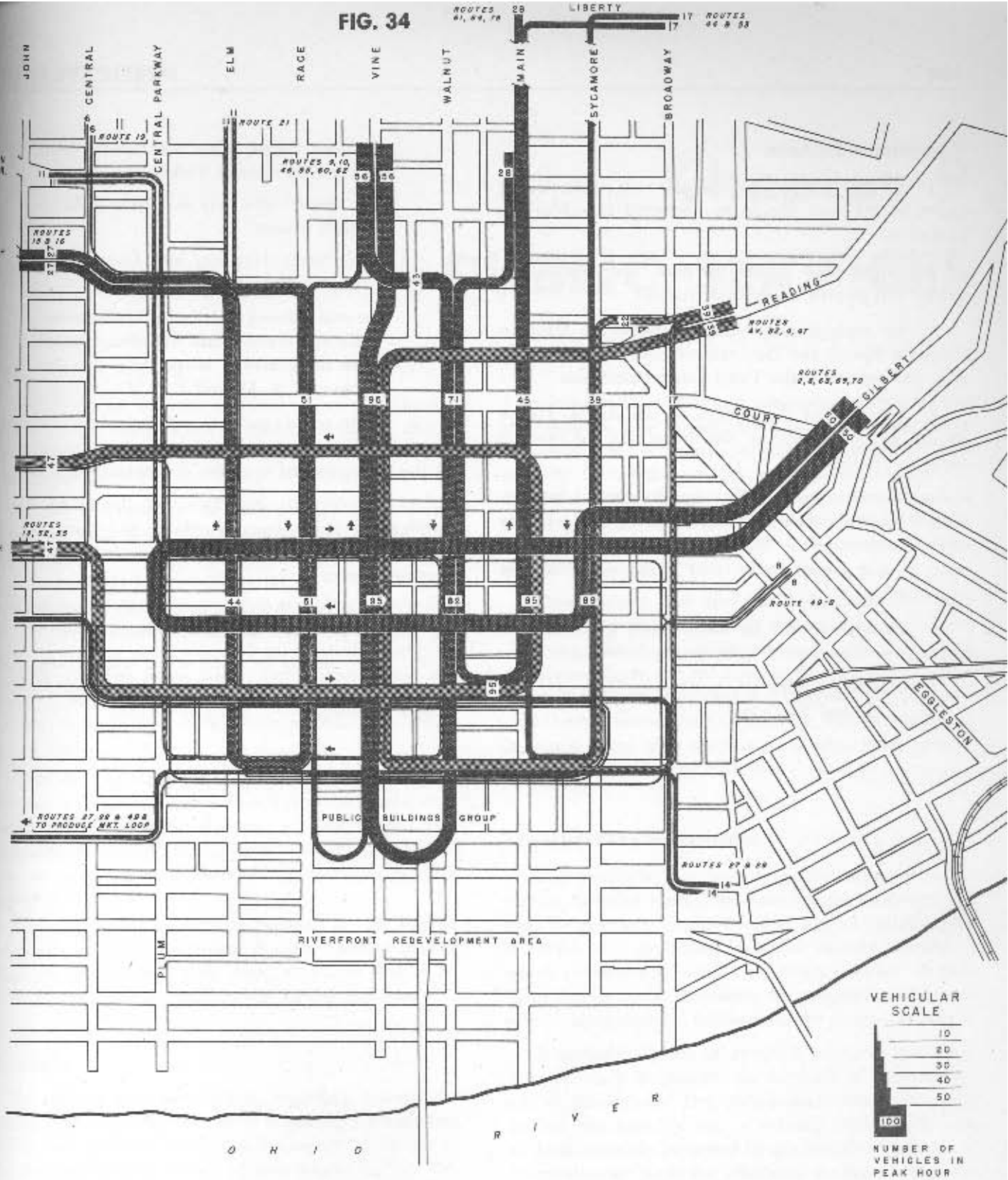
The system of surface routings obviates the need for an elaborate system of downtown shuttle routes. However, when and if there is a flow of passengers between the core area and fringe parking areas, such traffic must be provided for by shuttle buses.

Surface Terminal Facilities

The proposed surface routing plan will bring 95 vehicles per peak hour through the present surface terminal at Government Square. While this is a decrease from the present 114 vehicles, the Square will still function as a terminal.

The existing facilities in Government Square should therefore be improved. This should be done in addition to the underground terminal facilities. The present facilities provide reasonably adequate capacity for the large concentration of buses, but there is a definite need for a more suitable terminal recognizing the convenience and safety of boarding and alighting passengers.

FIG. 34



ULTIMATE SURFACE ROUTING FOR PUBLIC TRANSIT

DOWNTOWN CINCINNATI

ALL RUBBER-TIRED OPERATION

NORTH

SCALE IN FEET

400 0 400 1200

CITY PLANNING COMMISSION
CINCINNATI OHIO

METROPOLITAN MASTER PLAN

Recommendations

1. As part of the ultimate plan all public transit routes in the Area should be converted to rubber-tire operation.

2. Expressways should be built and express bus service inaugurated along these routes.

3. An underground terminal should be built in Fountain Square and Government Square with subway tube connections to the Third Street Distributor.

4. The idea of completion of the Rapid Transit Project as such should be abandoned and the existing tubes put to other use.

5. The downtown surface routing should be rearranged as the public transit routes are converted to rubber-tire operation. The loops should be extended so as to offer greater traffic relief in the central core of congestion.

6. Changes should be made when practicable in downtown street traffic operation as follows:

Vine Street: One way north from Fifth to Central Parkway.

Sycamore Street: One way south from Third to Central Parkway.

Fifth Street: One way east from Vine to Main Street:

Ninth Street: One way west from Broadway to Main Street.

The area between Third and Ninth Streets, Central Avenue and Broadway should be designated a no-parking area between 7 A. M. and 6 P. M.

7. Route rearrangements and end-of-the-line modifications where needed should be made when street car routes are converted to rubber-tire operation.

8. The Intercity Bus Terminal should be located south of the Third Street Distributor and integrated with the public building grouping as shown in the Riverfront Redevelopment Plan.

9. Consideration should be given to the construction of loading platforms in Government Square.

10. Study should be made of all intersections where bus turning movements are made and curb radii increased where necessary.

Chapter 9
PUBLIC SERVICES

Public service facilities required to serve residential communities include schools, branch libraries, health centers, post offices, police and fire stations, and in some cases buildings containing municipal offices.

In the Cincinnati Metropolitan Area the existing pattern of such facilities is greatly affected by the multiplicity of political subdivisions. Inasmuch as political boundaries rarely tend to follow logical community and neighborhood lines as proposed in the Master Plan, this study was not significantly influenced by them in planning for the best distribution of public service facilities. Existing facilities were taken into consideration but planning for future needs stresses the community and neighborhood pattern rather than political boundaries of any kind.

This does not contemplate elimination of separate political jurisdictions but subordinates them whenever necessary in recognizing the most efficient, logical performance of services. Public library and postoffice services as now organized serve as precedents for this approach.

For tabulations of existing facilities in the various categories of public services and more detailed Master Plan proposals relating to each, reference should be made to the report entitled Public Service Facilities.

Schools

In making recommendations regarding schools the *"School Location Report"* (City Planning Commission, 1935) was reviewed, as well as the report *"A Survey of the School-Building Needs of Cincinnati, O.,"* by Dr. T. C. Holy and Dr. John H. Herrick (Ohio State University, 1945). The latter has been officially adopted by the Cincinnati Board of Education.

Also taken into consideration was *"A Proposed Plan for the Location of Public Schools"* (Regional Planning Commission, July, 1937) and the study of school facilities prepared for the Cincinnati School District by the City Planning Commission, which it complemented.

The Holy-Herrick report is concerned essentially with the present Cincinnati School District. As the Master Plan includes the urban and urbanizing portion of the metropolitan area throughout Hamilton County some adjustments of the report's proposals are suggested, particularly in relation to the communities outside the Cincinnati School District. There are a few modifications resulting from the influence of Master Plan features other than schools which could not be foreseen at the time of that report.

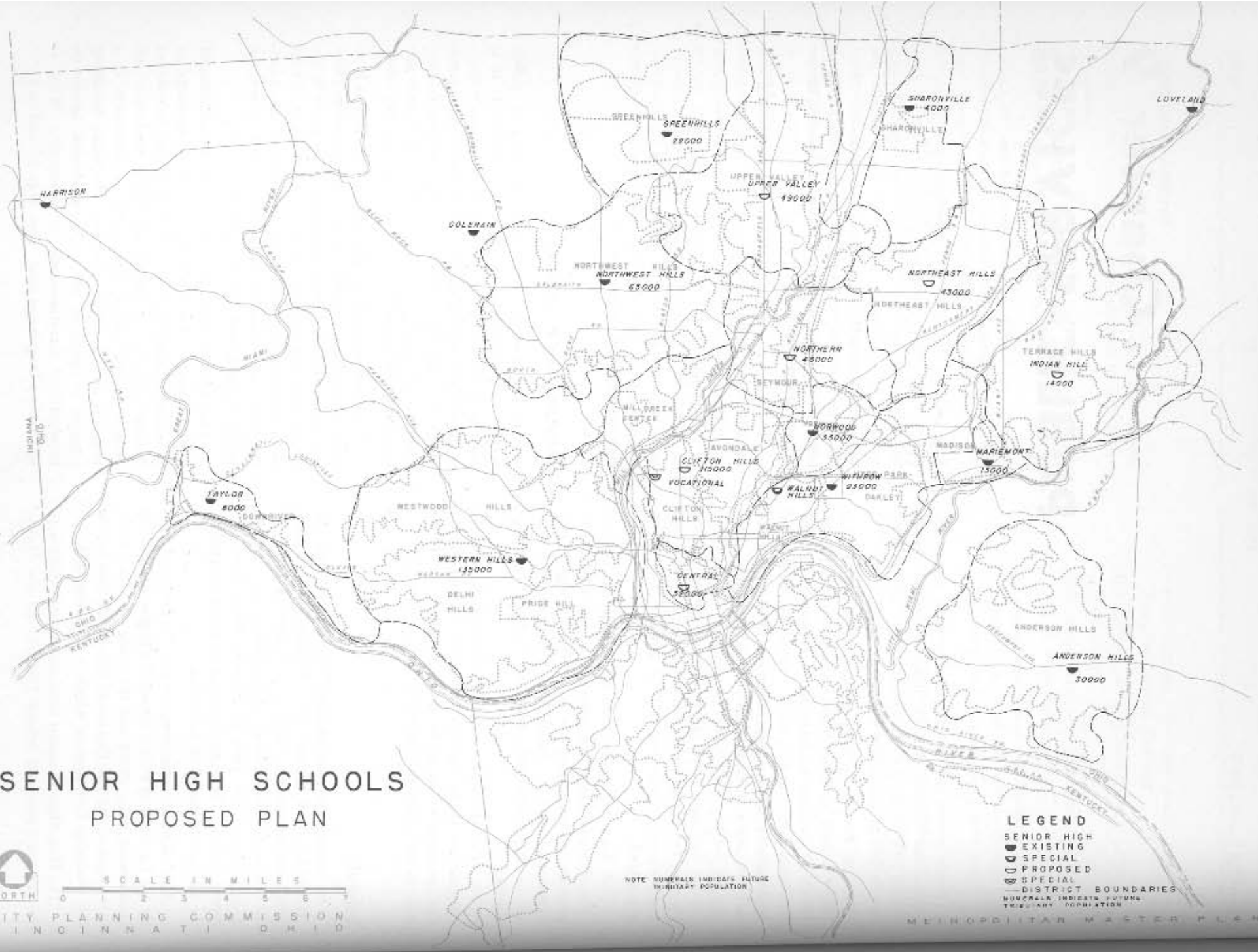
These include such features as the community and neighborhood plans, with their respective recreation and shopping areas and other community facilities; and motorways from the standpoints of (1) their service to or within a community, and provision of access to other communities, and (2) together with railroads and industrial areas, their significance as separators between communities and neighborhoods.

Master Plan Proposals

The principle that long-range planning of public service facilities cannot be done most effectively if it must be governed by the limits of political subdivisions is particularly applicable to school district boundaries which are constantly subject to change. Seldom do they form logical social, economic or geographic units for providing educational facilities for the people they serve.

It seemed necessary or advisable to plan school locations as nearly as possible on the basis of communities and neighborhoods. Due consideration was given to the quality, age, capacity, etc., of existing structures as well as those currently proposed by the boards of education. Proposals were made for additional facilities where the longer range future need is apparent.

The plan recognizes the principle of consolidation of school districts. From the standpoint of economy in providing a balanced pattern of adequate and convenient facilities plus the advantages inherent in modern school systems of the metropolitan type, consolidation is a practical and desirable objective. Proposals involving changes of board of education jurisdiction cannot be accomplished simultaneously or overnight. What is offered is a long-range goal. (See Figs. 35 and 36.)



SENIOR HIGH SCHOOLS

PROPOSED PLAN

NOTE: NUMERALS INDICATE FUTURE SCHOOLSAT POPULATION

LEGEND

SENIOR HIGH
- EXISTING
- SPECIAL
- PROPOSED
- SPECIAL
- DISTRICT BOUNDARIES

NUMERALS INDICATE FUTURE TRIBUTARY POPULATION

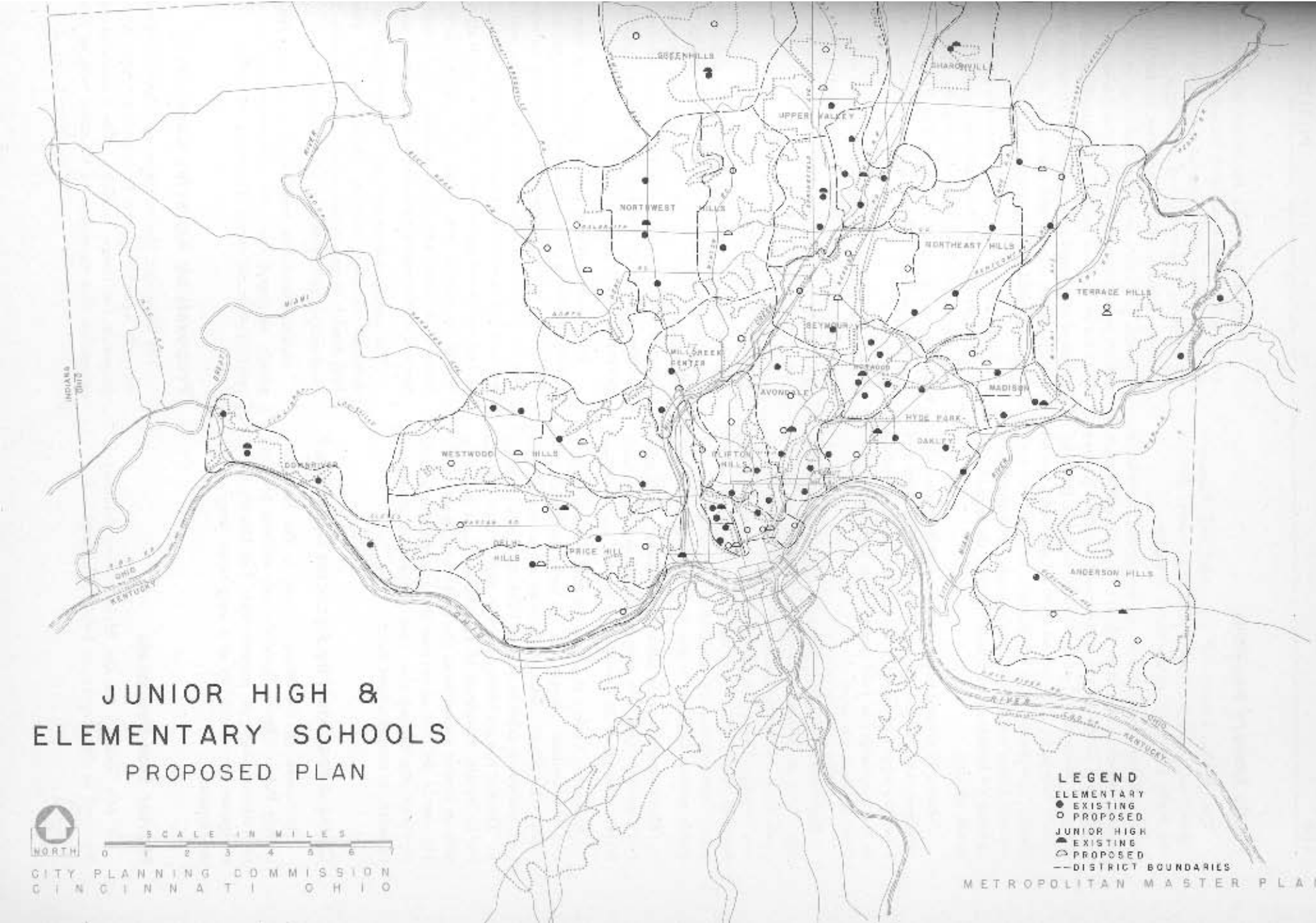
NORTH

SCALE IN MILES
0 1 2 3 4 5 6 7

CITY PLANNING COMMISSION
CINCINNATI OHIO

METROPOLITAN MASTER PLAN

FIG. 35



JUNIOR HIGH & ELEMENTARY SCHOOLS

PROPOSED PLAN

LEGEND

ELEMENTARY
- ● EXISTING
- ○ PROPOSED

JUNIOR HIGH
- ◓ EXISTING
- ◠ PROPOSED
- — — DISTRICT BOUNDARIES

NORTH

SCALE IN MILES
0 1 2 3 4 5 6 7

CITY PLANNING COMMISSION
CINCINNATI OHIO

METROPOLITAN MASTER PLAN

FIG. 36

Public Library Facilities

The Public Library of Cincinnati and Hamilton County serves all territory within the county. Besides the Main Library it maintains 38 branches.

In addition there are 268 general service facilities in three categories. One type, library stations, offers part-time service to the general public with facilities located in rented store rooms, or in schools, or other publicly-owned buildings. The second type, which serves special groups, is represented in fire stations, industrial or commercial firms, institutions, and schools. The third type consists of bookmobiles which circulate throughout the entire county.

Finally, 32 deposit stations perform still another type of library service, generally involving a small store and a limited supply of books. Usually there is no attendant as the storekeeper is paid one cent for each book circulated through his store.

Residents of Northern Kentucky employed or attending school in Hamilton County may receive free library cards from the Public Library of Cincinnati and Hamilton County. Otherwise they must pay an annual membership fee of $3. Thus the library system is more nearly metropolitan in scope than the other types of public service facilities in the Master Plan.

There are two public libraries in Kenton and Campbell Counties. One is in Newport at 4th and Monmouth Streets, the other in Covington at Scott and Robbins.

In Kenton County there are libraries in six secondary and intermediate schools for use only by pupils. In Campbell County students' libraries are maintained in four secondary schools and in Villa Madonna College. Ft. Thomas has no library but the high school has one for its pupils. Residents of Ft. Thomas must pay $2 a year to receive a card from the Newport Library unless (as also in the case of persons living elsewhere outside Newport city limits) they own property in Newport, or work or attend school there.

Current Proposals by Agencies Concerned

Relocation of the Main Library is the Hamilton County Public Library District's only definite proposal for construction at the present time. The Library Board recognizes the desirability of a long-range program for development.

Master Plan Proposals

A new location for the Main Library building is discussed in the chapter on Public Buildings.

In preparing the plan for branch libraries (Fig. 37) many factors were considered, including distance from the Main Library and from other branches or distributing agencies, convenience of reaching a proposed new location, relation of local centers to population and business, proximity to school buildings in which some library service is available, facilities (existing or potential) for convenient parking, the hazardous and isolating effects of thoroughfares on juvenile patronage, classes of readers to be served, and likelihood of change in the population and characteristics of the neighborhood.

Proposals for new library branches have been made in the light of these considerations, giving due weight to requests that have been made to the Library Board for new or improved facilities. The Plan indicates expectable needs for branch libraries within the next 20 to 25 years.

Where library and school facilities are combined, there should be joint financial participation by the two agencies, at least in respect to costs of operation.

Health Centers

The national and local trend is for additional and more complete medical services by public health departments, and a fine line is no longer drawn between prevention and treatment. Formerly these services were handled mostly by the types of private agencies supported by the Community Chest.

The modern major health center is a community agency primarily concerned with preventive medicine and public health education, and involving an organization of physicians, nurses and other health and social workers and volunteers. It offers a general, well-rounded service and is not specialized. It aims to reach all people within its district who need, but cannot afford, such services. It aims also to co-ordinate local health and medical service with recreation and social service activities.

The smaller sub-centers are more restricted in their activities, handling routine clinical matters. These in turn feed into the major center equipped with X-ray, fluoroscope, and other special facilities.

Health clinics and health stations are even less completely equipped than the sub-centers and are more specialized in the types of services they offer.

Proposals by Agencies Concerned

The Cincinnati Health Department and Norwood are the only agencies in the Metropolitan Area reporting proposals for future facilities. The Cincinnati agency recognizes that expansion of its work will be through

LIBRARY BRANCHES

PROPOSED PLAN

NORTH

SCALE IN MILES

0 1 2 3 4 5 6 7

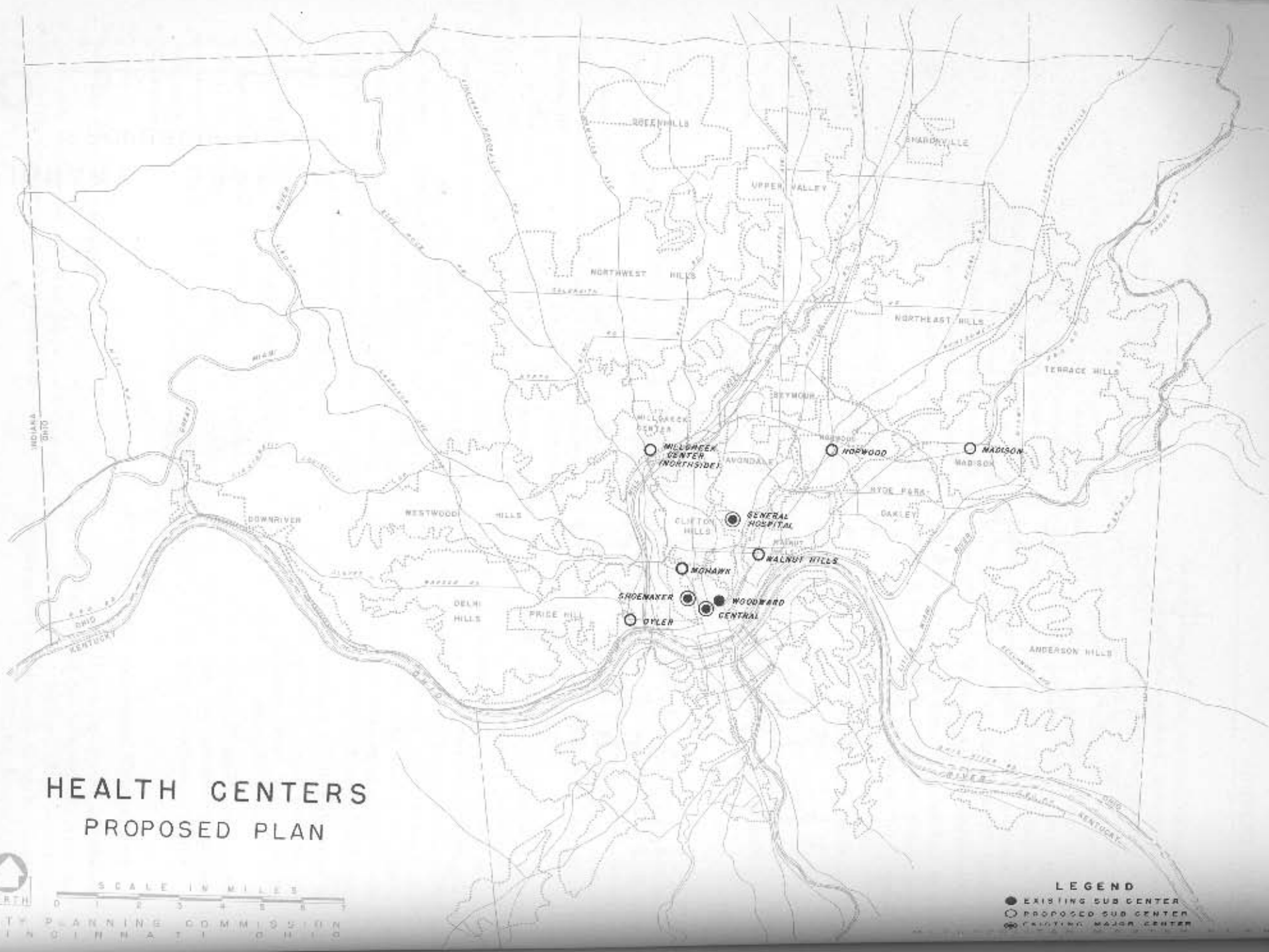
CITY PLANNING COMMISSION
CINCINNATI OHIO

LEGEND

- MAIN LIBRARY
- BRANCH BUILDINGS
  - EXISTING
  - PROPOSED
- TENANT BRANCHES
  - EXISTING
  - PROPOSED

METROPOLITAN MASTER PLAN

FIG. 37



HEALTH CENTERS
PROPOSED PLAN

FIG. 38

health centers and facilities of several kinds but has not given official approval to an expansion program.

The City proposes to take over the Shoemaker Health Center on Cutter Street.

Consideration is being given to the establishment of sub-centers in Mohawk, Mill Creek Center (Northside), Oyler, Madison and Walnut Hills.

It is also proposed that the existing Madisonville health sub-center be housed in its own building.

Norwood has passed a bond issue for a Veterans' Memorial Health Center. It is proposed to construct the Center in an existing city park at the northwest corner of Montgomery Road and Mills Avenue.

Master Plan Proposals

In Fig. 38 Master Plan proposals for major health centers and sub-centers are shown. The map does not show lesser health facilities such as clinics and stations.

Some comments are needed to clarify proposals in connection with some of the facilities indicated:

Union Bethel, at Third and Lawrence Streets, may be in the path of the junction of the Northeast Expressway with the Third Street Distributor and the connection of the latter to Columbia Modified Expressway. Much of the downtown residential area it now serves may be redeveloped and the need for local health services of the present type removed. Mt. Adams, too, is scheduled for redevelopment or rehabilitation, and in any case could be served by the Uptown sub-center.

In lieu of a location in Fairmount, proposed by the Cincinnati Health Department, the Plan proposes one in Walnut Hills. Although the latter is not far from General Hospital, access to the hospital is inconvenient. Density, volume, and character of the older portions of this community also suggest a greater localized need than in the case of Fairmount, which can be served satisfactorily by health facilities in Oyler and Northside. Because of its convenient relation to main thorofares the former West End Library branch, now abandoned, or a site nearby is suggested for the health sub-center.

The study for a community center for Norwood contained in the Master Plan Communities report indicates the preferability of a site for the proposed new health sub-center west of City Hall rather than that of the existing small park farther south on Montgomery Road.

Post Offices

An independent post office is one which functions separately from any other. It may or may not serve an incorporated city or village, but where it does the postal service area is not restricted to the territory comprised within the corporation line. The boundaries of an area to be served by an independent post office are based on topography, population density, extent of physical improvements, and relation to other post offices. Establishment of a post office is based on demonstrable need within an area, rather than on a minimum expectable revenue or volume.

Current Proposals by Agencies Concerned

Sites have been acquired and money appropriated for new post offices in Milford and Harrison. These are the only definite projects. There is talk of a new post office in Norwood facing the small city park at Wells and Montgomery.

There is the possibility of a new post office in the future for Newport. A suggested site is one south of Fourth Street between York and Monmouth. Newspapers have mentioned a possibility that Dayton, Kentucky, may be allocated funds for a Federal Building. The Newport office, however, has no official confirmation.

Master Plan Proposals

Because they involve Federal rather than local ownership, consideration of post offices differs from that of the other types of public service facilities. It is the normal policy of the Post Office Department to rent buildings for branches or stations rather than to erect its own structures. This policy is based mainly on a feeling that mobility is desirable in view of possible instability of population and of neighborhood demands for service.

More important, however, than the question of ownership (from the standpoint of the local tax base, Federal rental appears preferable to ownership) is Federal policy in selection of sites for branch buildings and stations. By their very nature these facilities have tended to be located within or close to community or neighborhood shopping centers as focal points of public patronage. Master Plan community civic center studies indicate that in general such locations are the logical ones for grouping of community public service facilities. The branch of Federal Government having jurisdiction over choice of locations might well seek to locate such structures, whether rented or owned, so they will participate if possible in eventual development of a community civic center. The localities in which such potentialities are apparent are indicated in the Downtown Motorways Plan which appears as Fig. 30 in the Motorways chapter of this volume.

Municipal Offices

Cincinnati and every other Hamilton County municipality has a City or Village Hall.

The cornerstone of Cincinnati's City Hall was laid in 1888. This building is antiquated, overcrowded, inefficiently planned, poorly located in being remote from other important public buildings, and inconvenient to most public transit routes.

In Kentucky there are municipal office buildings in all the cities and in some of the larger towns. In the smaller or more recently incorporated municipalities, official meetings are held in space rented or lent for the purpose.

Current Proposals by Municipalities

No actual steps have yet been taken to replace Cincinnati's obsolete City Hall. Plans have been prepared for new village halls in Mt. Healthy and Silverton and early construction is anticipated. Mt. Healthy's administration building, to be built at Perry and McMaken Streets, will house the police and fire departments, while Silverton's hall, to replace the present building on the same site, will incorporate the existing fire and police stations.

Indian Hill has acquired a 14-acre site at the southeast corner of Drake and Shawnee Run Roads for a new village hall and community center to be built soon. Reading hopes to erect a new municipal building but has made no provision for funds. In the latter two villages, the administration buildings will house police and fire departments.

Covington is considering erection of a new courthouse. The present city hall will then be too large for the city's use alone and since the building is old it might be replaced by a new municipal building.

Master Plan Proposals

In the organization of the Metropolitan Area by communities it is desirable to decentralize certain administrative activities for the convenience of the public to the fullest extent consistent with efficiency of operation. With these factors in mind, it is suggested that consideration be given to the feasibility of establishing an office in each community civic center where certain public functions involving contact with the public could be performed, to obviate trips from suburbs to City Hall, Court House or Federal Building.

Such an office might take care of payments of water and tax bills, licenses, and possibly some details in connection with social security. These activities might occupy limited space in a police or fire station, public health center, or some other public service facility. With some additional remuneration, existing personnel such as police and firemen might be used. Part-time employees might be needed during peak periods.

Because of the character of space occupancy involved in such a plan, proposed Municipal Offices are not identified in Table Q in the report on Public Service Facilities but such a facility would be called for in every community.

Police Department Facilities

Separate police departments are maintained by Cincinnati and practically all the other cities and villages in the Metropolitan Area. There are separate police forces in each of the three counties—Hamilton, Kenton and Campbell. Co-operation and mutual use of facilities and equipment exists among these numerous departments.

Current Proposals by Agencies Concerned

A five-year building program was submitted in 1943 by the Cincinnati Police Department to the City Joint Improvement Program Committee. It suggested:

1. Erection of a new police headquarters and municipal courts building.
2. Relocation of District Stations 4 and 6.
3. Creation of a new District 8.
4. Relocation of Patrols 4 and 7.

A more recent report suggested:

5. Relocation of District 4 Station in the general vicinity of Sixth and Mound Streets.
6. Relocation of District 6 Station from 2855 Eastern Avenue to a more central location in Hyde Park or Oakley.
7. Creation of a District 8, to include the northern portions of Districts 6 and 7, taking in Bond Hill, Roselawn, Pleasant Ridge, Kennedy Heights, Carthage and Hartwell, the new station to be located either in Bond Hill or Carthage.

Suggestion No. 6 has now been adopted with the acquisition of a site on the south side of Erie Avenue near Victoria and plans for the building are now being prepared.

With respect to Suggestion No. 7 the Police Department advocates Bond Hill, in the vicinity of Seymour and Reading Road, as a site for the new station.

It has been suggested unofficially that Patrols 1, 2 and 3 be housed in one building.

The Police Department feels that a new Central Police Station should be built near the Court House. Such a location would be convenient to the courts and would facilitate transfer of prisoners between the Central Station and the Court House.

Other Police Department programs of improvements are contemplated by Mt. Healthy, Reading, and Terrace Park. The new administration buildings of these cities are expected to house police and fire departments. Only Mt. Healthy has a building under construction.

Master Plan Proposals

Proposals for revised Police District boundaries and for locations of Police Stations in Cincinnati are shown in Fig. 39.

The Master Plan concurs with the proposal to make a new District 8 of the northern part of District 7 and the western part of District 6.

The proposed location for the new police station for District 8 is the south side of Seymour Avenue just east of the Longview State Hospital grounds. This accords with a proposal whereby the Recreation Commission and School Board would acquire property in addition to the present site purchased by the Board of Education for two new junior and senior high schools. The police station would occupy that portion of the site about the level of Seymour Avenue, the lower or valley portion to be used for playfield purposes.

New stations are proposed for Districts 1 and 4 in the West End. Station and district proposals shown in the plan are based on anticipation of extensive redevelopment of the Downtown Basin Area outside of the Central Business District. Master Plan proposals visualize eventual industrialization of the area west and south of the Mill Creek Expressway.

The immediate problem is to select a location permanently satisfactory for a new district station in the future to serve the entire West End but which meantime will be conveniently located in relation to present district boundaries. A desirable permanent site for such District 1 would be on the west side of Linn Street between Lincoln Park Drive and Armory Avenue, the logical locality for the future business district of the redeveloped community of Linconia.

The remaining problem of new headquarters for District 4 may be solved temporarily by serving both Districts 1 and 4 from the Linn Street location or through use of an existing building within District 4 boundaries.

The Police Department's position on these two locations is that District 1 quarters should be in the vicinity of Armory and Linn or on Linn somewhere between Armory and Findlay, and District 4 quarters in the vicinity of Court and John.

In the proposed plan for police stations, no effort has been made to account for territory outside Cincinnati as police stations are primarily an administrative facility to which there is almost no occasion for visits by the public. They are more closely related to the pattern of municipalities than to the communities. It would appear academic at this time to attempt to suggest police district boundaries and station sites outside of Cincinnati, presumably based on assumption of some kind of county-wide administrative arrangement, or on annexation of a number of municipalities to Cincinnati.

Fire Department Facilities

Separate fire departments are maintained by Cincinnati and most of the other municipalities on both sides of the Ohio River. There are no official county fire departments comparable to the police departments in Hamilton, Campbell, and Kenton Counties.

Current Proposals by Agencies Concerned

The Cincinnati Fire Department contemplates a building program designed to bring its building needs up to date and to modernize its stations. The five-year building program submitted in 1943 to the City Joint Improvement Program Committee made these suggestions, with priority ratings as shown:

1. Move Co. 13 to southeast corner of Central and Freeman Avenues. (Mohawk)

2. Move Co. 31 to Marburg opposite Cardiff Avenue. (Oakley)

3. Combine Cos. 17 and 25 in a new building at 8th and Burns Streets. (Oyler)

4. Rebuild Co. 2 at same site, 9th and Freeman. (West End)

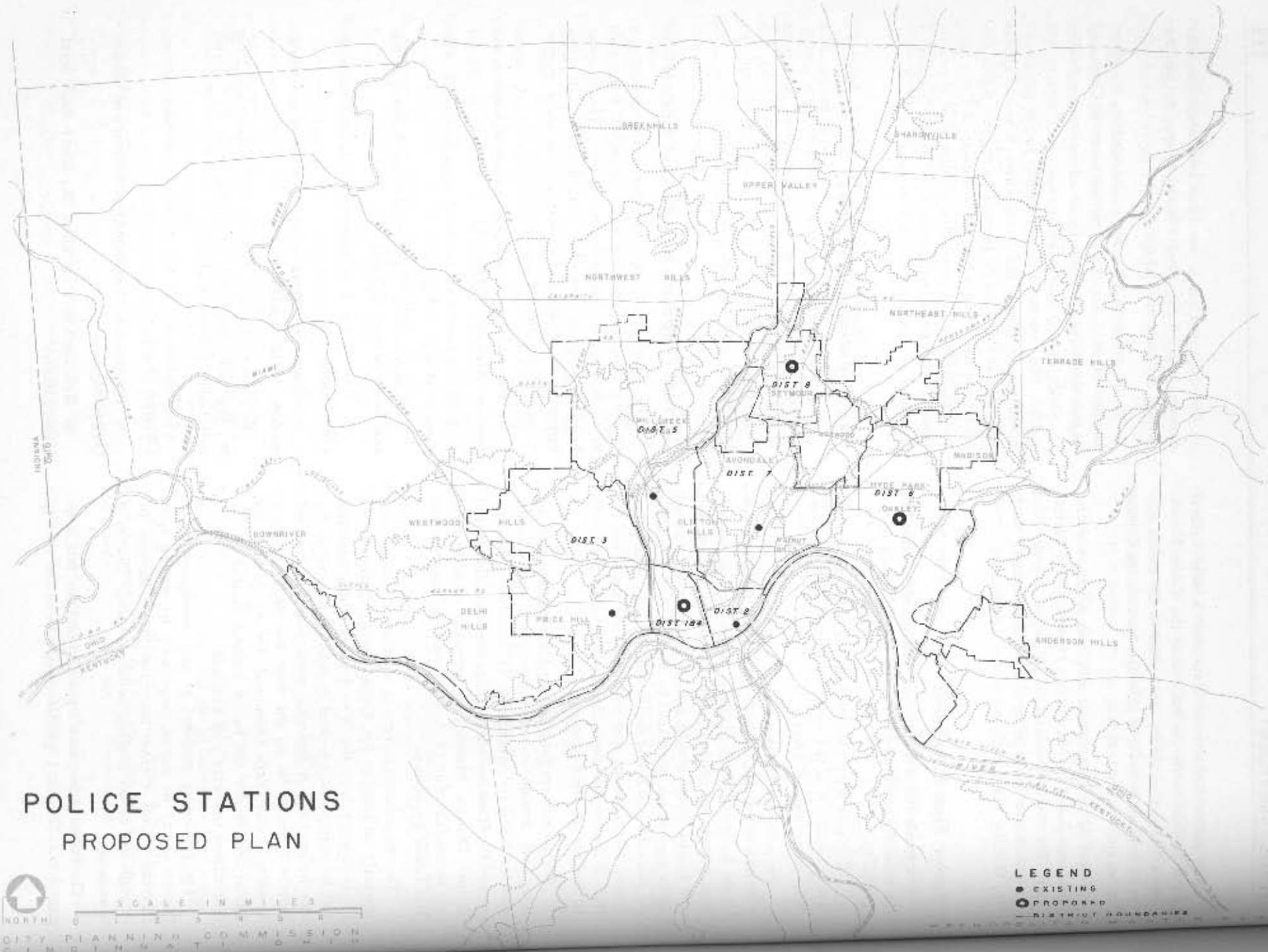
5. Relocate Co. 49 in vicinity of Prentice and Whetsel Ave. (Madisonville)

6. Relocate Co. 5 in vicinity of McMicken and Vine St., depending on plans for extension of Race Street northward. (Over-the-Rhine)

7. Relocate Co. 16 in vicinity of Peebles Corner. (Walnut Hills)

8. Relocate Co. 36 in vicinity of Eastern and Heekin. (Linwood)

9. Relocate Co. 1 on Third St., above flood level. (Lower Basin)



POLICE STATIONS
PROPOSED PLAN

FIG. 39

The sites for the first three proposals have been acquired and plans drawn.

Engine companies 3 and 44, displaced from their former location at Seventh and Sycamore, will be housed in a new structure on Ninth, Broadway and Cheapside.

The Fire Department in its current thinking, contends that:

1. Station 21 in the Fairmount shopping center is in a good location for its area but is poorly placed because of traffic congestion at the west end of the Western Hills Viaduct.

2. Station 37 in Riverside is handicapped by floods above the 69-foot level.

3. Station 32 is on the site for the new Avondale School. When the school is built a new site might be found at Rockdale and Washington, or Harvey and Rockdale Avenues.

4. Station 18 at Eastern Avenue and Strader Street is in the high water area.

5. If 12th Street is widened to Reading Road, Station 42 must seek a new site in the neighborhood.

Official proposals elsewhere in the county concerning fire departments are:

Norwood: A .2 mill levy for the city failed at the polls in November, 1946. The funds were intended to purchase additional equipment and to open a third fire house. A bond issue of $75,000 for these purposes was voted on by the people in November, 1948 and carried by a wide margin.

Terrace Park: Plans are nearing completion for a civic center in the present village green, including an administration building with a wing to contain the fire and police stations. Plans will probably not become a reality for 10 or 15 years.

Mt. Healthy: This community approved a bond issue in November, 1945, for a new municipal building, with space for the Volunteer Fire Departments, at the northeast corner of Perry and McMaken Streets. This building is now under construction (November, 1948.)

Northern Hills Volunteer Fire Department: This department, at Galbraith and Winton Roads, has purchased equipment and awaits erection of its building.

Reading: A proposed bond issue of $300,000 for a new municipal building and war memorial combined, with quarters for police and fire departments, was defeated in the November, 1948, election. However, $30,000 for additional fire equipment was approved. A site for the proposed municipal building has not been acquired.

The only suggestion current in Northern Kentucky pertaining to fire facilities is one by Newport concerning possible future need of a station near Grand and Water Works Road.

Master Plan Proposals

A proposed plan for Fire Stations is shown in Fig. 40. Additional comments are called for in a few instances:

DISTRICT 1

Company 1—The Riverfront Redevelopment Plan pre-empts the space south of Third Street from Central Avenue to Butler Street. A fire station might fit into that plan but it seems preferable to place it on the north side of Third Street. Master Plan proposals for downtown parking facilities cover the north side of Third westward to about the middle of the block between Elm and Race Streets. The remainder of that block frontage, or preferably frontage between Elm and Plum, would be the best location for a future fire station.

DISTRICT 3

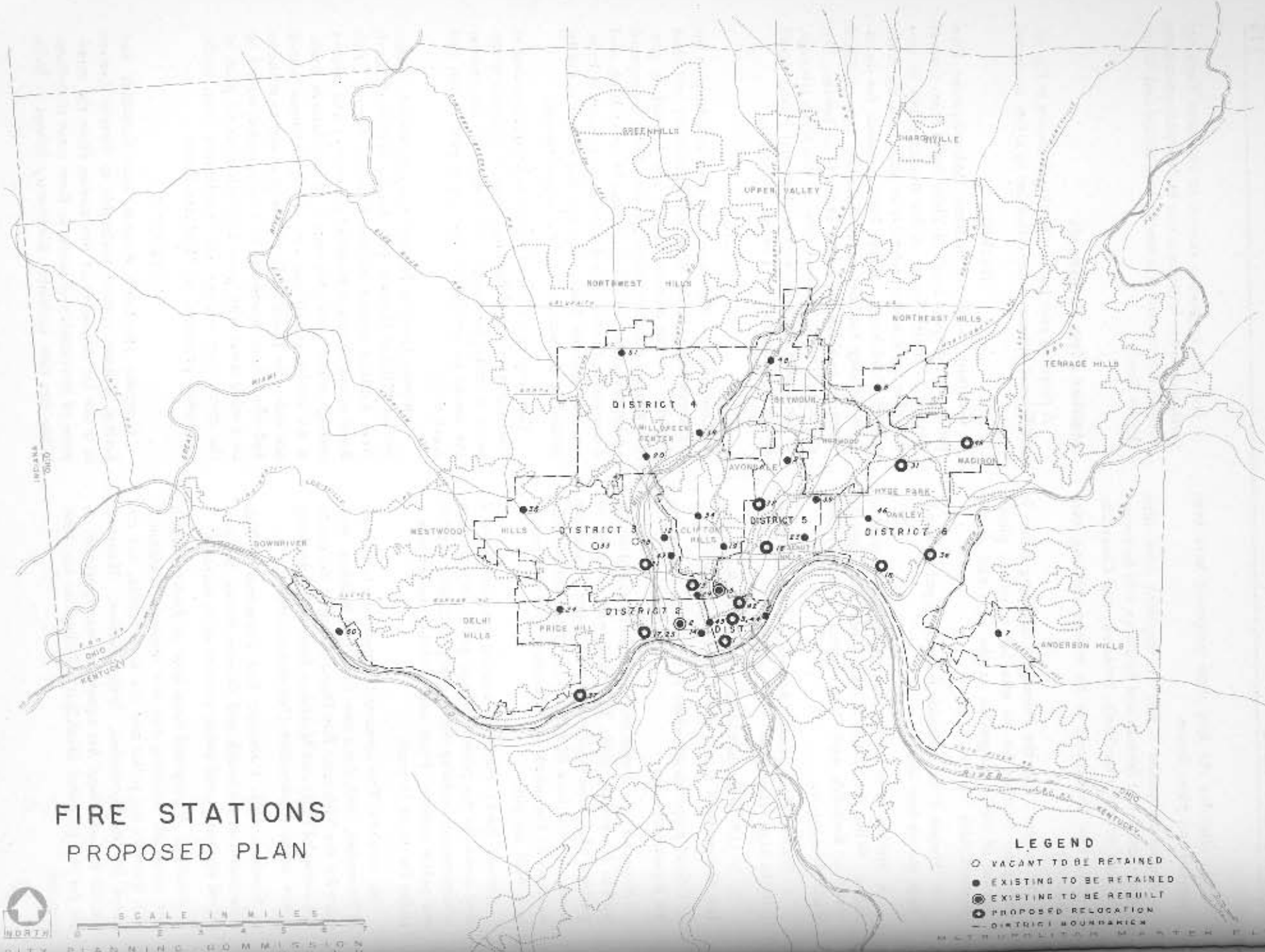
Company 13—The Motorways Plan and the plan for a redevelopment in the West End (Linconia) will close Freeman Avenue between Liberty and Central, to provide a larger tract for redevelopment. There is proposed an improvement of the jog of Linn Street at Bank, and a connection northeastward from Linn to Central Parkway and Mohawk Place. The new fire station would be located in the vicinity of these improvements.

Company 21—Elimination of the present building at Harrison Avenue and Beekman Street is desirable to improve a traffic bottleneck. Advantages of the present site would be retained by locating a new station just north of it.

Company 16—The Master Plan recommends relocation of William Howard Taft Road a half block north from Ashland Avenue to near Hemlock Avenue. Taft Road would become a modified expressway and remove through traffic from this section of the present route. A fire station placed just west of the Cummins School site which the Board of Education proposes to abandon and which is recommended as a playground, would be on a wide street with good connections to all parts of the community, without the interference from traffic congestion presented on McMillan Street.

DISTRICT 6

Company 18—Delta Avenue, near Columbia and Eastern Avenue, appears preferable to Eastern Avenue as a site for relocation of this station from the standpoint of convenience of access to these main thorofares. When the new Columbia Elementary School is built,



FIRE STATIONS
PROPOSED PLAN

FIG. 40

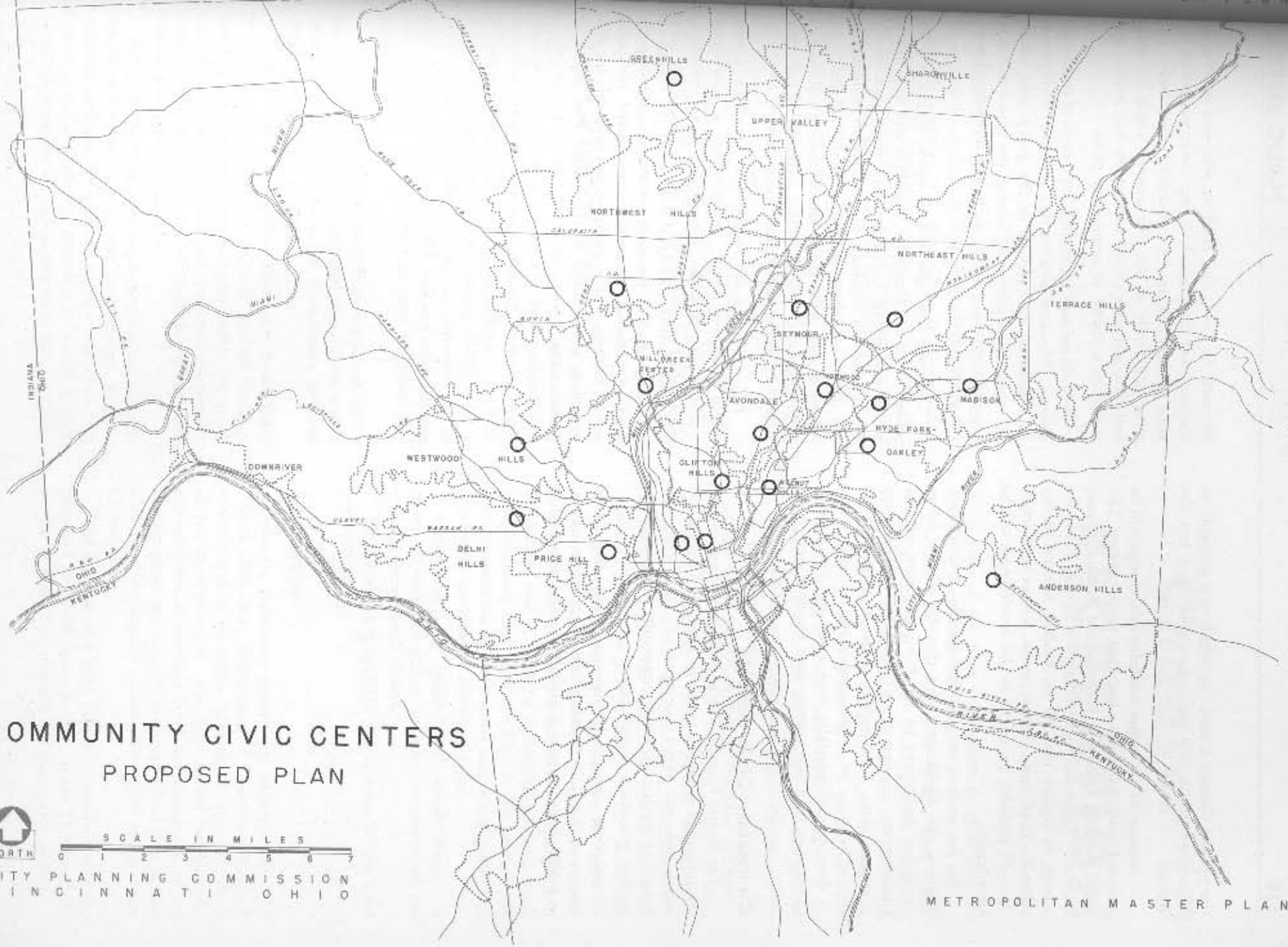

GREENHILLS
SHARONVILLE
UPPER VALLEY
NORTHWEST HILLS
NORTHEAST HILLS
TERRACE HILLS
SEYMOUR
MILLCREEK FERTER
AVONDALE
MADISON
HYDE PARK
OAKLEY
CLIFTON HILLS
WALNUT
WESTWOOD HILLS
DELHI HILLS
PRICE HILL
ANDERSON HILLS
DOWNRIVER
INDIANA
OHIO
KENTUCKY
MIAMI
LITTLE MIAMI
OHIO RIVER
COMMUNITY CIVIC CENTERS
PROPOSED PLAN
NORTH
SCALE IN MILES
0 1 2 3 4 5 6 7
CITY PLANNING COMMISSION
CINCINNATI OHIO
METROPOLITAN MASTER PLAN

FIG. 41

the present Lincoln School site which will probably be abandoned would be a satisfactory spot for a new fire station.

Company 36—A rather extensive interchange will be required with the grade separation project where Linwood Avenue, Columbia Parkway and Eastern Avenue intersect. There will be advantages in having a new fire station to replace the one on Heekin Avenue readily accessible to all three of these routes. A more satisfactory site will probably be found in the development of the interchange.

No fire stations are proposed outside of Cincinnati. There is the significant factor that fire district boundaries are determined by the National Board of Fire Underwriters. In view of this and other considerations it appears futile to attempt to devise a pattern for fire station locations in neighborhoods still in early stages of development especially since a required site consists of no more than two average-sized building lots.

Community Civic Centers

The Master Plan for Public Buildings brings out the advantages of grouping public or quasi-public buildings which serve the entire Metropolitan Area. The same reasoning applies to locating community service facilities in close proximity to each other.

From the standpoint of appearance, sharing an attractive setting, joint parking, and other factors, as well as public convenience, it is desirable that conscious effort be made to group the facilities wherever possible, as distinguished from merely being comprised within the same general setting. A community civic center may serve potentially as the hub around which the social and civic activities of the community will revolve and constitute a source of community pride.

Schools are used increasingly as centers of community activity. Wherever possible they should be incorporated in community civic centers or the group built around the school as a nucleus. So located, the school will serve as an educational, cultural, social and recreational center for people of all ages.

There are also types of quasi-public buildings which under certain circumstances may share and help to provide a joint setting. Buildings which might appropriately be included are churches, lodges or club buildings, or any others with some degree of public use and which call for dignity and attractiveness of setting and harmony of arrangement. The dominant character of the center should be public rather than commercial.

Fig. 41 shows the localities in Hamilton County where conditions favor concentration of community public service facilities. Favorability is not necessarily indicated by the number of present or prospective units.

Design studies for each community, showing the kind of potential treatment contemplated for public service facilities where conditions are favorable for their grouping, are included in the Master Plan report on Communities.

Chapter 10
RECREATION

Recreation in its various forms is recognized as necessary to full social and individual development. Opportunity for recreation is an essential for all, regardless of neighborhoods, race, age, or sex. There is therefore a community responsibility to provide, partly through public authorities, the necessary facilities.

In the Master Plan provision is made for the land areas needed not only for large parks and playfields, but for smaller local playgrounds and neighborhood recreation facilities ultimately to be located throughout the Area where required.

Recreation areas to fit the needs of the Area must be of varied types, distribution and sizes. Three general types of areas and facilities within reach of Metropolitan Cincinnati are recognized: regional, metropolitan, and community or neighborhood areas.

Regional Recreation Areas

Regional recreation areas, as defined in the Master Plan, are those located beyond the metropolitan limits but within reasonable driving distance from the metropolitan population. About 50 miles each way, or 1½ to 2 hours driving time, is a convenient distance for a day's outing. Depending on the attractiveness of an area, the length of the intended visit and scenic interest along the route, even 100 miles or more is a practicable distance.

Within or near this distance from Cincinnati nature has provided a wealth of potential sites. Only within recent years, however, have the three States involved taken steps to develop them.

In the Master Plan report on Recreation Areas, Table D lists recreation areas and features (except National Forests) now existing or officially proposed in the region around Cincinnati. The table gives pertinent information concerning parks, forests, historic monuments and commercial and quasi-public areas.

Parks and Reservations—Analysis of the various prospective park areas indicates that their number, size and proposed facilities are adequate to serve the Area. All appear to be satisfactorily accessible by existing highways. Construction of the expressways will, in effect, bring some of the areas much closer by increasing the speed and ease of reaching them.

Forests—State and National forests, both found within a reasonable driving distance from Cincinnati, recognize recreation as a proper subsidiary use of the land primarily placed in public ownership for reforestation and soil conservation. Over a period of years selective cutting produces forest stands attractive for recreation purposes. It is also the policy of the agencies to develop lakes and other scenic features, cabin sites, picnic grounds and the like.

Conservancy Areas—Although intended fundamentally for flood control these areas, too, recognize other uses of the land. As it is the policy of the Corps of Engineers to give full consideration to recreational potentialities in connection with flood-control reservoirs, these may provide large lakes and developed shore lines which will become important recreational assets for the people of Metropolitan Cincinnati.

Historic and Prehistoric Sites—With the exception of Ft. Ancient and Ft. Hill the significance of the historic and prehistoric sites shown in Fig. 42 lies primarily in their preservation of small areas containing features of noteworthy scientific or historical value.

Commercial and Quasi-Public Areas—These are shown in order to give a complete inventory of the regional recreational picture.

Fig. 42 shows graphically the location of the areas and features.

Suggestions

Effective legislation toward the establishment of a unified Ohio State Department of Conservation which would correlate recreation activities at the state level should be encouraged. The State should continue the appropriation of adequate funds for completion of the various parks and recreational reservations now scheduled for development within 100 miles or so from Cincinnati.

The creation of a state park in connection with the proposed Falmouth Dam project on the Licking River should be urged by Campbell and Kenton Counties.

Metropolitan Recreation Areas

It is difficult to draw a hard and fast line between the functions of metropolitan recreation areas and those of regional character just discussed. Metropolitan areas include widely varying types such as parks, playfields, golf courses, camps and amusement parks.

The distinction between metropolitan recreation areas and community neighborhood facilities also becomes difficult when an area with metropolitan drawing power functions at the same time as a neighborhood facility for those living in its immediate vicinity.

Parks—Existing metropolitan parks are located on upland sites, overlooking adjacent valleys. Some are much more extensively developed with facilities than are others.

The Hamilton County Park District is committed to the development of a system of large outlying parks in the county. These county parks, of which Sharon Woods is an example, will provide additional facilities for unorganized sports such as golf, archery, boating, fishing, picknicking, and games and sports usually played by picnic groups. In October, 1948, plans for the creation of a new county park of 2,000 acres in the western part of Hamilton County, to be known as Miami Whitewater Forest, were announced by the Park District. It would provide many family picnic areas, sites for organized camps for children, an artificial lake or series of lakes, a golf course, drives, parking areas, hiking and riding trails, shelters, and recreation fields.

For Campbell County, Master Plan studies indicate the desirability of acquisition as a park of the undeveloped and generally rather rugged upland tract lying between Ft. Thomas and the three cities on the lower level along the river—Newport, Bellevue and Dayton.

For the Cincinnati central riverfront a separate Redevelopment Plan has been made. (See chapter on Riverfront). Although much of the area in the riverfront plan will have park-like settings, the area specifically allocated to park purposes consists of a strip of 35 acres composed of the riverbank and a narrow strip along its top.

Playfields—Playfields in general should be located as close as possible to the people they serve. A metropolitan playfield therefore must be one that provides very exceptional facilities not normally found in a community playfield. Where conditions make playfields to serve individual communities difficult, if not impossible, there may be justification for an exceptionally large playfield providing facilities for two or more communities. For example, Walnut Hills and Western Hills playfields are proposed by the Cincinnati Recreation Commission for such expansion. On somewhat the same basis a playfield of exceptional size and character of facilities is proposed in Campbell County and another in Kenton County by authorities there.

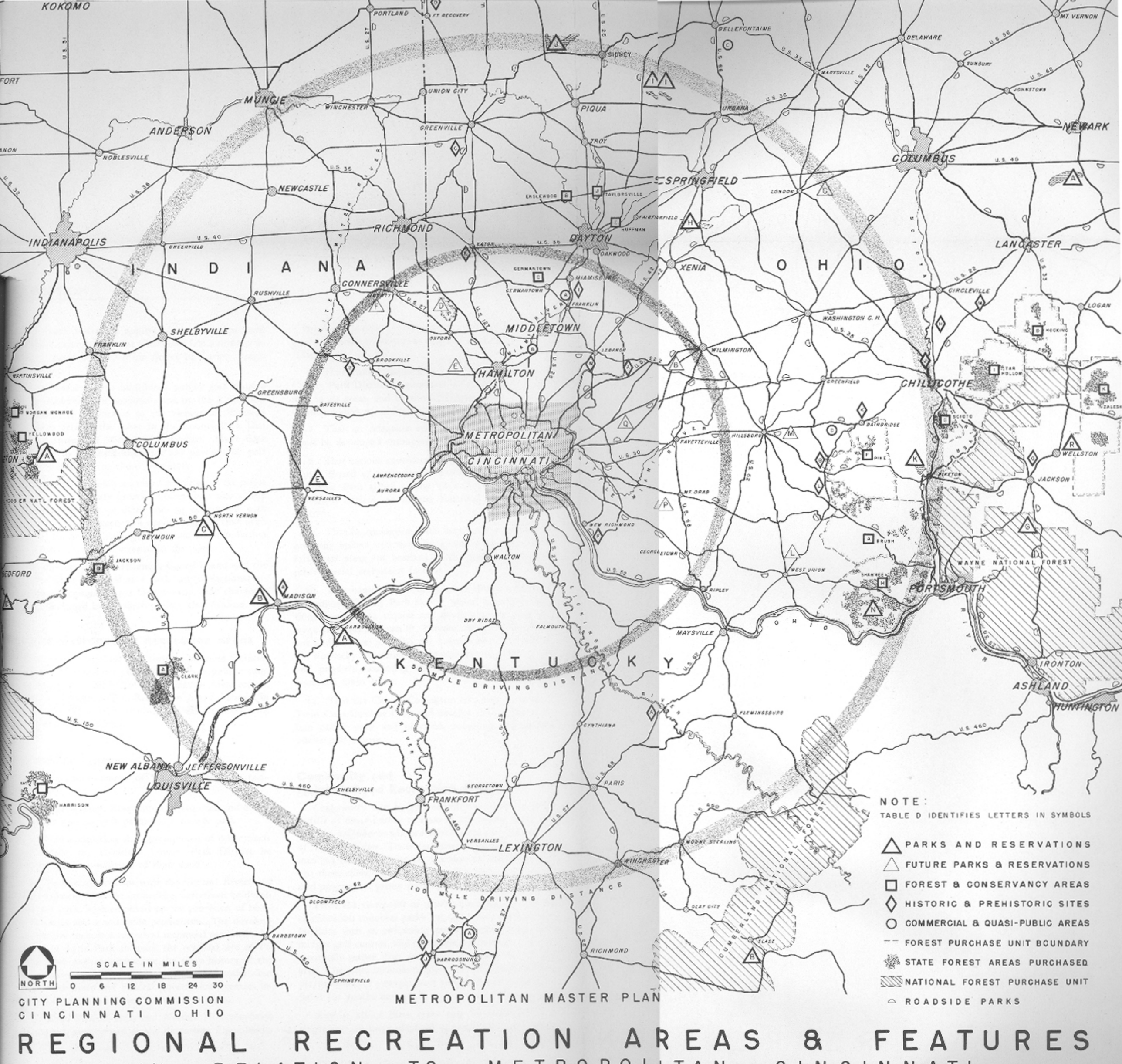
Deer Creek Common is included in the Metropolitan list because it provides several baseball diamonds which serve amateur leagues from all parts of the Area. Unfortunately there appears to be no way to avoid location of the proposed Northeast Expressway along the eastern margin of the Common, probably reducing it by at least one-half. To replace the facilities that will be lost and because of the desirability of adding additional ballfields to supplant some of the numerous isolated fields now existing on an impermanent basis, it will be well to be on the lookout for sites in connection with right-of-way acquisition for both the Millcreek and Northeast Expressways.

Because of the character of the terrain through which the lower portion of the Northeast Expressway will run there does not appear to be much hope of finding reasonably level areas of more than limited size in conjunction with it. Farther out there may be better sites.

In traversing the nearly level land of the West End and the lower Millcreek Valley the Millcreek Expressway may provide, in conjunction with necessary development of the areas it will traverse, usable tracts where the kind of facilities exemplified by Deer Creek Common may be duplicated more than once. Acquisition of sites for incidental recreation areas in connection with acquiring expressway right-of-ways appears to be permitted under the program for construction of interregional highways such as these two expressways.

As indicated in Fig. 43 there are three general localities on the Ohio side along the margin of the Ohio River which hold important potentialities toward providing a number of baseball diamonds with possible addition of certain other special types of facilities of widespread interest.

Two of these localities are downriver. One area extends westward from the present industrial development south of the New York Central R. R. yards to the Riverside Playground. The other consists of several large tracts extending eastward from Anderson Ferry Road and lying between several recently constructed gasoline tank farms. From the standpoint of public safety open development for recreation uses would be preferable to further tank development in view of the susceptibility of these areas to flooding and consequent incendiary risk. Flooding is no handicap to their recreational use. The scattered dwellings on portions of these two general sites are for the most part poorly maintained frame structures.



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METROPOLITAN MASTER PLAN

NOTE:
TABLE D IDENTIFIES LETTERS IN SYMBOLS

- PARKS AND RESERVATIONS
- FUTURE PARKS & RESERVATIONS
- FOREST & CONSERVANCY AREAS
- HISTORIC & PREHISTORIC SITES
- COMMERCIAL & QUASI-PUBLIC AREAS
- FOREST PURCHASE UNIT BOUNDARY
- STATE FOREST AREAS PURCHASED
- NATIONAL FOREST PURCHASE UNIT
- ROADSIDE PARKS

REGIONAL RECREATION AREAS & FEATURES
IN RELATION TO METROPOLITAN CINCINNATI

The latter statement applies also to the upstream area which extends from the Cincinnati Gas and Electric Company gas tanks at Corbin Street to Turkey Ridge Playground.

Golf Courses—Two additional public golf courses west of Millcreek are proposed, one by the Recreation Commission to be located in the vicinity of Western Hills High School, the other by the County Park District as a feature of Western Reservation. There does not appear to be justification for any new public golf courses in addition to those proposed.

Camps—The present degree of pollution of the major streams in this vicinity greatly reduces their desirability for boating, fishing or other uses in connection with summer camps. Prospects now appear brighter than ever, however, for action leading to elimination of pollution from all the rivers and streams in the Area.

Amusement Parks—Although Coney Island and the Zoo, the latter classified as a park, are recreational attractions of regional rather than metropolitan character, they are included in the metropolitan classification.

Plan of Metropolitan Recreation Areas

The names, locations and features of those facilities which the Master Plan places in the metropolitan category are given in Table E in the Recreation Areas report. The Plan of Metropolitan Recreation Areas is shown in Fig. 43. Metropolitan recreation facilities are also shown on the Master Plan Map.

Recommendations

1. That development of Winton Woods be completed.

2. That Western Reservation be acquired and developed over a reasonable period as a county park.

3. That acquisition and development of other tracts proposed by the Hamilton County Park District be deferred pending evidence of their need.

4. That in accordance with the Central Riverfront Redevelopment Plan the immediate waterfront be developed as a park, with emphasis on the provision of boating facilities and a waterside promenade. The development should include a historical memorial section in the vicinity of Lytle Park to mark the original site of Ft. Washington and commemorate the early history of the Cincinnati Area. The project might be undertaken jointly with State and Federal government agencies interested in the preservation of historical sites.

5. That Western Hills and Western Hills playfields be enlarged, as proposed by the Recreation Commission, to the status of metropolitan playfields and that a public golf course be developed in conjunction with Western Hills.

6. That consideration be given by the Hamilton County Park District to provision of group camp facilities in its areas, and by the Cincinnati Board of Park Commissioners of additional day camps.

7. That an adequate system of public swimming pools be developed throughout the Metropolitan Area.

8. That serious consideration be given by the Cincinnati Board of Park Commissioners to turning over Columbia Park either to the Ohio Archeological and Historical Society, or to the Hamilton County Park District.

9. That in connection with development of the expressway system attention be given to acquisition of incidental areas for baseball fields, tennis courts, and other special recreation facilities.

10. That consideration be given to the formation of a Campbell County Park Board, whose principal functions would be to acquire and develop (a) a proposed large park area between Ft. Thomas and Newport, Bellevue and Dayton; and (b) the Tacoma Beach section of the Kentucky riverfront as a metropolitan public beach and playfield, assuming the elimination of pollution from the Ohio River.

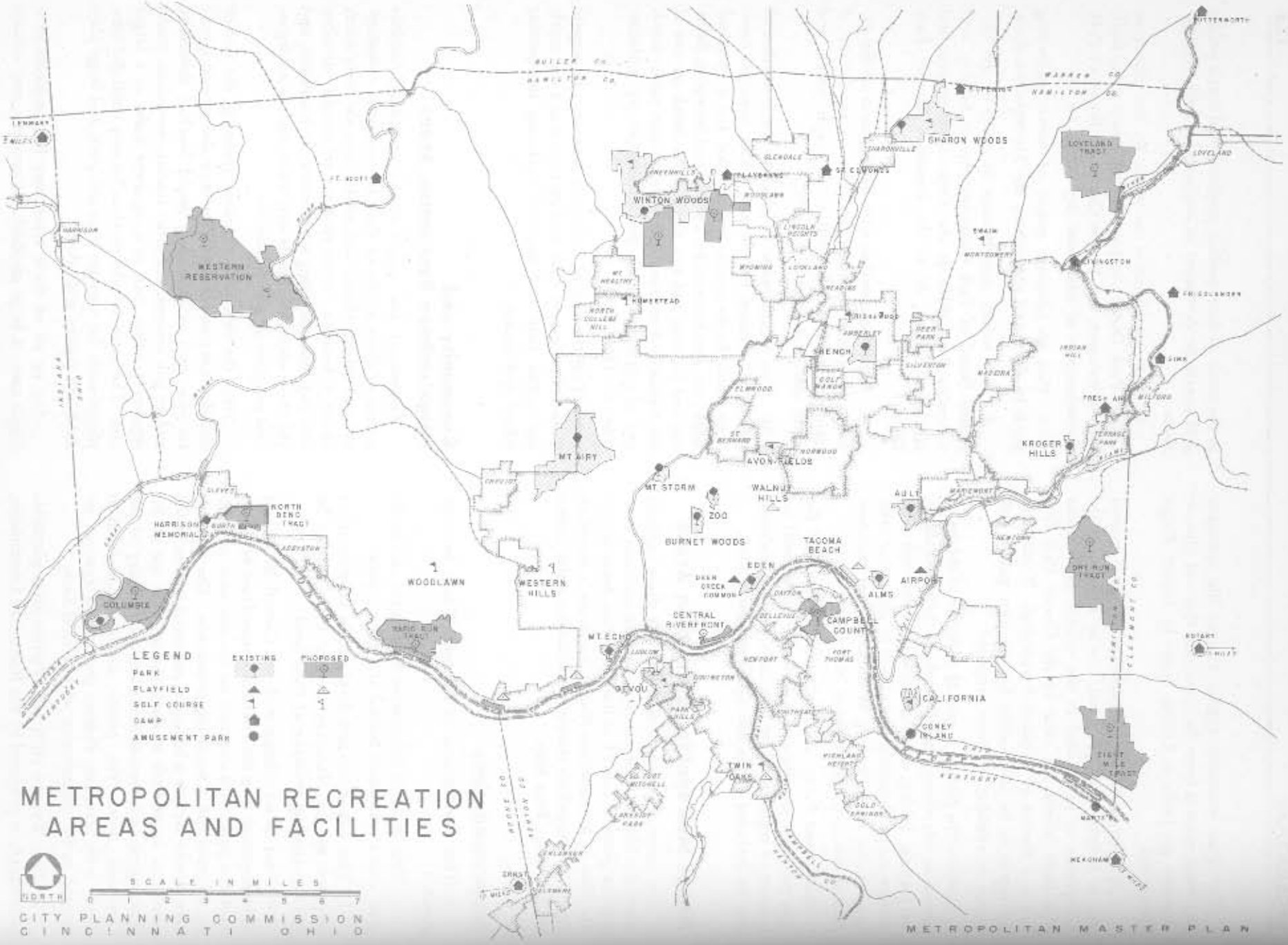
11. That the City of Covington take steps to acquire Twin Oaks Country Club and develop it as a metropolitan public park and playfield, retaining the present 9-hole golf course.

Community and Neighborhood Recreation Areas

Community and neighborhood recreation facilities consist of those within or close to residential communities and neighborhoods and which serve the daily needs of the population. These facilities are roughly divisible into (a) those requiring no direction or leadership, and (b) those effectively usable only when there is an organized program of group activities.

From the viewpoint of master planning, the former classification connotes parks but may also include special facilities such as swimming pools, baseball diamonds, midget golf courses, and other features sometimes found separately rather than as component items in a larger area. The latter includes playlots for very small children, playgrounds for younger boys and girls, and large playfields for youths and adults.

Any or all of these types may be combined in a single area. A large playfield, for example, may contain



METROPOLITAN RECREATION AREAS AND FACILITIES

CITY PLANNING COMMISSION
CINCINNATI OHIO

METROPOLITAN MASTER PLAN

FIG. 43

a playground, playlots, swimming pool, tennis courts, and a park section.

The following definitions of the various types of areas were adopted for the Recreation Areas Plan:

The play lot is a small area intended for the use of children of pre-school age. It is essentially a substitute for individual backyards. It is found primarily in apartment or tenement districts or as a part of large scale housing developments.

The playground is an area, at or adjoining the elementary school site, which serves the primary needs of children from 5 to 15 years of age. It has also become a center where the people of the neighborhood can find recreation and relaxation with their families, relatives and friends.

The playfield is an area that provides a variety of facilities primarily for the use of young people and adults. A section is usually developed as a playground for the children of the surrounding neighborhood. The playfield is a multi-purpose area providing facilities and activities for all ages and serving as a recreation center for several neighborhoods. A portion of the playfield is sometimes developed as an athletic field for highly-organized sports such as baseball, football and track.

The neighborhood park is a relatively small area primarily intended to provide an attractive neighborhood setting and a place for quiet passive recreation for people of all ages living in the neighborhood.

Recreation Area Standards

Among park, school, recreation and city planning authorities it is customary to appraise recreation facilities by what are regarded as desirable minimum standards of size in relation to territory and population to be served. Such standards, of course, cannot be applied arbitrarily to a metropolitan area nor to all localities in the same area. Varying conditions such as topography, population density and other factors influence the amount and types of recreation space required or possible of attainment in a particular neighborhood. Nevertheless the basic recreation needs of most people in most neighborhoods are similar.

After careful consideration of standards recommended in various other cities and by the National Recreation Association, the following are suggested and were used in the Master Plan, as minimum standards for application in Metropolitan Cincinnati:

Playlots: 40 sq. ft. per child; basis of 2400 sq. ft. per block in areas of intensive development; maximum service radius one-fourth mile; in high density areas one-eighth mile.

Playgrounds: One acre per 1,000 population; minimum desirable size five to seven acres; service radius one-fourth to three-eighths mile; in low density areas one-half mile.

Playfields: One acre per 1,000 population; 1 playfield to 15,000 to 25,000 population; desirable size 10 to 30 acres; service radius one mile; in low density areas one and one-half miles.

Parks: One acre per 1,000 population; desirable minimum size 2 acres or more; service radius one mile.

The Master Plan has made no effort to indicate locations for future playlots because of their highly localized character. It is the function of the various planning commissions in approving future large-scale projects, whether on vacant land or as redevelopments of blighted areas, to require provision of such facilities.

It is the recognized policy of the Cincinnati Board of Education and most other school boards in the Area to provide a playground adjacent to each elementary school. Non-school and supplementary playgrounds are necessary in many locations.

While in many cities playfields are identified with senior high schools, in this Area junior high schools tend to coincide with the principal communities. Some additional playfields must be provided where school playfields are too remote to serve residential areas of considerable size and to care for the needs of youth and of active adults.

In conjunction with a playground, a neighborhood park provides for children who do not relish, or who cannot indulge in, strenuous exercise. Here provision is made for activities of a quiet nature. Neighborhood parks also provide attractive outdoor spots for use by older people. The extent to which persons in the older age groups are increasing in proportion to the population gives special urgency to recognition of their needs. In areas of rather high density, small neighborhood parks are located by the Master Plan within a few blocks' walk of all residential sections.

In connection with community civic centers in the Master Plan, a neighborhood park may be made to provide a central open space, contributing a setting for the buildings involved.

Present Deficiencies

The following tabulation which appears as Table 3 in the Master Plan report on Communities gives some indication of present deficiencies in respect to recreation areas in each of the communities in the Ohio portion of the Area. The table also looks ahead to 1970 with estimates of the future total recreation acreage needed in each community:

Community	1940 Pop.	Current Play Area Requirements ACRES	Existing Play Areas ACRES	Current Deficiency ACRES	1970 Est. Net Population	Future Total Needed Acreage
Anderson Hills	6,600	14.0	38.3	.....	30,000	60
Avondale	36,600	80.2	55.4	24.8	42,000	84
Clifton Hills	43,800	101.2	64.5	36.7	48,000	96
Delhi Hills	9,100	32.0	31.3	.....	35,000	70
Downriver	6,400	13.6	17.4	.....	8,000	16
Greenhills	2,700	5.4	45.0	.....	20,000	40
Hyde Park-Oakley	33,900	91.0	93.7	.....	41,000	82
Linconia (West End)	35,000	136.0	49.0	87.0	28,000	56
Madison	16,600	37.6	39.6	.....	27,000	54
Millcreek Center	18,700	49.6	32.1	17.5	25,000	50
Northeast Hills	23,300	49.2	65.1	.....	56,000	112
Northwest Hills	21,900	47.6	55.2	.....	72,000	144
Norwood	33,000	68.0	51.1	16.9	35,000	70
Price Hill	31,500	63.0	15.2	48.5	35,000	70
Seymour	17,300	43.8	48.9	.....	27,000	54
Terrace Hills	6,700	12.4	43.3	.....	13,000	6
Upper Valley	27,800	59.4	90.9	.....	50,000	100
Uptown	32,100	67.2	21.3	45.9	21,000	42
Walnut Hills	36,000	104.0	44.2	59.8	38,000	76
Westwood Hills	36,700	82.0	97.8	.....	60,000	120
Isolated Areas:						
Lower Basin	11,450	22.9	3.1	19.8	3,000	6
Riverside-Sedamsville	5,200	11.6	18.1	.....	5,000	10
Sharonville	1,150	2.3	4.1	.....	3,000	6

The figures under "Existing Play Areas" include 1) Community Plan Areas which now or potentially are attractions of community calibre but not necessarily complete playfields; 2) neighborhood play areas which comprise those of more local character and include some school grounds of which no recreational use is now made, but are potentially usable, and 3) Board of Education proposals. Similar data for Kentucky are not available.

A mere table cannot, of course, bring out all the aspects of sufficiency or inadequacy of recreation areas. Appendix D in the Master Plan report on Recreation Areas points out in more detail current deficiencies in individual communities and, to some extent, in neighborhoods. The widely varying character of the communities and neighborhoods introduces several factors that bear significantly on the provision of additional facilities where current deficiencies are indicated. These factors are discussed on pages 77 to 81 in that report.

The problem of provision for recreation areas faces nearly all communities from the oldest and most deteriorated to those in early stages of development.

In areas so blighted as to require complete redevelopment there is the worst deficiency of neighborhood parks and play areas. The West End is the most obvious example. In connection with redevelopment plans adequate provision must be made here for recreation areas of various kinds.

There are localities in which residential development is essentially completed but which are deficient in recreation areas. Even if heavy cost is involved it is important that needed areas be provided. Provision of appropriate recreation and park areas is frequently the attractive element required to assist in arresting the deterioration in a neighborhood. Avondale, Clifton Hills, Walnut Hills and the older portion of Price Hill are especially deficient in playgrounds or playfields.

In the newly developing areas around the city's perimeter there is a different situation. As long as such territory remains partially developed, vacant lots are at hand for improvised recreation. But eventually an entire neighborhood builds up without provision for necessary open spaces and by that time the cost of making such

provision may appear prohibitive. A new residential section thus finds itself as deficient in recreation areas as are the oldest sections.

Facilities Along Expressway Right-of-Ways

In addition to the possibility of placing facilities of metropolitan type along the expressway right-of-ways (see discussion under Metropolitan Recreation Areas earlier in this chapter) opportunities may also be presented for providing facilities for more localized use, either in conjunction with a complete large playfield or smaller playgrounds, or in the form of special facilities such as tennis courts, a baseball field or a playground ball field, etc. Exact locations of such facilities can be determined only in connection with detailed right-of-way study and acquisition, but should be considered during the early stages of each expressway project.

Acquisition of Open Spaces

In the case of larger tracts such as parks, aviation fields, parkways, large playfields and the like, there can be no doubt that the only feasible method of acquisition is purchase (or condemnation). The planning should, of course, precede the acquisition in order to give the process moral and political justification. Early planning also indicates to the public where the future large parks and open spaces should be located. These tracts should be acquired early while the land values are low.

In built-up sections land for recreational purposes is usually acquired by the governmental unit by purchase from the owner or through the power of eminent domain.

Perhaps the best method of acquiring small neighborhood recreation areas in undeveloped sections is through the exercise by planning commissions of their control over the subdivision and platting of land. The first step is that the open space to be acquired be located by means of a plan. This does not necessarily mean that the plan shall locate the tract exactly but the plan should indicate the approximate location of the open space. No arbitrary rule, such as that each subdivision must contribute one-tenth of its area, can be justified in the courts. In the planning of open spaces there should be some standard such as one acre for each 300 of the population. To be reasonable, as required by the courts, the contribution by any specific subdivision should correspond to the plan and should not be based on any arbitrary rule.

A plan also furnishes proof of reasonableness of the community's desires and a basis for negotiation between the planning commission and the subdivider. The planning commission can and should develop standards for aggregate open spaces, that is, aggregates of spaces for streets, building setbacks and small parks or playgrounds. Within these general standards there can be considerable elasticity in the allocation of these open spaces among the various types.

Plan of Local Recreation Areas

Fig. 44 indicates graphically: 1) *existing* playfields, playgrounds and parks of the community and neighborhood type; 2) *existing* parks and playfields of the metropolitan type so located as to function partly as local facilities; 3) *proposed* play areas that will be adjuncts of definitely proposed expansion programs of the various boards of education; and 4) *proposed* play areas and neighborhood parks to round out the pattern of local recreation facilities. They are also shown on the Master Plan Map.

Some of the proposed areas shown are based on definitely suitable sites; others on general locations. These appear also in the plans presented in the chapter on Community Plans. While they are properly sized to the future population neither those plans nor Fig. 44 are to be regarded as the last word in recommendations for such facilities. This is particularly true in relation to areas recommended for early or eventual redevelopment and the outer portions of peripheral communities not yet developed.

The Kentucky facilities also call for more detailed study.

Recommendations

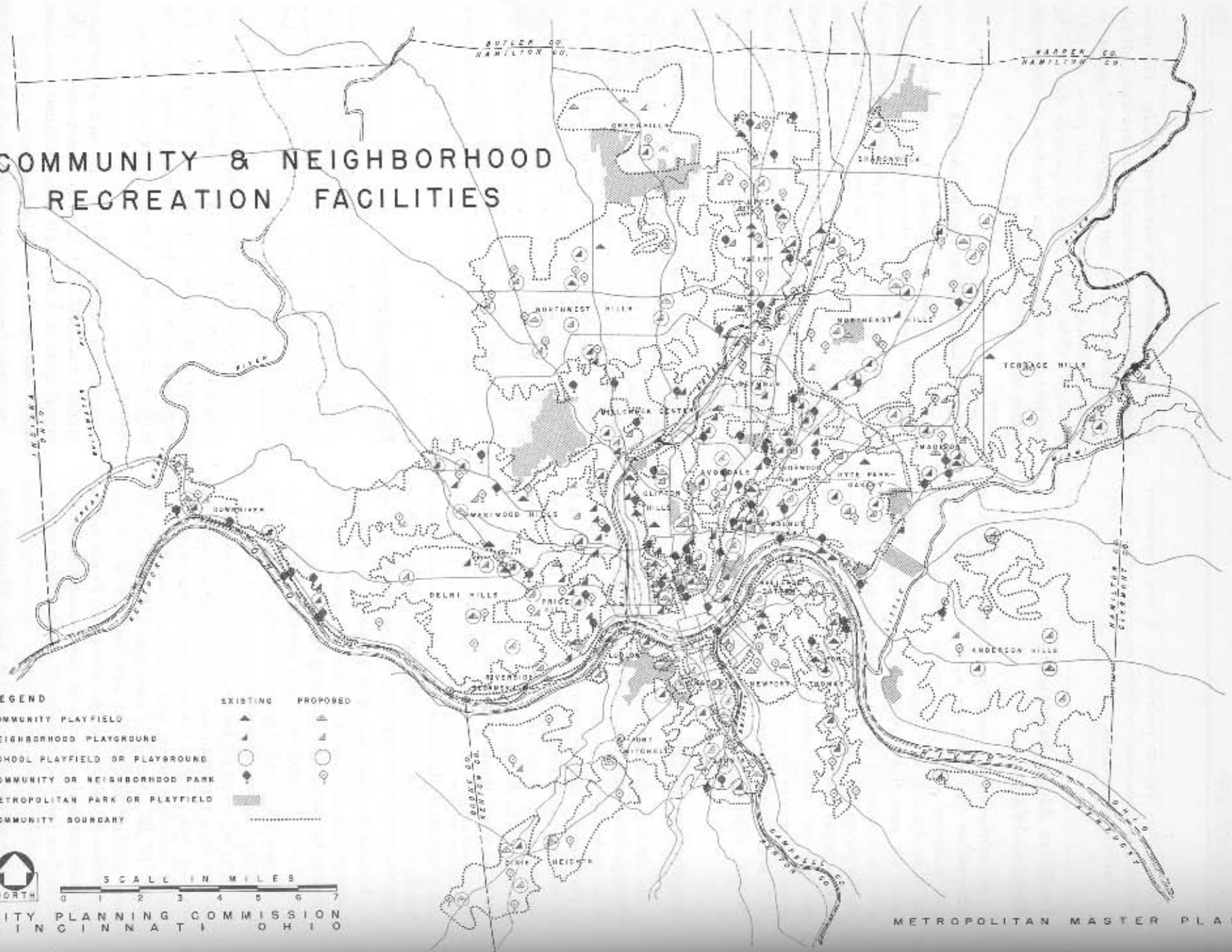
1. That one acre each of playground, playfield, and neighborhood park, or a total of three acres for each 1,000 of population served, be regarded as a minimum standard for communities and neighborhoods in the Cincinnati Metropolitan Area.

2. That if at all possible a neighborhood playground comprising from 5 to 7 acres be provided in conjunction with every existing and future elementary school, and a larger community playfield containing from 10 to 30 acres in conjunction with every junior and senior high school.

3. That where present and proposed school playgrounds and playfields will be too remote to serve residential areas of considerable size, additional play areas be provided by the proper local agency.

4. That if possible neighborhood parks be provided as integral parts of playgrounds and playfields, and

COMMUNITY & NEIGHBORHOOD RECREATION FACILITIES



LEGEND

	EXISTING	PROPOSED
COMMUNITY PLAYFIELD	▲	△
NEIGHBORHOOD PLAYGROUND	◢	◿
SCHOOL PLAYFIELD OR PLAYGROUND	○	○
COMMUNITY OR NEIGHBORHOOD PARK	🌳	🌳
METROPOLITAN PARK OR PLAYFIELD	▬	
COMMUNITY BOUNDARY	·····	

NORTH

SCALE IN MILES
0 1 2 3 4 5 6 7

CITY PLANNING COMMISSION
CINCINNATI OHIO

METROPOLITAN MASTER PLAN

FIG. 44

that where these give incomplete coverage of need additional park areas be added.

5. That in connection with large-scale housing developments, planning commissions require provision to be made for playgrounds and/or playlots for very young children, in accordance with the standards set up herein.

6. That no unneeded school sites or other public property be offered for sale in areas earmarked for future redevelopment and that pending redevelopment consideration be given to use of such properties or others which may be obtainable for interim recreational use with a minimum of expenditure for improvement.

7. That planning commissions require the provision of adequate recreational areas, in consonance with the standards used in the Master Plan, as additional sections of the Metropolitan Area are subdivided.

(The standards set forth in Recommendations 1, 2, 3 and 4 were used in the Master Plan.)

Chapter 11
RAILROADS

Cincinnati is important as a gateway for both north-south and east-west railroad traffic. It is a focal point for rail movements between the great commercial, manufacturing and agricultural regions of the Middle West and similar areas in the Southeastern states. The adequacy of railroad facilities in this Area is therefore not only of local concern but is a matter of national import. Long-range transportation needs of the nation are involved.

Analysis of railroads as an element in metropolitan planning while taking them into account must look beyond the needs and welfare of the railroads as such. The Master Plan studied rail transportation in relation to the numerous other physical and economic factors and features which condition the future development of a metropolitan urban center.

Passenger Phase Solved

Cincinnati's Union Terminal is a magnificently conceived and executed solution of the passenger phase of railroad transportation in this Area. Unfortunately, the program of improvement of railroad operation stopped short after producing the right answer for passenger service. Continued congestion of freight traffic indicates the need for provision of equally satisfactory terminal arrangements for freight.

Freight Problem Remains

Seven railroad systems converge at Cincinnati from all directions: the Baltimore and Ohio, the Chesapeake and Ohio, the Louisville and Nashville, the New York Central, the Norfolk and Western, the Pennsylvania, and the Southern. (See Fig. 45.)

Due to the character of local topography the railroad lines serving the Area are located principally in the valleys of the Ohio, Little Miami and Licking Rivers, and Mill Creek. Major industrial areas have developed along these lines and have formed concentrated railroad and industrial districts through which the heavy gateway traffic must pass.

A large part of this traffic is concentrated in Mill Creek Valley and crosses the Ohio River on the Southern, C. & O. and L. & N. railroad bridges. Heavy east and west traffic which follows the Ohio Valley for some distance below Cincinnati also uses the Mill Creek route in passing through the Metropolitan Area.

The mingling and crossing of traffic which occurs near the junction of Mill Creek and the Ohio River have created serious congestion which extends from that point to Ivorydale Junction in Mill Creek Valley, where west-east traffic turns eastward. This situation and the limitations due to capacities of the present bridges over the Ohio constitute the critical features of Cincinnati's railroad problem.

The Problem Diagrammed

In the Master Plan study surveys of existing freight traffic were made. A diagram designated B appears as Fig. 2 in the Master Plan report on Railroads. It shows that:

(1) Heavy concentration of traffic occurs on the C. & O. Bridge while the Southern and L. & N. Bridges carry comparatively little traffic;

(2) Congestion occurs at Cincinnati Junction where large volumes of traffic cross each other moving between Mill Creek Valley and the Ohio River Valley;

(3) A large volume of traffic is concentrated in Mill Creek Valley between Cincinnati Junction and Ivorydale Junction.

Most of the north and south traffic moves over the C. & O. Bridge across the Ohio River because there is no practicable way to connect the Southern Bridge approach on the south side of the river with the C. & O. and L. & N. lines, and because the L. & N. Bridge has excessive approach grades and is too lightly constructed to accommodate heavy engines.

The large volume of freight traffic in Mill Creek Valley and through Cincinnati Junction is composed of two types of movements: (1) L. & N. and C. & O. traffic interchanging with that of the N. Y. C. and

B. & O., and (2) intermingling of these interchange movements with the through east-west freight traffic of the B. & O.

Passenger Traffic Increases Congestion

Through passenger trains in and out of the Union Terminal from the north increase congestion between the B. & O. Mill Creek Yard and Ivorydale Junction. During the two rush-hour periods when most passenger traffic occurs, freight movements are completely stopped. Two additional tracks for this passenger traffic were a planned part of the Union Terminal project but were later omitted. It is assumed that the railroads will provide them in the near future to relieve this critical situation.

The Improvements Needed

The objective of the Railroads Plan is to eliminate the traffic congestion in the Mill Creek Valley in general, and particularly at Cincinnati Junction.

The objective can be realized by providing a new route to permit the heavy north-south interchange traffic to by-pass Mill Creek Valley and Cincinnati Junction.

The plan to cure this congestion includes:

1. Construction of a new Ohio River bridge just west of Lunken Airport;

2. Double tracking of the P. R. R. Richmond Division from Rendcomb Junction to its crossing of the N. Y. C. south of Sharonville;

3. A new connection from the north end of the N. Y. C. Sharonville Yard to the B. & O. Toledo Division north of Glendale, and

4. Sharing of the Sharonville Yard by the N. Y. C. with the B. & O.

By constructing a new bridge over the Ohio River west of Lunken Airport to connect with the C. & O. and L. & N. on the Kentucky side, the existing route of the P. R. R. Richmond Division could be used. It would be adequate for such a belt line if it were double-tracked from its junction southwest of Mariemont to the N. Y. C. south of Sharonville.

This line could be connected directly with the N. Y. C. Ohio Division south of Sharonville Yard, and a new connection to this yard provided from the B. & O. Toledo Division at a point about three miles north of Glendale. The N. Y. C. Sharonville Yard is a modern hump yard with ample capacity to handle B. & O. trains in addition to its own normal traffic.

Advantages of Proposed Rerouting

The effect of rerouting traffic according to this proposal is shown in Diagram C in Fig. 2 in the Railroads report. When compared with the diagram showing the same traffic as currently handled, the following changes which eliminate the present congestion and attain the desired objective of improving freight movement, are apparent:

(1) Traffic on the C. & O. Bridge is materially reduced;

(2) Traffic movements through Cincinnati Junction are very much simplified;

(3) Traffic on the B. & O. main tracks between Ivorydale and Cincinnati Junction is reduced;

(4) All freight traffic and all through passenger trains on the B. & O. Toledo Division between a point north of Glendale and Cincinnati Junction are eliminated;

(5) Removal of interchange traffic from the L. & N. Bridge eliminates the need for this structure and the tracks along Saratoga Street in Newport;

(6) Traffic on the P. R. R. Richmond Division is greatly increased.

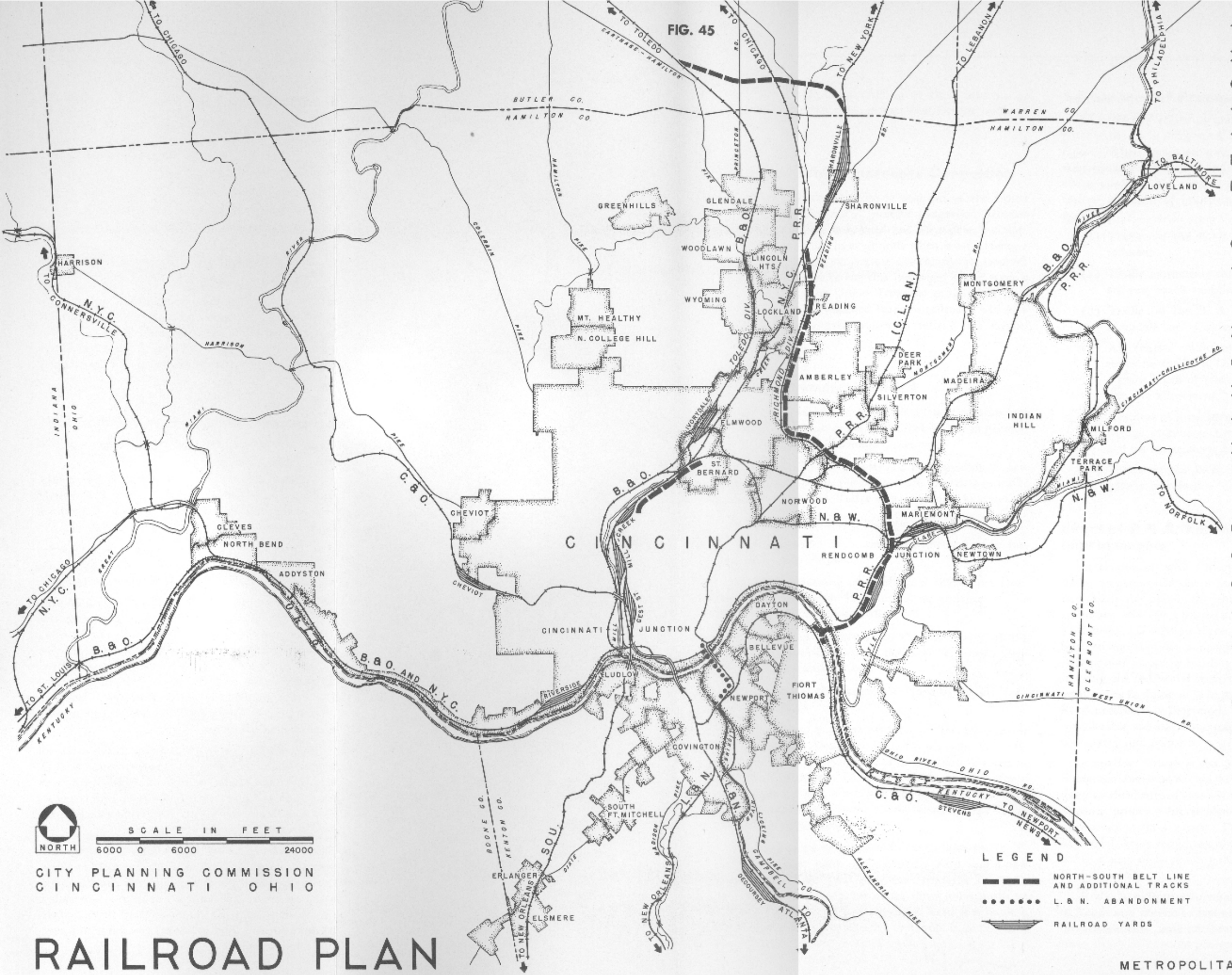
Effect of P. R .R. Richmond Division Improvements

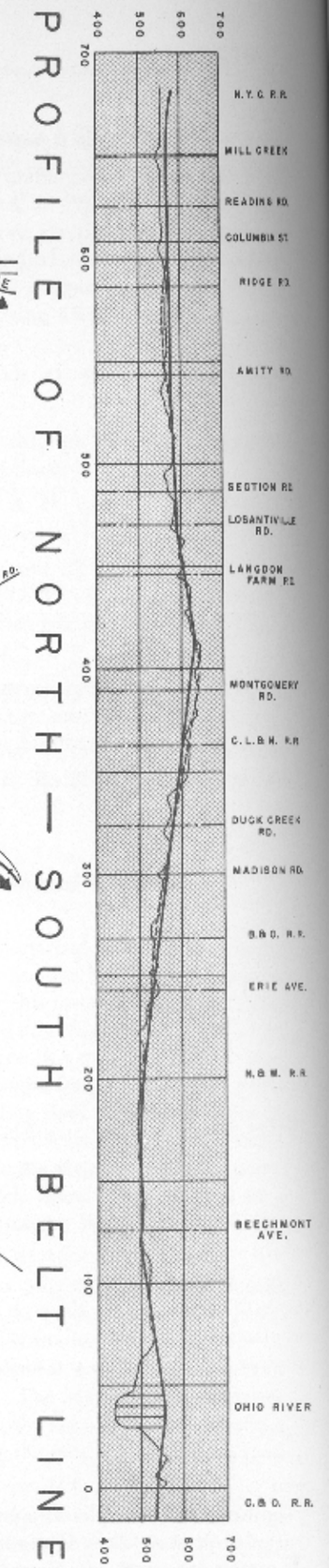
In connection with the marked increase of freight traffic which would occur on the P. R. R. Richmond Division it may be said that this increase would not have an unfavorable effect on the communities adjacent to it. This railroad line passes through a natural separator belt between communities as sought for in the Master Plan. At no point except in Reading does it have the effect of severing one residential section from another. The nearest it comes to doing so is in the vicinity of Montgomery Road northeast of Norwood. Here, however, it is in a considerable cut and Montgomery Road forms a strong connecting link across it.

Amberley Village is the only locality where future residential development might be contemplated in proximity to this railroad line. However, the desirability of abutting property for residential use has already been discounted to some extent. The Master Plan report on Industrial Areas recognizes the suitability for industrial use of a strip of land along the east side of the railroad in this vicinity.

In the 10 mile stretch from the north end of Reading to Rendcomb Junction there are only 13 grade crossings on this division, nine of them in Reading. Of the 13, seven grade elimination projects (three of them in Read-

FIG. 45





LEGEND

- NORTH-SOUTH BELT LINE AND ADDITIONAL TRACKS
- L. & N. ABANDONMENT
- RAILROAD YARDS

RAILROAD PLAN

FOR FACILITATING FREIGHT MOVEMENTS IN THE CINCINNATI AREA

METROPOLITAN MASTER PLAN

ing) would be required whether or not the changes proposed in this Railroads Plan are carried out. (See Appendix B in the Railroads report.)

It therefore appears that the proposed use of the Richmond division as a bypass route for interchange traffic is logical and satisfactory. Any possible unfavorable effect of increased traffic through Reading will be far outweighed by beneficial effects of removal of traffic from the B. & O. Toledo Division upon residential areas many times more extensive.

Effect of B. & O. Toledo Division Improvements

As can be visualized from Fig. 6 in the Railroads report, the B. & O. is much more of an adverse factor in relation to the abutting residential areas than is the P. R. R. Richmond Division. The former now cuts directly through Glendale, Wyoming, and other Upper Valley neighborhoods to the south. The removal of this burden of heavy through and interchange rail traffic would increase the desirability and value of nearby residential properties in Glendale, Woodlawn, Wyoming, Lockland, Hartwell, Carthage and Cumminsville.

On this division a large majority of the existing grade crossings would become of such minor importance as not to justify separation if the Plan is carried out. If it were not carried out, at least ten grade separation projects would be required and from 15 to 20 other crossings would either remain as danger spots or would require closure, at the price of considerable local inconvenience. (See Appendix B in the Railroads report.)

Effect of Improvements on Kentucky Side

It would be a great advantage to Newport to have the L. & N. tracks removed from Saratoga Street, eliminating the nine grade crossings. (See Fig. 45.) The Master Plan proposed Saratoga Street as a modified expressway to permit rapid and efficient carrying of U. S. 27 motor traffic through the closely built-up part of that city. Removal of the railroad is an essential step toward achievement of this major highway improvement.

The 1946 volume of freight traffic from the C. & O. Stevens Yard to the C. & O. Bridge was about the same as that from the L. & N. DeCoursey Yard to the C. & O. and L. & N. Bridges. This means that adoption of the proposed rerouting plan would constitute merely a reversal of present flows. The effect of freight movements on nearby property in Dayton, Bellevue, and Newport would be unchanged.

Estimated Cost of the Plan

The cost of the suggested improvements (excluding the two new B. & O. passenger main tracks) is estimated in detail in Appendix A in the Railroads report. It may be summarized as follows:

New Ohio River Bridge	$4,380,000
P. R. R. Richmond Division Improvement	4,620,000
B. & O. Toledo Division Connection	1,330,000
Total Estimated Cost	$10,330,000

According to the Railroads report, the very real necessity for improving existing conditions would justify this expenditure. Economic justification is demonstrable even if railroad traffic never increases above its present volume, or even though it declines, if the effect of the savings to both the railroads and the public are properly weighed.

Benefits and Savings Under the Plan

These savings are indicated by the following estimates:

(1) Consolidation of yard operation at Sharonville should save a minimum of 2 switch engines, which would amount to approximately $175,000 per year. Capitalized at 3% it would justify an expenditure of $5,840,000.

(2) The helper engine now necessary 24 hours a day on the N. Y. C. approach to the C. & O. Bridge could be eliminated, justifying an expenditure of $2,920,000.

(3) Improvement of the P. R. R. Richmond Division as proposed would require complete separation of grades on this line, cost of which is included in the estimate. All grade crossings involved in this separation must be eliminated in the future regardless of the proposed rail traffic change. The cost of these separations, estimated at $1,250,000, would therefore be a savings or credit to the future grade crossing expenditures. (See Appendix B in the Railroads report.)

(4) Elimination of all passenger trains and all through and interchange freight traffic from the B. & O. Toledo Division tracks would obviate expenditures amounting to $4,550,000 for grade crossing projects that otherwise must be carried out. (See Appendix B in the Railroads report.)

These four items total $14,560,000. They represent only those savings or benefits which are most apparent and easily appraised. Both the railroads and the industries they serve would benefit by the elimination of delays due to present congested conditions and by the consequent more efficient local industrial switching and interchange movements.

The benefits to the public through increased community values and residential desirability along the route of both the B. & O. and P. R. R. have already been commented upon. The public would also benefit by better railroad service to industrial areas.

All these benefits should be considered in apportioning improvement costs. The railroads and the public should assume their financial shares in proportion to actual benefits.

Division of Expense

A tentative division of expense, based on total estimated costs of $10,330,000 and total estimated benefits of $14,560,000, follows:

Railroad Benefits		
Yard operation saving	$5,840,000	
Helper engine saving	2,920,000	
Grade crossing elimination (15% of cost)	870,000	
Total Railroad Benefit	$9,630,000	(65%)
Public Benefits		
Grade crossing elimination (85% of cost)	4,930,000	(35%)
Total Benefits	$14,560,000	(100%)

Based on these percentages, the division of costs would be:

Railroad Share	$ 6,715,000	(65%)
Public Share	3,615,000	(35%)
Total Cost	$10,330,000	(100%)

NOTE: All of the estimates in connection with the Railroad Plan and report were made as of late in 1946.

East-West Belt Line

The possibility of eventual need of a belt line for bypassing east-west freight traffic around the Metropolitan Area was studied. A route was worked out that could connect the B. & O. and P. R. R. at Loveland with the B. & O. and N. Y. C. at North Bend. From the standpoint of grades such a line is practicable. Preliminary estimates late in 1946 indicated a probable cost for a double track line from Loveland to Sharonville and a single track line from there to North Bend, of less than $7,000,000. Prospective need for this belt line, however, is remote if present congestion in the Mill Creek Valley and Cincinnati Junction is relieved by carrying out the proposed Railroads Plan.

Railroads Plan Not an Extensive Project

This Plan for improving the handling of freight traffic is much less ambitious than that which culminated in the Union Terminal. It involves a surprisingly small amount of physical modification of the present track pattern. Achievement of the Union Terminal demonstrated that it is possible for all railroads serving the Area to co-operate in both construction and operation, the latter including joint use of facilities where most efficient and desirable.

The Railroads Plan, like any other element of the Master Plan, is subject to further study as to details. Acceptance of the general concept of the Plan by railroads and public officials would make it possible to proceed with assurance with the gradual elimination of those grade crossings where the conflict of anticipated railroad operations and motor traffic indicate the justification for such expenditures.

Chapter 12
AIRPORTS

Cincinnati became an important city due to its location on the principal artery of transportation in the West in the early days — the Ohio River. It thrived as it kept pace with later developments — canals, highways, railroads.

The era of the new medium of transportation — the airways — is really just beginning. Its effects on the development of cities will be fundamental and far-reaching. Cincinnati cannot afford the handicap imposed by failure to provide the facilities through which the full possibilities and benefits of air transportation can be realized.

The Master Plan points the way to adequate implementation of Cincinnati's air opportunities, outlines for the Area a system of airport facilities capable of handling safely and efficiently the anticipated air traffic of the future, and indicates how such a system can best be coordinated with other transportation and land use elements.

For a detailed discussion of the aviation potentialities of the Area, future needs, analysis of sites and means for effectuation of the Airports Plan herein the report on Airports should be consulted.

Ten-Year Airport Plan

A metropolitan airport plan is essentially the translation of the anticipated volumes of various types of scheduled and non-scheduled flying into terms of required service facilities at specific locations. The Airports Plan is based on estimates of volumes of air traffic reasonably to be expected in the Area during the 10-year period beginning in 1947. This term accords with the opinion of aeronautical planning officials that due to the swift and perhaps radical changes possible, it is unrealistic and unwise to make plans for a longer period.

Present and Prospective Air Service

At present the Area is served by five major airlines — American, Delta, Trans-World, Piedmont and All-American Aviation. Turner Aeronautical has been certificated to service Cincinnati but has not yet begun operations.

Because of the strategic location of the Area near the center of U. S. population, and because of its importance as a gateway between the north and the south, it is logical to assume a more comprehensive service of scheduled flights for the future than obtains at the present time.

Cincinnati continues aggressively to seek new air routes and improvements in its existing route pattern by participating in and bringing proceedings before the Civil Aeronautics Board.

Existing Facilities

(NOTE: Since the Airports Plan was promulgated, the Civil Aeronautics Administration has developed a new nomenclature to designate classes of airports, based on runway lengths and widths, and taxiway and landing strip widths. The new nomenclature employs the terms "feeder," "local," "express," "deluxe," and "international," to correspond roughly with the old designations as Classes I, II, III, IV, and V. The earlier designations are retained in this book as the new ones are not exactly comparable).

The existing facilities are shown in the Airports Plan, Fig. 46.

There is no Class V airport in the Area at this time and the Boone County ("Greater Cincinnati") Airport owned by Kenton County is the only Class IV. Scheduled airline operations recently moved to the latter airport from Lunken because of the longer runways and safer approaches for large modern transports at Boone County.

Lunken Airport (Class III) is owned and operated by the City of Cincinnati. Put in service in 1927, it was the principal airport for the Area until January 10, 1947.

The airport at Oxford is owned and operated by Miami University. Tri-State Airport is equipped for private flying, and instructional and charter service. It is used for those purposes.

All other classified fields, including those at Hamilton and Middletown, are used for non-scheduled private flights, charter service, and the like.

Eight of the airports shown in Fig. 46 as recognized by C. A. A. are unclassified. Several are totally undeveloped.

Ownership Factors

Development of a permanent system of airports to meet metropolitan requirements for the next ten years necessitates a clearly-defined policy of ownership of these facilities.

The City Council of Cincinnati has undertaken to acquire the site for the Blue Ash Airport which is to be developed by Hamilton County with Federal aid.

Lunken, now owned and operated by the city, will continue on that basis. The Boone County Airport will remain under the jurisdiction of Kenton County.

Private Flying

Private flying fields are still in the pioneering stage. It has not been proved in most cases that they can show a profit on the capital invested. The Federal Airport Act (Public Law 377, 79th Congress, approved May 13, 1946) furnishes financial assistance for both major airports and minor flying fields. Public ownership (but not necessarily public operation) is the surest way to guarantee adherences to the adopted plan and avoid risk of pre-emption of a component private field or site by some other permanent use.

Approach Protection

All the land needed to provide safe flight approaches cannot feasibly be included within an airport. Structures or trees inside approach zones can be condemned and removed under the power of eminent domain. Easements or construction rights can be acquired with or without condemnation.

Zoning for unincorporated areas in Hamilton County is now in the making and the maps proposed for adoption clearly define the Blue Ash Airport site for that purpose. In Kentucky such zoning legislation as is available applies only to cities of certain classes.

There is at present no legislative authority in Ohio for the zoning of airport approaches but legislation toward that end is expected to be introduced in the next session of the Legislature.

Co-ordination of Activities

To assure effective co-ordination of flying activities in the Area the most desirable procedure would be to set up a Metropolitan Aviation Authority. Because of the interstate aspects, however, considerable difficulty would be encountered.

In lieu of an Authority, so far as the Blue Ash Airport is concerned, there has been set up by ordinance of City Council and similar action on the part of the Hamilton County Commissioners a group designated as the County-City Airport Committee to co-ordinate action of the county and city with reference to the Airport. The Committee consists of three members of the Finance Committee of Council, three County Commissioners and three citizen members, with a Secretary. It has no final legal authority, was formed for co-ordinating purposes only, and its jurisdiction at present is confined to matters affecting the Blue Ash Airport.

Cincinnati's Aviation Needs

Master Plan studies indicate the need by 1956 for these aviation facilities in the Cincinnati Area: (See Fig. 46.)

(1) A master airport (Class V) for scheduled air transport.

(2) A major airport (Class IV or V) for military flying and cargo transport, with additional provision for extensive private flying.

(3) A major airport (Class III) for non-scheduled miscellaneous commercial and instructional flying.

(4) Several airports in Hamilton County, and one in Kenton or Campbell County, for private flying.

(5) Facilities for amphibian basing and operation.

(6) Provision for future operation of helicopters in several locations.

Recommendations

The analysis of these prospective needs within the Metropolitan Area for airports and other facilities to satisfy requirements for all kinds of flying within the next ten years leads to the following recommendations:

1. Approval by C. A. A. of the Airports Plan including the site selected by City Council at Blue Ash has cleared the way for immediate steps toward the development and early completion of the required facilities there.

2. Lunken Airport should continue as a Class III airport, operated as an essential facility to accommodate rapidly expanding non-scheduled flying activities. These activities to include demonstrations and sales; maintenance and repair of based and itinerant private and company-owned planes; charter, taxi, and "drive-your-

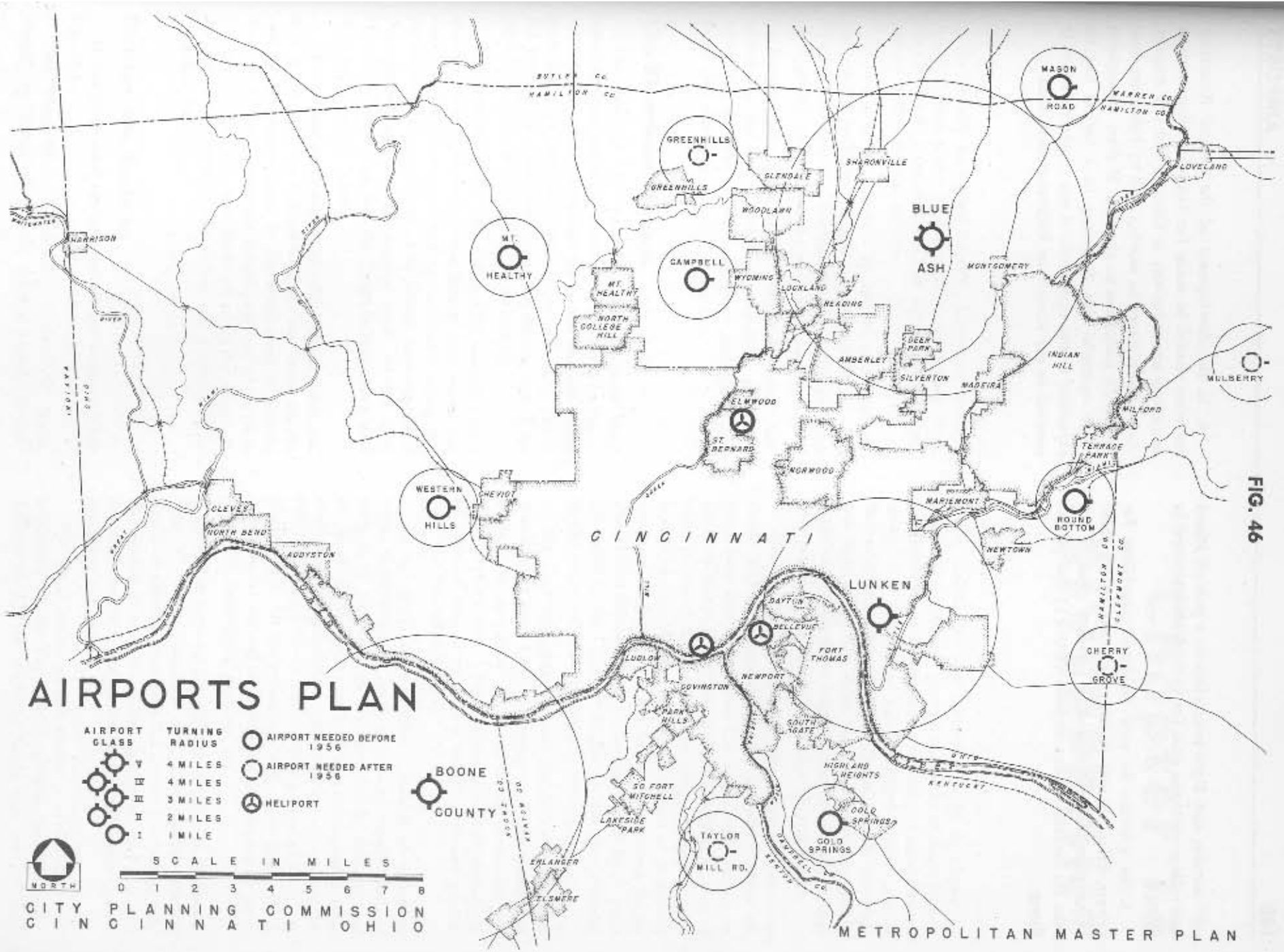

AIRPORTS PLAN
AIRPORT CLASS
TURNING RADIUS
V 4 MILES
IV 4 MILES
III 3 MILES
II 2 MILES
I 1 MILE
AIRPORT NEEDED BEFORE 1956
AIRPORT NEEDED AFTER 1956
HELIPORT
BOONE COUNTY
NORTH
SCALE IN MILES
0 1 2 3 4 5 6 7 8
CITY PLANNING COMMISSION
CINCINNATI OHIO
METROPOLITAN MASTER PLAN
CINCINNATI
GREENHILLS
MT. HEALTHY
CAMPBELL
BLUE ASH
MASON ROAD
MILLSBERRY
WESTERN HILLS
LUNKEN
ROUND BOTTOM
CHERRY GROVE
TAYLOR MILL RD.
GOLD SPRINGS
LOVELAND
HARRISON
CLEVES
NORTH BEND
ADDYSTON
ELMWOOD
ST. BERNARD
NORWOOD
AMBERLEY
SILVERTON
MADEIRA
INDIAN HILL
MILFORD
TERRACE PARK
MARIEMONT
NEWTOWN
SHARONVILLE
GLENDALE
WOODLAWN
WYOMING
LOCKLAND
READING
DEER PARK
MONTGOMERY
DAYTON
BELLEVUE
FORT THOMAS
NEWPORT
COVINGTON
LUDLOW
PARK HILLS
SOUTH GATE
HIGHLAND HEIGHTS
SO. FORT MITCHELL
LAKESIDE PARK
ERLANGER
ELSMERE
BUTLER CO.
HAMILTON CO.
WARREN CO.
CLERMONT CO.
BOONE CO.
KENTON CO.
KENTUCKY
OHIO
INDIANA
OHIO RIVER

FIG. 46

self" service; and flight instruction as a part of school and college curricula, and for individuals interested in flying.

3. In addition to such incidental provisions for private flying as may suitably be made at the three major airports, steps should be taken to preserve the sites for several smaller airports (Class 1) for private flying.

4. In the development of the Central Riverfront provision should be made for heliports. Experimental operations are under way at Chicago and Los Angeles, among other places, in moving mail by helicopter from downtown postoffices to airports. If these experiments prove successful this Area may be a logical one for expansion of this operation. A site should therefore be reserved in the Riverfront Redevelopment Area.

Chapter 13
RIVERFRONT

In the early days when the Ohio River was the major transportation artery to the rapidly developing West, the Cincinnati riverfront was the scene of much commercial and industrial activity.

Today it is characterized by ancient tenements and commercial buildings largely unused above the first floors; a few small and medium-sized factories; railways, sand, gravel, and coal yards; and much vacant land.

Immediately adjacent to the heart of downtown Cincinnati lies this large stretch of wastefully used land which has no hope of self-redemption and which is a social and economic liability to the city.

The Riverfront Problem

The flood of 1937 brought into focus such long-standing questions as: of what use to the city is its downtown riverfront? is it being used to the best advantage from the city's viewpoint? are its uses such as to justify the expense of protection from inundation, and if so, what kind of protection would be desirable?

The issue was partly resolved by City Council's decision in 1940 to proceed with a barrier dam across the mouth of Mill Creek but not to continue it along the remainder of the riverfront. This project now completed was decided upon after extended study by the City Planning Commission and the Corps of Engineers, and after much public debate.

The district inundated by the 1937 flood, from the turn in the Mill Creek flood wall at Carr Street on the west to the narrow point in the flood plain at Martin Street on the east, presents a special problem which must still be met. The area, boundaries of which for statistical purposes were carried along streets and property lines, comprises 432 acres.

Division into Sections

It can be divided logically into three sections: (See Fig. 47.)

The West Section, extending from Carr Street roughly to Central Avenue, is devoted largely to railroads, warehouses and industry. Study developed no reason to suggest any general measures of flood protection or substantial changes in property use except demolition of a half-dozen old residential blocks east of Baymiller and north of Fourth Street. As old buildings are replaced by new ones, localized provision can be made to prevent flood damage, and to provide emergency access to the buildings in time of high water.

The East Section, east of Butler Street, also contains chiefly railroads, warehouses, and industry. There appears here also no occasion for substantial changes in land use except the similar need of eliminating two or three blocks of decadent old dwellings. Whether there is economic justification for the protection of properties from serious floods by a low flood wall between Butler and Martin Streets along the south side of Pearl, calls for study by the Corps of Engineers and consideration of the wishes of affected property owners.

The Central Section, flanking the city's Central Business District from Central Avenue to Butler Street and bounded on the north by Third Street constitutes the major problem area. Characterized by an intermixture of all types of uses, it presents a wholly different picture from the two other sections.

Its 191 gross acres contain a jumble of activities. There is an unusually large amount of vacant land — 68% of its gross acreage is unoccupied by structures of any kind. Of the total area 21% is in wholesaling; 10% in transportation facilities; 35% in streets, alleys, and the Public Landing; 6% in manufacturing uses; and 14% in unused land. Of the remaining 14%, more than half is in residential use and the remainder is occupied by local shops and commercial parking lots.

Activities here are periodically interrupted by floods. Most of the buildings are old. The produce market district is affected soon after the lowest flood stage (52-foot level) is reached. Other businesses and the old dwellings on the lower streets offset flood losses against prevailing low rents.

The flood history of this section is climaxed by the conclusion of the Corps of Engineers that economic damages to it from recurring floods were not sufficient

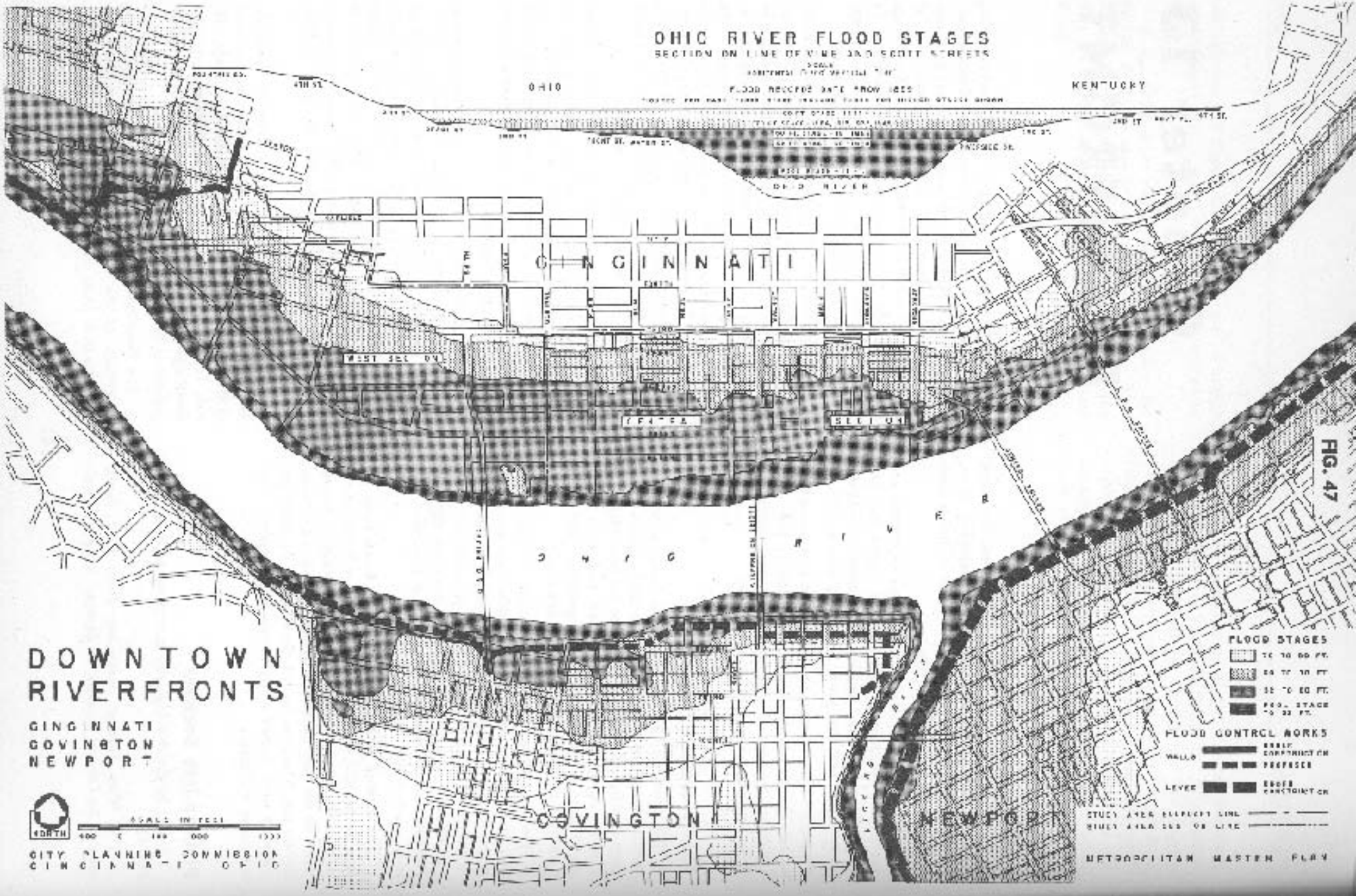

OHIC RIVER FLOOD STAGES
SECTION ON LINE OF VINE AND SCOTT STREETS
OHIO
KENTUCKY
CINCINNATI
COVINGTON
NEWPORT
O H I O R I V E R
DOWNTOWN
RIVERFRONTS
CINCINNATI
COVINGTON
NEWPORT
NORTH
SCALE IN FEET
CITY PLANNING COMMISSION
CINCINNATI OHIO
FLOOD STAGES
FLOOD CONTROL WORKS
WALLS
LEVEE
METROPOLITAN MASTER PLAN

FIG. 47

FIG. 48

to justify Federal participation in construction of flood control works. The additional cost of protecting "the bottoms" in conjunction with the Mill Creek Barrier Dam would have been $6,556,200. The Federal share would have been $4,252,200 and Cincinnati's share $2,304,000, of which $500,000 would have been assessed on benefiting property owners.

All of this section was covered by the great flood of 1937 but flooding is not the prime cause of its decline. Central waterfronts in Detroit and Buffalo, unaffected by floods, are similarly decadent. The real root of the trouble is that the whole layout of streets and structures built to serve an earlier period in the city's history has become obsolete resulting in a conglomeration of marginal uses.

For the most part buildings are very old, some having passed the century mark. In recent decades numerous structures have been torn down because of old age, deterioration or flood damage. Few have been replaced, and few new buildings have been erected on land previously unused. The threat of floods, difficulty of assembling sizeable tracts because of diversified ownership in small tracts, and the gridiron street pattern all have discouraged piecemeal replacement. It is a sub-standard area which brings inadequate returns to the city in both tax revenues and usefulness and has a depreciating effect on the whole Central Business District.

Tax valuations reflect a high degree of obsolescence. Land valuation for tax purposes is $3,183,686; buildings, $6,303,910; total, $9,487,596. The average tax valuation of land per square foot is 59 cents; of land and buildings, $1.76. Few property sales in recent years were above tax figures; many were much below them. There is every reason to believe that market values will continue to decline.

Some of the worst atmospheric pollution in the city occurs here, due to smoke and fly-ash from the Kentucky cities, river boats, locomotives, and commercial and residential heating plants. Smoke from the area itself helps to blacken the Central Business District.

Advantageous Location

This section occupies a strategic position at the prospective focal point of arterial highways for the entire Metropolitan Area and adjoins the most intensively developed and highly valued property in the city. Now a deteriorated area of declining activities and values, a relic of bygone days — it can be made an area of great value, utility and inspiration.

The difficulty of assembling without power of eminent domain tracts of sufficient size to permit improvement on an effective scale indicates the necessity of overall property acquisition and replanning by a public agency. After assembly, areas best suited for private development could be sold or leased, to be rebuilt in general accord with the Redevelopment Plan.

The Central Business District, immediately adjoining the riverfront, is the principal focal point of the city, of the Ohio portion of the Metropolitan Area, and of traffic to and from Kentucky by way of the bridges.

This places the Central Riverfront in a key position with relation to the metropolitan transportation system. It has a most favorable present and potential relation to new expressways, river bridges and their approaches, parking facilities, and bus, river, and aircraft terminals.

Its accessibility via the proposed expressways, low land cost, opportunity for flexibility of arrangement, and favorable setting, attest its suitability for buildings to house activities that would draw crowds from the whole Metropolitan Area and beyond. For the same reasons it can be seen that governmental administrative and service buildings of the central type can be erected here to advantage.

Demand for existing modern apartments near Lytle Park indicates that a rehabilitated Central Riverfront should provide sites for some apartment buildings.

The fact that the original site of Fort Washington lies within this area suggests that recognition be given to development of a portion of it as a historical memorial center.

It is appropriate that at least a portion of the river bank be used for activities related to recreational use of the river. Provision for other types of recreation of a central or metropolitan rather than localized character would also be appropriate.

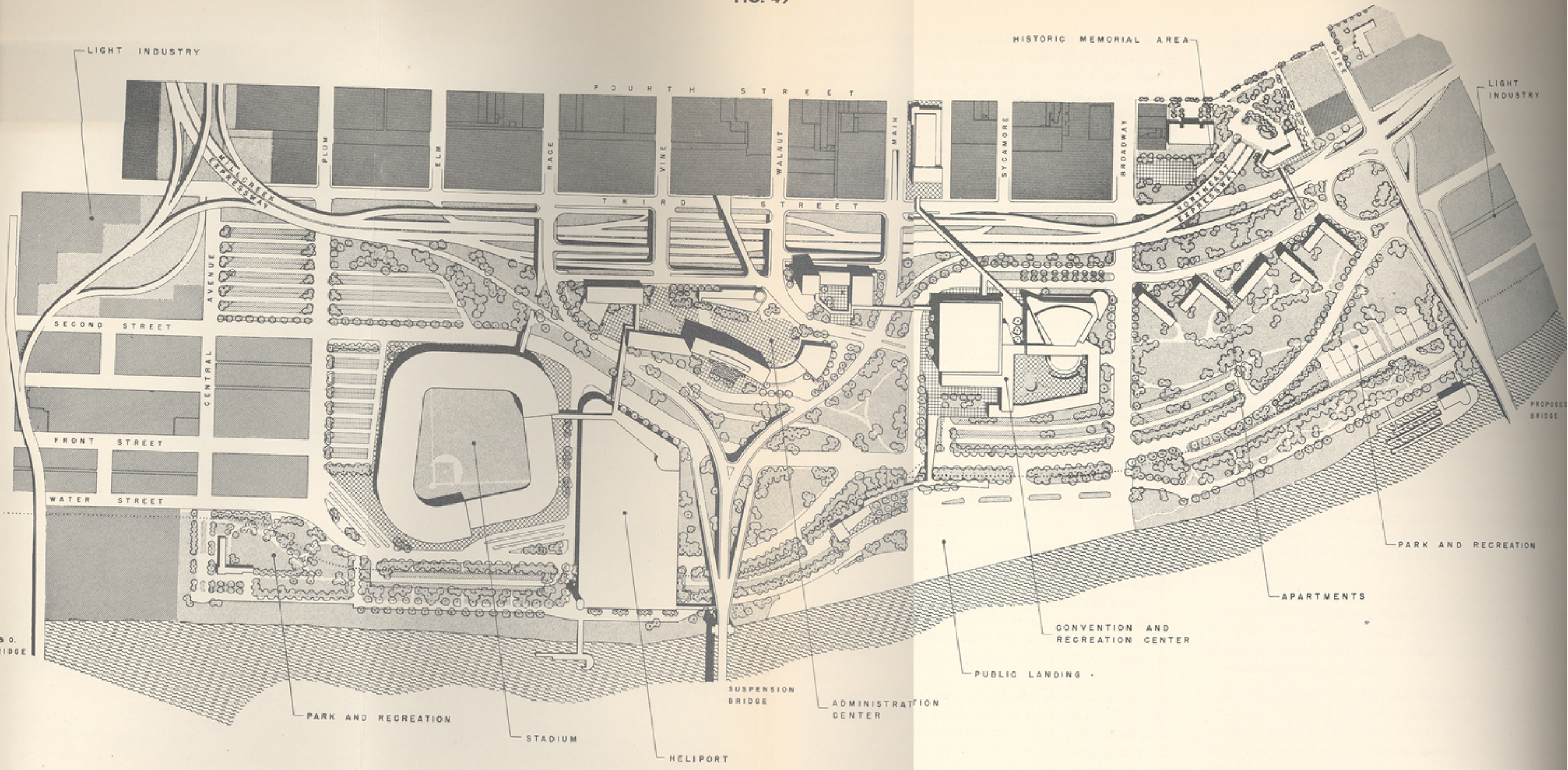
It was found desirable and feasible to allocate to wholesale and light industrial development sections not needed for other activities which do require central locations, subject to appropriate restrictions for protection of non-industrial uses.

The Remedy

The proposed Redevelopment Plan makes provision for the various buildings and land uses which can be located to best advantage in the area in order to serve best the entire Metropolitan Area. It arranges them in a relationship to one another and to adjoining sections of the city which appears efficient, economical and attractive.

An aerial photograph of the Cincinnati Central Riverfront upon which has been superimposed a view of the area as it will appear when the Redevelopment Plan has been fully accomplished, appears as Fig. 48.

FIG. 49



DOWNTOWN RIVERFRONT REDEVELOPMENT PLAN

NORTH

SCALE IN FEET
200 0 200 600

CITY PLANNING COMMISSION
CINCINNATI OHIO

METROPOLITAN MASTER PLAN

What the Plan Includes

The Plan contemplates extensive improvements for motor transportation and public transit including the Third Street Distributor, an elongated collector and diffuser of traffic to and from the expressways; a new motorway bypass for commercial and riverfront traffic; new approaches for the Suspension Bridge; ramp connections between the Mill Creek Expressway and the C. & O. Bridge; replacement of the L. & N. and Central Bridges by a new structure; surface, above-ground, and underground parking lots, decks and garages; and a transit terminal for intercity buses.

The Third Street Distributor forms the connecting link between the proposed interregional expressways that will traverse the Metropolitan Area. It also serves as a means of distributing traffic to and from the several river bridges, downtown streets, and off-street parking facilities.

A railway right-of-way connection follows roughly the present line along Front and Water Streets to permit the Pennsylvania Railroad to continue freight interchange with railroads from the South and with others in Mill Creek Valley, and to afford continued service to existing industry along Eastern Avenue.

Major buildings proposed for the Central Riverfront in effect create a civic center including an Administration-Service Center for public and quasi-public structures, an Exposition Hall-Arena, and a permanent Industrial Exhibit and Merchandise Mart; a Stadium for professional baseball and other major sports events.

A group of apartment buildings and a memorial historical development are located in the area below Lytle Park.

At the ends of the development a total of 13 acres or 12.7 per cent of the present net area is set aside for suitable light industrial and wholesale activities.

Open space near the river is devoted to parks and recreational facilities, including a boat harbor and an esplanade.

The Redevelopment Plan is shown in Fig. 49.

Flood Protection

No appropriate use has been omitted from the Plan because of the flood threat. First consideration was given to providing the best locations for all elements in relation to each other and to adjacent existing development.

East of Race Street important structures are placed along the northern part of the area with main floors at or above the level of Third Street which is regarded as safely above inundation. Such buildings as those in the Administration and Convention Centers have their exposed portions above the highest flood, with foundation walls providing self-protection. These are further aided by individual levee-like dirt fills against them, sloping away toward the river.

The entrance approach to the apartments from the north side is above floods. Parts of their substructures are built on exposed piers, resulting in open areas to be used for parking, recreation terraces and the like. Rare inundation would cause no damage and only temporary interruption of use.

That portion of the Distributor which dips below the Third Street level for several blocks to permit the four most central north-south streets to pass over it, is protected not only by the retaining wall on its south side but by various structural walls and dirt fills between it and the river. An intercepting sewer to Mill Creek, needed in any case, would take care of surface water during floods.

The walls of the Stadium can be made impervious to floods which seldom if ever occur during the season when the Stadium would be most in demand. During any flood it can be reached by pedestrian walks from the Third Street level or higher.

The heliport deck is above flood level and it, too, can be reached by pedestrian walks. Parking levels beneath it would suffer only temporary curtailment of parking during a flood.

The truck bypass and service street might be closed a day or two every four or five years by spring floods; the Distributor could then be used. Most of the land close to the river is devoted to walks, picnic areas, and the like, which would suffer no real damage through inundation. Industrial firms located within the scope of the Plan might work out a scheme of joint access or follow the example set by individual plants which handle the problem successfully.

Selective flood protection is therefore achieved in the development of the Plan and there is no need for a flood wall across the entire riverfront which, besides being costly, would cut the city off from the Ohio River to which it owes its origin and which is the most significant feature of its site and setting. Expenditure of several million dollars to shut out floods becomes wholly unnecessary. (See Fig. 50.)

Development by Units

While the full value of the Plan depends upon its complete realization, flexibility inherent in the design permits development by stages in any desired or required sequence and admits of revisions to meet changing con-

FLOOD PROTECTION

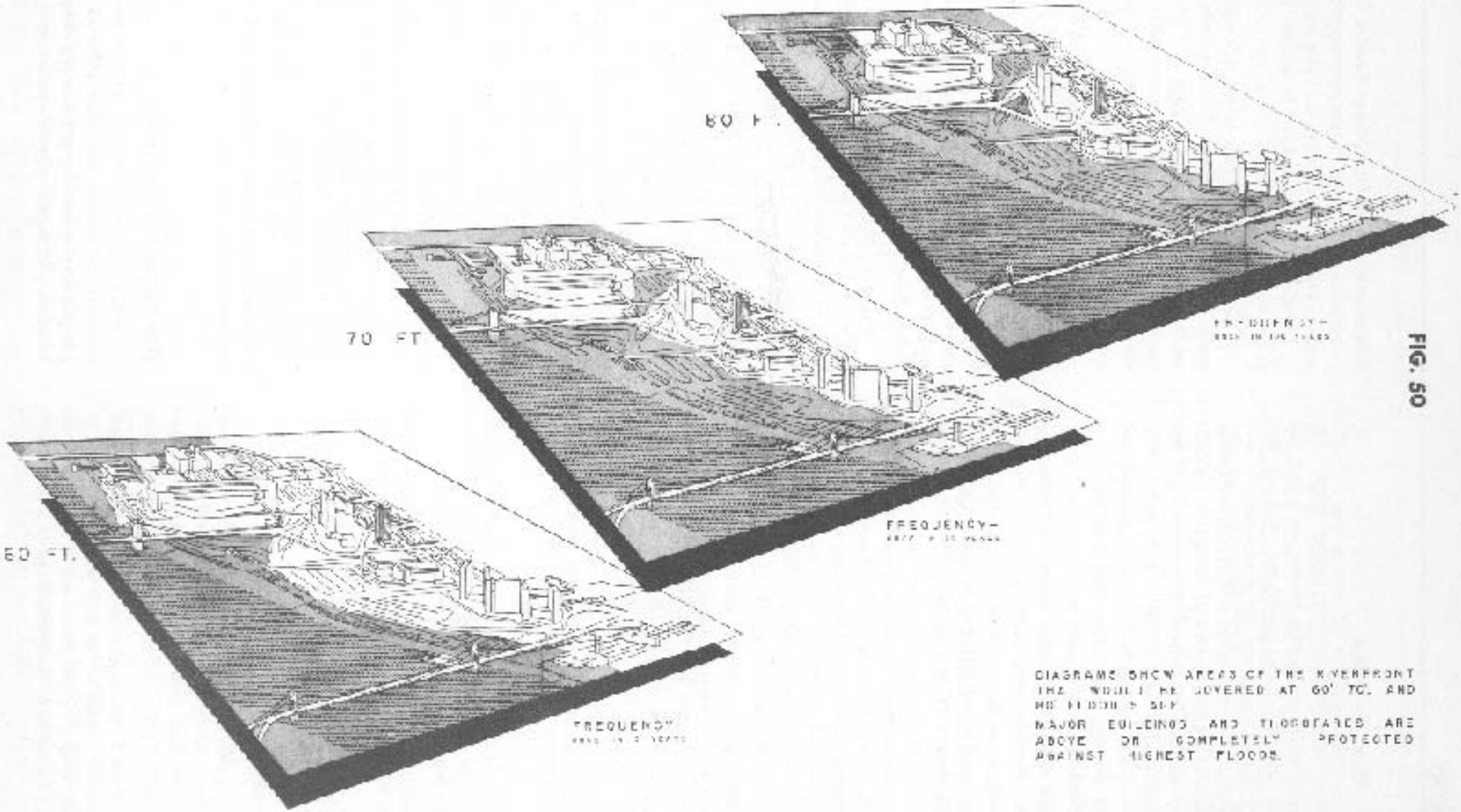


FIG. 50

DIAGRAMS SHOW AREAS OF THE RIVERFRONT THAT WOULD BE COVERED AT 60' TO, AND 80 FLOOD S SEE

MAJOR BUILDINGS AND TERRACES ARE ABOVE OR COMPLETELY PROTECTED AGAINST HIGHEST FLOODS.

ditions during the period of redevelopment. The redevelopment can be achieved unit by unit over a term of years. The Third Street Distributor appears as the logical first step. How long it will take to complete the entire project depends on circumstances and the wishes and resources of the people of the city.

The plan is broad in scope and conception; at the same time it is practical and economical. It *can* be realized.

Some of the Benefits

Some of the significant commercial and economic advantages in improving the riverfront are:

In conjunction with the expressways, the redevelopment will enhance values in the Central Business District which have been declining in recent years. Many desirable downtown corners depreciated by more than 40% in tax value from 1924 to 1943.

Adequate facilities to accommodate conventions and major sports events will draw large numbers of people from out of town. The Cincinnati Convention and Visitors' Bureau estimates Cincinnati has lost $1,000,000 a year in trade for the last 10 years due to inadequate convention facilities, and probably another $1,000,000 a year for lack of facilities for major sports events.

An auditorium accessible by expressways extending in four directions to reach Louisville, Dayton, Columbus and Lexington might well double patronage of summer opera, permit a season of light opera, and increase attendance at such performances as symphony concerts.

Seasonal horticultural displays will be possible in the more open portions of the area.

Attraction of outside people and funds will benefit retail and service establishments and call for additional hotels, transportation, parking facilities, etc., adding to payrolls.

Frontage on north side of Third Street will be improved. Resultant increase in tax values may well add $100,000 in tax revenues.

Effectuation of the Plan

Excess condemnation provisions of the Ohio General Code may be sufficiently broad to cover this project, but an adequate urban redevelopment law would be the ideal instrument under which to proceed. As an alternative, the entire area might be regarded as a park, and condemnation proceeded with on that theory.

The numerous civic and patriotic organizations interested in a memorial historical development around Lytle Park might start the project. The statutes would permit such associations to acquire land, by condemnation if necessary, for memorial purposes in this area as the site of Fort Washington.

Results to be Expected

In summary, the redevelopment will accomplish these significant results:

- Eliminate a blighted area and its depreciating effect on surrounding territory
- Increase tax values in the Central Riverfront
- Stimulate improvement of adjoining property
- Invigorate the Central Business District
- Obviate the Central Riverfront flood problem
- Relieve downtown traffic congestion
- Provide greatly needed parking facilities
- Provide highly desirable and relatively inexpensive sites for public and semi-public buildings
- Lessen the smoke nuisance by removing some serious offenders
- Restore the area to its place of prominence as the "front yard" of the city
- Enable Cincinnati not only to maintain but to improve its status as a regional trade center.

Recommendations

Develop the needed legislative tools.

Complete the acquisition of the area as rapidly as possible.

Proceed with individual parts of the development as the need appears and projects can be financed.

Chapter 14
PUBLIC BUILDINGS

The Official City Plan of 1925 said: " . . . the chief trouble with the public buildings of Cincinnati is their haphazardness; each seems to have been located entirely independently of all others." The Civic Center Report of 1934 made similar observations. For the past twenty-five years or more, during which Cincinnati has been talking about having a Civic Center of the formal type, nothing tangible has been accomplished. No building has yet been placed in planned relation to an officially-recognized civic center site.

From earliest times cities have sought to arrange their public buildings in orderly, visually effective architectural groups. The term "civic center," customarily applied in this country to such a grouping connotes to many an impracticable, grandiose scheme, and excessive expenditures. Many cities seem to have felt that they were not properly planned unless they had made provision, at least on paper, for an arrangement characterized by monumental buildings in rectilinear relationship, facing a broad open plaza. Today planners have more practical reasons for seeking groupings of public buildings. Much greater flexibility in planning such groups is invited by the contemporary concept of buildings designed to perform their functions efficiently rather than in conformity with preconceived traditional exteriors.

By dropping insistence on symmetry and monumentality it is possible to achieve more effective and varied designs of buildings and the areas around them. Functional planning results in significant economies in site development and structure, as well as fresh and stimulating visual effects.

The Master Plan report on Public Buildings is concerned only with major public and quasi-public buildings of the central type — "central" implying their location at approximately the center of vehicular transportation, public and private, so as to be readily accessible to all the people in the Area. That focal point is Downtown Cincinnati.

Buildings of the central type may be classified in two groups. The first consists of structures having administrative or service functions. These serve the Metropolitan Area, or major parts of it, such as the City of Cincinnati or all of Hamilton County. They are referred to as the Administration-Service Group. Obvious examples are the City Hall, Court House, Federal Building and the Main Public Library.

The second group involves assembly of people as spectators or auditors of presentations to be heard and seen and having a cultural, recreational or commercial nature. Examples are an auditorium, exposition hall or arena, stadium and museums. These are referred to as the Assembly-Exhibition Group.

Benefits of Grouping

Standing alone a public building runs the risk of undesirable buildings and land uses as neighbors. In a group it benefits from the proximity of others of its kind. Each building secures environmental protection through open space provided for the others and each one gains amenity from inclusion in a harmoniously-planned design. Furthermore, the effectiveness of many fine buildings is lost because it is impossible to get a good view of them. In a well-planned group each building can be viewed satisfactorily from many angles.

Occupants of each building having occasion for mutual contact benefit from the closer co-operation and saving of time which is possible when the buildings are grouped. The joint use of many facilities — information bureau, reference library, parking space, access roads, assembly rooms, central heating, and general setting, for example — may be provided for.

The combination of assembly facilities needed for large conventions — such as an exposition hall or arena, and an auditorium — with the addition of a permanent industrial and commercial exhibits building would place Cincinnati at the forefront of convention cities and complement the city's natural advantages as a transportation center. The same buildings in separate locations would have less than the total of their combined potentialities.

There is increased convenience and saving of time to citizens when they have occasion to visit two or more

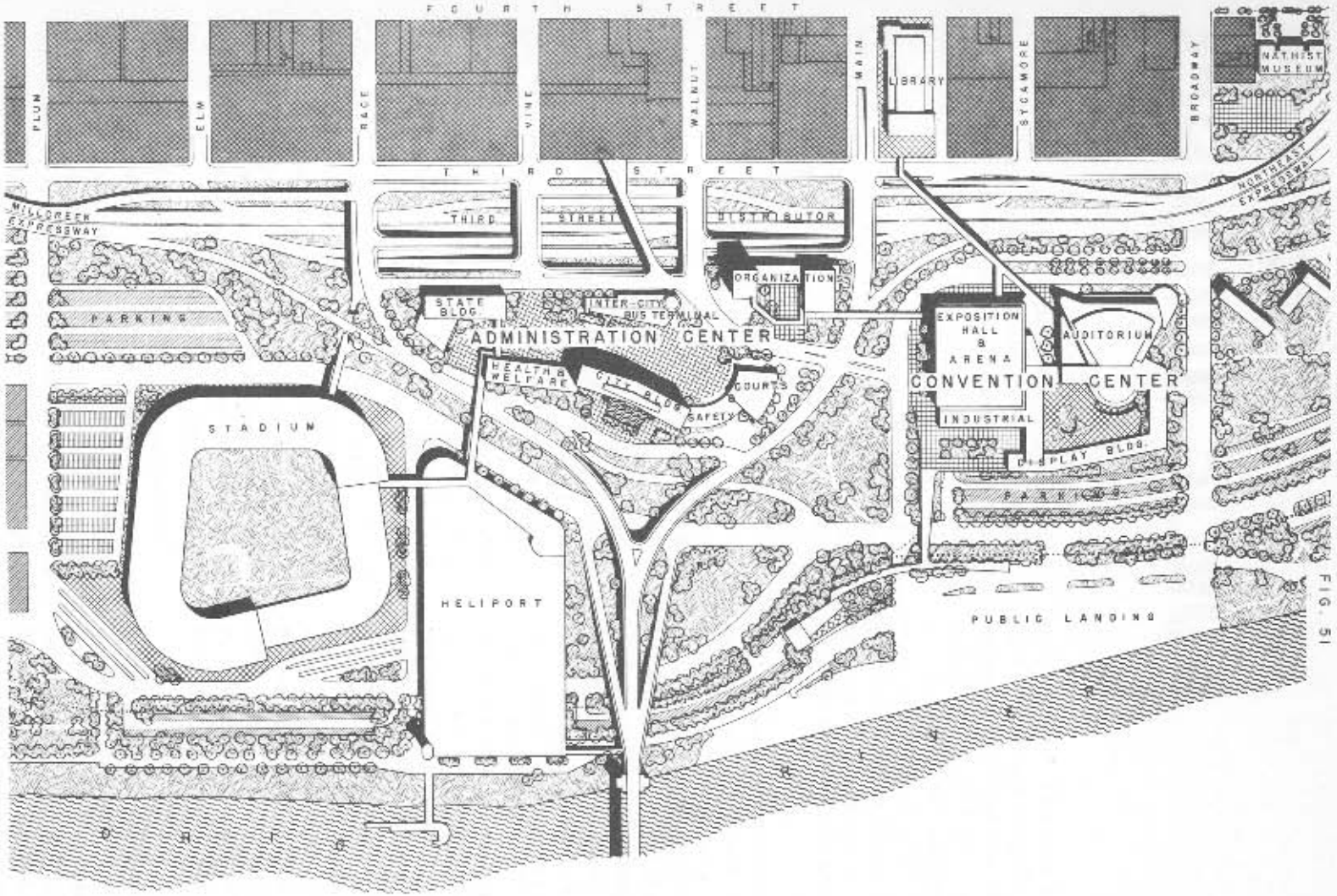


FIG. 51

PUBLIC & QUASI-PUBLIC BUILDINGS
IN THE
RIVERFRONT REDEVELOPMENT PLAN

NORTH

SCALE IN FEET
400 0 400 1200

CITY PLANNING COMMISSION
CINCINNATI OHIO

METROPOLITAN MASTER PLAN

public buildings on the same trip, if these buildings are near to each other. A central information bureau would save time and effort for those uncertain what building they need to visit.

A grouping provides a focal point for expressing the civic pride and progressiveness of the city — it constitutes a "trade mark" or symbol of public spirit. The masses of people who would use it would warrant special transit facilities and more convenient service.

The following significant economies are implied in some of the benefits previously mentioned:

Total site requirements may be less than for the same buildings on separate sites;

The same is true of development costs and operation of the physical plants;

Time is saved in inter-relationships of personnel housed in the buildings and by the public using the buildings;

Appropriate location of the center can help materially to stabilize the Central Business District.

Cincinnati's Need for Public Buildings

The present Federal Building and the County Court House are the only buildings of the Administration-Service type which can be regarded as "permanent."

There is need for a new City Hall (including special provision for Criminal Courts and Public Safety offices), a State Office Building, a Federal Office Building, a Main Public Library, a Board of Education Office Building, a Health and Welfare Building, and an Organizations Building to serve as headquarters for numerous quasi-public associations.

There is need for a Convention Center, including an auditorium and exhibition hall-arena, an industrial products exhibit, and a merchandise mart (the auditorium could be so designed that the sides could be opened in connection with use for Summer Opera); a natural history museum, and a stadium for major league baseball and other outdoor sports events.

There is evidence of sufficient interrelated activities among most components of the Administration-Service type of buildings to make their grouping worthwhile from that standpoint.

The economic value of the component buildings mentioned for a Convention Center is many times greater if they are made distinct units in an efficiently-designed combination than if built in separate locations without any structural relationship.

Criteria for Available Sites

Factors considered in determining a proper location included: environmental relationships and land use characteristics; property and developmental costs; accessibility; flexibility of the building arrangement; and present and future availability.

After an exhaustive survey six possible areas were selected for careful analysis. All six lie in a belt a few blocks wide, adjacent to the north, east and south sides of the Central Shopping District defined by frontage on Race, Seventh, Main and Fourth Streets. These areas are analyzed in detail in Chapter 4 and illustrated in Fig. 9 in the Master Plan report on Public Buildings.

Riverfront Site Chosen

Analysis proved the superiority of the Central Riverfront area over the other five areas. (Fig. 51.) This tract lies for the most part between Race Street and Broadway, from Pearl to Front Streets, adjacent to the Third Street Distributor which will occupy the blocks between Third and Pearl Streets. The Public Building group would be part of the larger redevelopment plan for the Central Riverfront, from Central Avenue to Butler Street presented in the chapter on Riverfront.

The area is now predominantly blighted or obsolescent and unless acquired, replanned and eventually redeveloped as a whole, is likely to deteriorate further and depreciate the adjoining business district. That portion of the riverfront designated as Site 6 can accommodate practically all public buildings, both of the Administration-Service and Assembly-Exhibition types. No other central site can do this at comparable cost and with similar advantages of good environment, access of all kinds, flexibility and expansibility of site, ample space for parking, and social and economic benefits to the entire Metropolitan Area.

The Riverfront site provides an adequate and potentially very satisfactory area. Assuming the passage of necessary State enabling legislation to permit public acquisition, a comprehensive plan can be prepared and the entire area redeveloped over a period of time in accordance with this official plan.

Provision is made in the Riverfront Redevelopment Plan for all buildings previously referred to except the Central Library, Board of Education offices, and a Federal Office Building.

The Main Public Library

The Master Plan gives attention to special requirements of a site for a new Main Public Library, funds

for which are now available. Of ten sites carefully analyzed three were adjudged worthy of serious consideration: Site A, bounded by Fourth, Main, Third, and Hammond Streets; Site B, the northeast corner of Fifth and Main Streets, and Site J, bounded by Garfield Place, Race, Ninth, and Elm Streets.

Of these, Site A appears best on all counts. It is as close as possible to the heart of the Central Business District. It is the only available site that can be related visually to the Central Riverfront Redevelopment area. Site A, however, is inherently a highly desirable location, quite independently of the great advantages it would gain from the redevelopment of the riverfront.

Board of Education Office Building

The Board of Education Office Building, also a project on which early construction is probable, is not included in the Riverfront Plan for that reason. If the Library Board selects the site at Fourth and Main Streets, the Board of Education might well choose an adjoining site on Fourth, Main, or Hammond Streets, to the mutual advantage of both buildings.

Federal Office Building

A Federal Office Building, not included in the Riverfront Plan for lack of space (though it could be an alternate for the State Office or Organizations Buildings) might well be located in planned relationship to the Library and Board of Education Building. This would place it only a block or so from the present Federal Building.

Chapter 15
PARKING

Downtown parking constitutes a problem to almost every motorist. No American city has solved it in a completely satisfactory manner. The essence of the difficulty, of course, is the concentration of drivers' destinations within an area of limited size.

Parking is an integral part of the overall transportation process. Adequate highways in and out of the Central Business District cannot be more effective than the terminal facilities or parking spaces permit. They must be considered together.

The 1945 Transportation Survey revealed that every day about 49,000 automotive vehicles seek a place to park in the downtown area. This represents the present scale of the parking demand problem.

Statistical data and a more detailed discussion of the problem and its proposed solution are contained in the Master Plan report on Parking.

The Plan presented herein applies exclusively to the downtown area. Parking in connection with suburban business centers is discussed in the chapter on Community Plans.

Influence of Expressways

The development of the three metropolitan expressways which will have downtown Cincinnati as their main destination will have a marked effect on the parking situation. They will invite more and more motorists by facilitating quick, safe, and convenient trips to the downtown area. With the proposed modified expressways they will accommodate as much as 60% of the daily traffic destined for the downtown area.

The expressways may be expected to bring as much as 25% more traffic into the area than entered it in the peak year 1941. The prime need will be parking facilities well located with respect to the Central Business District and the peripheral streets which act as distributors between expressways and downtown destinations.

Changes in Modes of Travel

Downtown Cincinnati is deficient in parking spaces, particularly in respect to the most highly concentrated area bounded by Seventh, Elm, Main and Third Streets.

According to the 1945 Transportation Survey in that year 225,300 trips were made daily (24 hours) to and from the area bounded by Plum Street, Central Parkway, Eggleston Avenue, and the Ohio River. For 1941 the corresponding figure was 228,300.

While the volume in the two periods remained almost the same the mode of travel was substantially different. In 1941, 44% used public transit while in 1945, during wartime gasoline rationing, this figure was 68%. With improvements in service the normal pre-war 44% may be expected to rise gradually to 50%, in line with experience showing that the larger the metropolitan population the greater the proportion of public transit riders. The latter figure was used in determining the percentage of motor travel to be expected in the future.

Factors Which Influenced the Plan

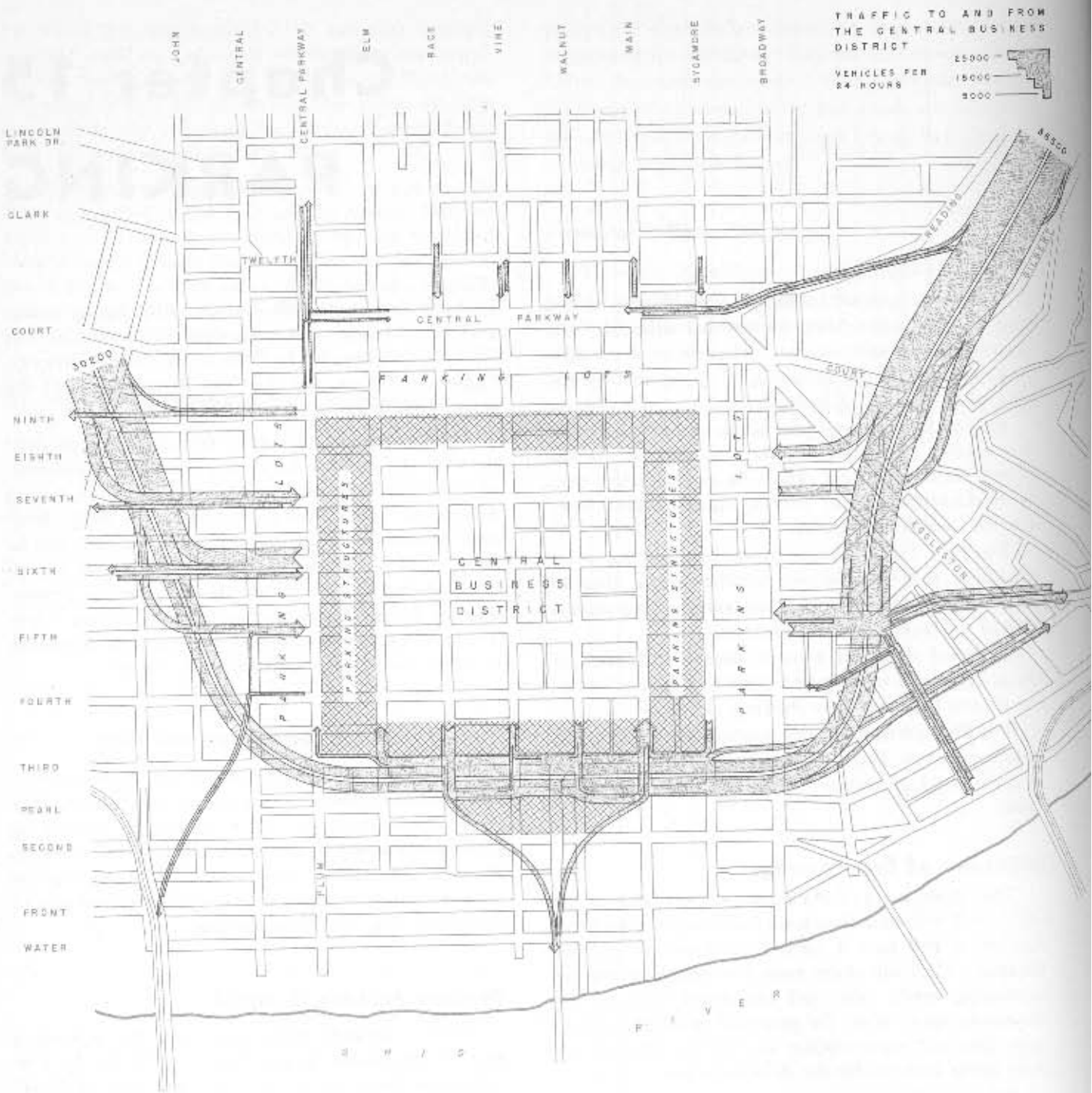
The problem of parking relates directly to automobile drivers and their downtown travel habit pattern. The more important factors which influenced the Parking Plan were destination, purpose of trip, time of arrival in the area, and length of time parked. All of these factors are exhaustively reviewed on pages 37 to 41 inclusive in the Master Plan report on Parking.

Present Parking Demand

Traffic constantly enters and leaves the downtown area. Accumulations begin about 7:30 A.M. By 9:30 departures begin to increase and by noon the two-directional flows are about equal. The peak accumulation of cars in the downtown area occurs between 1 P.M. and 3 P.M. In each of the two hours following 1 P.M. accumulations are about equal.

To relate characteristics of the normal pre-war and post-war periods to parking habits available statistics were adjusted to 1941. A curve developed on the basis of half-hour intervals and known destinations, time of arrival, and length of parking shows a net accumulation of 20,800 vehicles parked. This means that the 18,780 parking spaces available were crowded considerably be-

FIG. 52



GENERAL LOCATION SCHEME FOR PARKING FACILITIES

DOWNTOWN CINCINNATI

NORTH

SCALE IN FEET
400 0 400 1200

CITY PLANNING COMMISSION
CINCINNATI OHIO

SOURCE: 1945 TRANSPORTATION SURVEY
METROPOLITAN MASTER PLAN

yond their normal capacity. The number of *additional* parking spaces now required is therefore approximately 2,250 in round numbers.

Future Requirements

Population studies of the Metropolitan Area indicate that the 1940 population of 787,044 may be expected to increase to about 924,000 by 1970. Based on the indicated relationship between trips and population, the number of trips into the downtown area will likewise increase. In 1940 and 1945 inbound daytime trips totaled 102,151 and 102,845 respectively. By 1970 these trips, it is estimated, will increase to approximately 120,000. If 50% of these trips are made by automobile the destinations in the area which represent parked cars at the end of the trip some time during the day will be 54,600.

Thus based on peak hour demand the increase in parking spaces necessary by 1970 to take care of the accumulation of cars in the peak period between 1 P.M. and 3 P.M. will be 2,600 spaces, plus the 2,250 spaces needed now, or a total of 4,850.

Assuming that traffic increases warrant prohibition of curb parking on all streets between Third and Ninth, Central and Broadway by 1970, and abandonment of the more inefficient off-street parking facilities, the total parking spaces necessary *in addition to those now existing* will be about 6,000.

The area required for such a volume of parking on open lots would be equivalent to about 10 city blocks. It must therefore be assumed that some of the spaces will be provided in multi-deck structures.

Basis of the Plan

The underlying basis of the Plan is that parking facilities should be located outside of, but as close as possible to, the highly congested retail shopping district bounded approximately by a line along the center of the blocks between Third and Fourth Streets, Eighth and Ninth Streets, Elm and Race Streets, and Main and Sycamore Streets, as shown in Fig. 52. Within this area parking lots should gradually be eliminated and construction of new garages avoided.

There should be provided an inner belt of parking garages as close as possible to this congested area primarily to serve the short time parkers, and an outer belt of parking lots (a considerable proportion probably operated by parking meters) on sites permitting charges low enough to accommodate long time parkers.

Major traffic relief will be afforded by construction of the Millcreek, Northeast and Dixie Expressways which provide means for motor vehicles to bypass the central core area. For traffic destined to this area, convenient access arrangements from expressways to properly-located parking facilities will reduce to a minimum the travel over streets in the most congested section.

In the Plan open-deck garages are proposed immediately adjacent to this congested area. Parking lots are suggested in the remainder of the downtown area.

The Parking Plan

The Parking Plan is shown in Fig. 53. It was developed from an evaluation of available facilities, land use, expressways, traffic, types of facilities, site costs, present and anticipated parking requirements and other related data.

In the Plan parking facilities are located between the expressways and the highly congested retail business district. Fig. 52 shows how vehicles may travel between expressways and parking facilities with minimum use of downtown streets. Free movement between parking facilities and expressways will be further expedited by increasing the no-curb-parking area to the boundary streets — Broadway, Ninth, Plum and Third — after completion of the expressways.

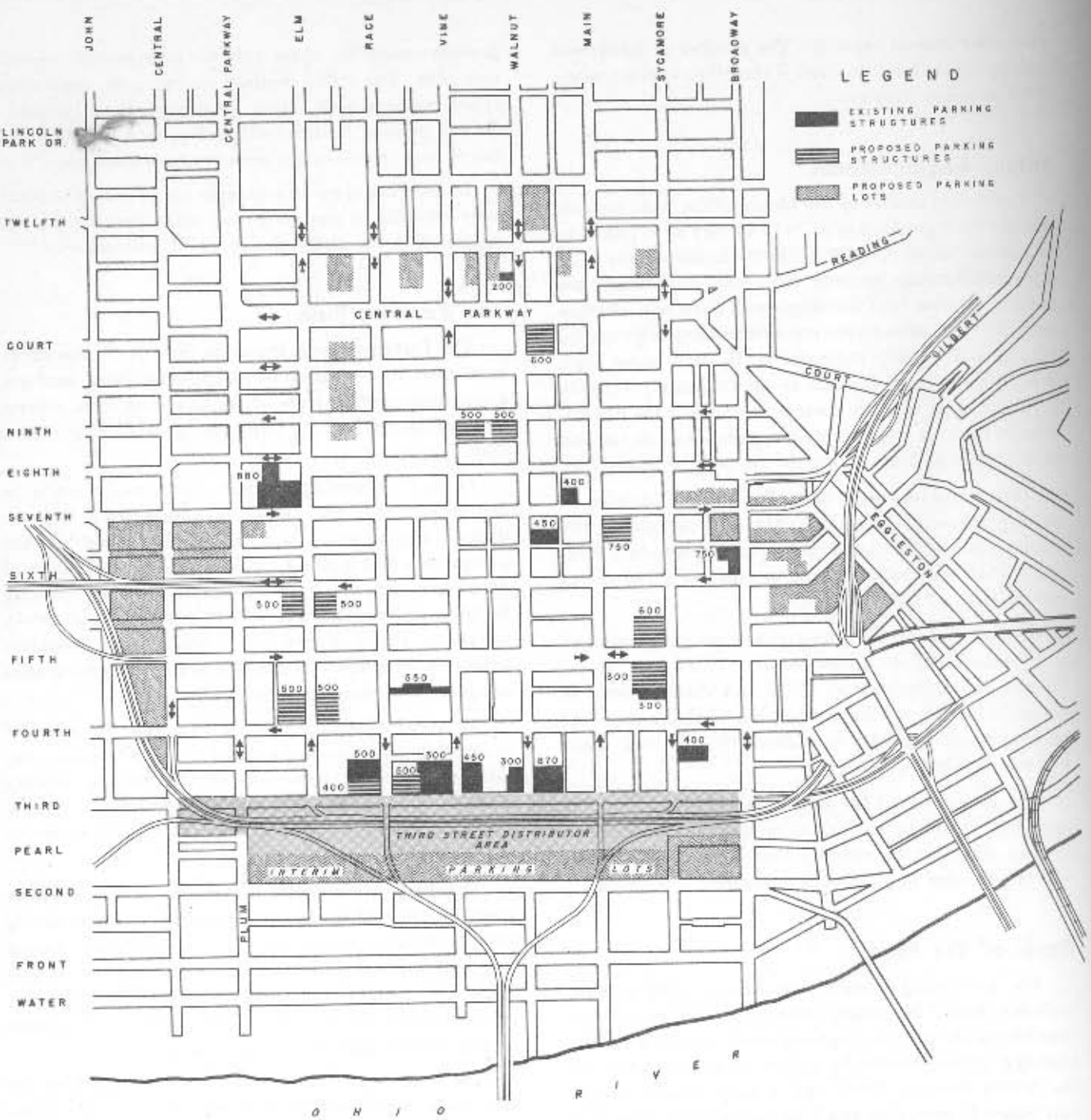
To avoid creating congestion care must be exercised in locating entrances and exits of parking facilities considering distances from intersecting streets, relative traffic volumes on adjacent streets, and direction of one-way traffic having in mind avoidance of use of streets in the inner core area.

The Plan has assumed expansion of the one-way street system within the area bounded by Plum Street, Central Parkway, Broadway and Third Street, except that Eighth Street, Court Street, and Fifth Street east of Main will remain in two-way operation. This will affect entrance and exit locations. Traffic movements shown in Fig. 52 are based on such a pattern.

The long-range objective toward which parking facility expansion should be directed is shown in the Plan. It anticipates eventual replacement of several garages and numerous lots by higher type or more appropriate uses. Other existing sites should be expanded to make a more economical layout possible or because of demand for additional parking spaces within their respective areas. To supply the increase in demand some new sites have also been designated.

With one exception, the Plan does not recommend any new facility with over 600-car capacity although several larger garages now existing will continue. A maximum capacity of 500 vehicles is probably a preferable standard at which to aim. Excessive concentration

FIG. 53



PARKING PLAN

DOWNTOWN CINCINNATI

NORTH

SCALE IN FEET
400 0 400 1200

CITY PLANNING COMMISSION
CINCINNATI OHIO

SINGLE ARROW INDICATES ONE-WAY STREET

METROPOLITAN MASTER PLAN

in one structure tends to congest traffic along streets adjacent to entrances and exits and often involves longer walks to destinations than is considered convenient.

Garages and lots in the Plan have been chosen in relation to their convenience to destinations, relative land cost, and potential uses. The basic elements involved in a satisfactory plan include quantity, location and rate structure.

Public transit should afford convenient service between the more remote parking facilities such as the riverfront and the heart of the business district.

The Plan contemplates interim use of portions of blocks within the proposed Riverfront Redevelopment Area during the period of its redevelopment. Parking spaces to be available ultimately in that area for use by persons destined for the business district approximate 2,000. The transit service envisioned for the redeveloped Central Riverfront can insure the popularity of these parking spaces.

Ways and Means of Providing Facilities

Methods of providing parking facilities range from unregulated commercial ownership and operation to public ownership and operation, with intermediate variations such as merchants' co-operative arrangements, public utility type of regulation, public ownership with private operation, etc.

To be fully successful a complete parking program requires municipal regulation with possibly actual provision of some of the facilities by public agencies. In order to assure a pattern of parking facilities adequate in terms of location and quantity, whenever necessary the City should take steps through the power of condemnation to assemble sites for parking facilities as needed.

Municipal *ownership of land* used for parking facilities is advisable not only to assure an adequate supply in the right locations but to guarantee their relatively permanent retention in that use.

Municipal *operation* appears much less important. Publicly-owned facilities may be leased to commercial operators or such an organization as a merchants' association.

The City's participation may be through a city department or the establishment of a semi-independent parking authority, although the former is to be preferred. A single public agency should be made directly responsible for handling those aspects of the parking problem which concern the public interest.

A periodic check survey should be made at least every three years in order to keep this Parking Plan up to date.

Legislation

To carry out this Plan additional legislation is needed.

Ohio State enabling legislation, passed in 1947, should be broadened to give cities more freedom in developing and regulating parking facilities. This is necessary for the immediate attack on the problem.

In the long-range picture certain local action needs to be considered. The City's Zoning Ordinance and Building Code should be revised to reflect parking needs in relation to desirable types and intensities of land use. Provision of space for off-street parking as well as for loading should be required wherever desirable and feasible. Any legal requirements that add unnecessarily to the cost of new parking structures and hence to their service charge to the public should be discovered and eliminated.

Chapter 16
PRODUCE MARKET

In the process of formulating the Master Plan, which is concerned with encouraging the most effective uses of land for all necessary purposes, public and private, certain types of land use called for special study. The wholesale fruit and vegetable market, requiring as it does specialized facilities within a rather limited area, falls in this category. In addition, the market's present location is within the area covered by the Central Riverfront Redevelopment Plan and its relocation is therefore a necessary corollary of that Plan.

Wholesale produce marketing operations in Cincinnati are now concentrated chiefly in that part of the riverfront known as the "central bottoms." They have gravitated there over the years due to access to all the railroads, and relatively low rents and taxes. *Their only association with the river occurs when floods disrupt their operations.* Frequent inundations, other inconveniences and inefficiencies and the fact that other uses are more appropriate for the riverfront, give added weight to the desirability of transferring these marketing activities to a more commodious and flood-free site.

Economic Importance of the Market

One of Cincinnati's outstanding activities is wholesaling, marked by an unusual concentration in the field of fresh fruits and vegetables. It is highly important that Cincinnati maintain and if possible expand its position in this field.

During recent years the total supply of such products distributed from this market has averaged around 25,000 carloads per year. This means an average of over 1,000 tons per day the year around. In periods of heavy seasonal receipts, and on certain days of the week, probably as much as 2,000 tons are handled in one day. Railroad unloads have ranged between 14,000 and 18,000 car loads annually. No record is made of motor truck receipts.

The Cincinnati market serves a wide trade territory in Ohio, Indiana, Kentucky, Tennessee and West Virginia. Rail unloads here have greatly exceeded those of most comparable cities. The larger total of rail unloads, however, may have been offset to some extent by smaller truck receipts in the local market.

Railroad Facilities

Railroads serving Cincinnati are the Southern, B. & O., L. & N., New York Central, Pennsylvania, C. & O., and N. & W. All maintain team tracks in the produce market district.

The Flood Problem

Although the market has no necessary connection with the river, its location subjects it to periodic inundation by Ohio River floods. Floods interrupt activities, destroy or contaminate supplies on hand, complicate or prevent receipts, and cause considerable capital and maintenance cost to dealers, property owners, public utilities and the city. Local protection measures have been declared uneconomic. The only alternatives presented are to tolerate flood damage or move to a flood-free site.

Wholesale Marketing Area Today

Distribution to retailers is conducted at several widely scattered places. The present district is in the central riverfront bottoms south of Second Street, between Vine Street and Central Avenue. Most of the primary receivers have stores along lower Plum Street or in that vicinity. One group of jobbers is on Pearl near Sycamore, another on Sixth, and a few stores are on Court, between Central and Plum. A farmer's market uses city-owned property at Twelfth and Central.

The major physical job is a *big moving operation.* Within a few hours hundreds of tons of perishable products must be unloaded and moved to various places within the market for display, sale, and delivery to buyers. The products are bulky and heavy. Many are tender and easily bruised. To send these foods on their way to consumers in the best possible condition and with a minimum of loss and waste requires the most efficient and convenient handling facilities.


CONSOLIDATED
PRODUCE MARKET
PROPOSED MARKET
EXISTING MARKET DISTRICT
NORTH
SCALE IN FEET
200 0 200 600 1200
CITY PLANNING COMMISSION
CINCINNATI OHIO
METROPOLITAN MASTER PLAN
SIXTH STREET EXPRESSWAY
POSSIBLE SITE FOR FARMERS' MARKET
DEALERS' STORES
DEALERS' STORES FUTURE
CARLISLE ST.
FIFTH ST.
FOURTH ST.
THIRD ST.
SECOND ST.
FRONT ST.
WATER ST.
SEVENTH ST.
EIGHTH ST.
NINTH ST.
CENTRAL AVE.
PLUM ST.
ELM ST.
RACE ST.
VINE ST.
WALNUT ST.
C.N.O. BRIDGE
SUSPENSION BRIDGE
OHIO RIVER

FIG. 54

Present Facilities and Methods

Present facilities and methods are not well adapted to supplying needs of retailers. Most of the store buildings were originally built for other purposes and few have adjoining trackage. The streets are narrow and problems of traffic congestion will probably become more serious. Most sales and deliveries are made at railroad cars nearby. Refrigerator cars are really used as display, selling and storage space for receivers and much of the supply is trucked by each receiver to his own store or to the buyer's truck or store. The total selling costs of a dealer are probably greater than if all sales could be made at his store. Despite handicaps the local market is believed to be doing a more efficient and less costly job than markets in many other cities. Nevertheless, the new market proposed would be more satisfactory to sellers and buyers, making material savings in distribution cost of foods in Cincinnati and its trade territory.

Requirements of a New Market

The Master Plan report on Wholesale Produce Market contains a detailed study of the physical facilities required in a new market to fit the needs of Cincinnati. A good market should be complete as to goods and services rendered, made available to all types of buyers, sold and delivered in the shortest time with minimum rehandling. All facilities should be at one location.

The fundamental requirements are (1) a large tract of land; and (2) a series of large covered platforms at truck-bed height, with direct rail connections, accessible on all sides for loading and unloading motor trucks. On such platforms products can be unloaded directly from incoming carriers and reloaded into outgoing vehicles without being lowered to sidewalk or street level only to be lifted up again. The platforms should differ in size, shape, and arrangement according to the needs of their users, but all would be intended to serve the same purpose whether divided into stores for wholesale dealers, or unloading and display platforms for auctions, or loading and unloading platforms for growers and truckers.

Design for New Market

The detailed Plan in the Wholesale Produce Market report shows wholesale dealers' stores arranged in a row on each of two parallel rectangular concrete platforms. Each store has a full complement of the desirable facilities and appurtenances including full basement, mezzanine office, refrigerating rooms, etc.

Direct unloading from refrigerator cars into stores is provided by double tracks alongside store platforms. Streets past both ends of each row of stores permit trucks to park at right angles, with space for free movement of other vehicles.

Team tracks are located conveniently back of the row of larger stores, at an angle to the rear platform.

An auction building, a covered truck loading platform, parking areas, traffic regulations, fences and gates are provided for in the Plan.

Criteria for Site Selection

From the standpoint of location the market has three fundamental requirements; (1) accessibility to all transportation; (2) the shortest average time distance to local buyers, and (3) sufficient area at reasonable cost. It need not be in the central business district.

Suggested Site for Relocation

The facilities shown in the illustration in the Wholesale Produce Market report and suggested in the Master Plan as a possible new layout, would occupy 49 acres. The site would take in the area between Third and Sixth Streets, and extend from John Street and the Millcreek Expressway westward nearly to Linn Street projected. An irregular western boundary leaves undisturbed several existing large buildings and plants. This site provides adequate space for all local requirements, with considerable margin for expansion. About half of the total area would be occupied by team tracks. (See Fig. 54.)

Within the limitations imposed by Cincinnati's hills the proposed site is perhaps as centrally located as any in the area served by the market. That area includes the nearby cities in Kentucky. Streets and highway connections are excellent. An underpass below Sixth Street and gateways at Fourth and Fifth Streets provide unobstructed access. The site adjoins the Millcreek Expressway which will furnish the best possible connections to local points and major highways. Located at the end of the C. & O. Bridge it is directly accessible to points across the river and south.

All railroads except the Pennsylvania now have tracks or connections in the immediate vicinity. The Pennsylvania has a single track across the central riverfront from the east. This would be retained for interchange with other lines west of the central bottoms.

Because this site is flood-free, satisfies all requirements of a modern market site and is now occupied largely by one of the city's worst slums, relocation of the market here would reclaim the area for what is probably its highest and best use.

Responsibility for Development

Development of such a market should not be undertaken by any agency or person who would be in a position to control its inherently monopolistic activities. This could be avoided through its establishment by one of several methods:

(1) A private corporation could be formed, subject to restrictions similar to those found in public utility franchises. The corporation would develop and lease the facilities, but should have no hand in the operation of the market.

(2) A corporation could be set up by the local government as a Market Authority. It should possess about the same powers as a similar private corporation, but would be conducted in the public interest rather than for private gain. Such Authority should be managed by a non-political board.

(3) A department of Markets under the City Manager might be created as an administrative branch of the city government. All of the powers, duties and responsibilities previously mentioned would be vested in the City Manager.

Chapter 17
EFFECTUATION

Throughout the chapters of this book devoted to the individual elements of the Master Plan frequent references have been made to ways and means of effectuating projects. It is not intended to repeat or even to summarize these remarks specifically in this chapter, but rather to consider in a general way the legal status of planning, the present powers of the planning commissions, the available instrumentalities for effectuation and desirable additional tools.

Adoption of the Plan

In Cincinnati the Master Plan took effect upon adoption by the City Planning Commission and it requires no further legislative approval. In other parts of the Metropolitan Area similar adoption of their component parts of the Plan by the planning commissions of the various governmental units is necessary to give it effect within their own jurisdictions.

Policy for Plan Effectuation

The Master Plan is not an end in itself. It will be of value only to the extent that it is used for directing public and private improvements and developments to bring into reality the desirable future community which it envisions. However thoroughly prepared and sound, it will not have all the influence it should and cannot be of maximum value unless it is constantly applied to all proposed projects and developments.

It is a long range program and is not intended as a static device. It must be kept constantly attuned to changing conditions so that in general it will at all times contain the features most conducive to the improvement of the Area and its sound future growth and development.

The Master Plan is not merely a compilation of desirable projects but an organic whole of closely related elements. The achievement of these elements must be systematic, not haphazard, or serious unbalances will be created.

This implies that the various local governmental units, boards and departments use the Master Plan as a guide to their own long-term programs and annual budgettings. Procedures for capital budgetting and public works programming must have "built-in" provisions for application of Master Plan programs. Moreover, the public must be educated to what the Plan is and can do. The relation of the periodic bond issue submissions or extra levies to the total pattern and promise of the Plan must be made clear at all times.

Enlargement of Commission Activities

These considerations have in turn special implications for wider activities on the part of the City Planning Commission, charged as it is by the state statutes and the City Charter with the making and constant improvement and refinement of the Plan and the general administration of community planning as an arm of the local government.

As the author of the Plan the Commission is best fitted to appraise physical progress under it. It is best fitted to chart Plan effectuation in relation to the time element and to modify Plan features in the light of changing conditions, actual experience, and deficiencies in past accomplishment.

It is accordingly necessary that the Commission maintain continuous contacts with all the political subdivisions, boards and departments to the end that they may be kept informed with respect to the Plan and alive to their responsibilities under it, and to assure its maximum assistance to them in the formulation of their own long-range programs and other activities.

Because the tools of effectuation and all steps in that direction are of continuing character, planning labors are not completed with the adoption of the Plan. The Commission should follow through with more detailed studies of the various Plan elements precising them as new data appear and research and design studies proceed.

Reports on special Plan topics for public distribution and special reports on pertinent subjects for the information and guidance of City Council and other legislative bodies and officials should be prepared and published occasionally by the Commission.

Moreover, the Commission should participate actively in the regular procedure for drafting Public Improvement Programs and Capital Budgets. The rules of City Council should provide clearly for the details of this participation.

Powers of the Planning Commission

Under the Ohio State Enabling Act and the Cincinnati City Charter the City Planning Commission is the official planning agency for the City. Chief among its powers and duties is "making a plan of the whole or any portion of the City or of any land outside the City which in the opinion of the Commission, bears a relation to the planning of the City, and to make changes in such plans from time to time when it deems same advisable." The power and duty to zone the City are also specifically granted.

Whenever the Commission shall have made a plan of the City or any portion thereof, no public building or improvement or publicly or privately-owned utility may be constructed until and unless its location is approved by the Commission. No amendment of the zoning ordinance may be made without the approval of the Commission.

The Commission is also the platting commission of the City and has control of platting within the City and within three miles thereof. All plats must be submitted to the Commission and approved before they can be offered for record or accepted by the City. The same applies to acceptance by the city of streets, alleys, ways, or other public ground.

The Commission has the power to control the marking of historical landmarks; to control, in the manner provided by ordinance of Council, the location of statuary and other works of art which are or may become the property of the City, and the removal or relocation of any such works belonging to the City.

In addition to the enumerated powers, the Charter gives the Commission advisory powers upon all matters relating to the planning and development of the City.

The Mapped Street Line power of the Commission was conferred by City Ordinance passed July 3, 1929.

Any approval or disapproval of the Commission may be overruled by City Council by a vote of not less than two-thirds of its members.

These powers are sufficient to secure a considerable conformity with long-range plans.

Planning Administration

Planning administration consists of giving effect to the Plan by several and varied means continually brought to bear on all proposals looking to the Area's development and redevelopment. A brief discussion of the more important methods, procedures and practices which can facilitate the carrying out of the Plan is in order.

The principal instruments and processes employed fall in two major categories: those concerned with public properties, facilities and improvements, and those applied to the development and use of private property.

Public Improvements

The mandatory referral to the Planning Commission of proposed plans for public projects is in Ohio the immediate means by which the recommendations of the Plan in regard to public improvements are currently given effect.

Experience has shown that carrying out major public improvements can be accomplished soundly and consistently only through long-range programming of capital improvements. Such programming bridges the gap between a master plan and the actual construction of the physical improvements recommended by it.

Capital improvements are the physical plant and equipment required by the City to render its services to its people. Streets, playgrounds, schools, libraries, parks, fire and police stations, water and sewerage plants, street lighting systems, etc., are known as "public works" or capital improvements. The funds expended for these facilities are referred to as "capital expenditures," a term properly applied regardless of the manner in which the facilities are obtained or financed.

A capital improvement program is a list of carefully chosen and co-ordinated capital improvements needed by the governmental unit during the time period covered by the program and which can be afforded during that period, commonly five or six years. The projects are arranged in order of priority with estimates of costs, method of financing and related data.

The section of the program covering projects allotted to the first ensuing year, developed with precise plans and close estimates of costs, becomes a part of the current budget when it is adopted by the legislative body.

Function of the Long-Range Program

The broad purpose of a long-range capital improvement program has already been implied: to further and facilitate the systematic and economical provision of needed public improvements in accord with the Master Plan and in scale with the City's ability to pay for them. Programming is thus one of the major instruments for carrying out the Plan.

Advance programming of capital improvements enables the citizens and all public officials and agencies to take a long-range view of their future activities and responsibilities. Intelligent long-range policies can be adopted and the tax rate stabilized.

Investors, management of business and industry and home owners alike are enabled to gage the future more accurately in respect to both the physical development of the City and the financial obligations entailed by such development. Nearly all municipal departments are placed in better position to program their construction activities and operations. Greater efficiency at reduced cost can be attained in that their work can be more evenly distributed and their personnel stabilized and better trained. Co-ordination of the construction activities of adjacent and overlapping governmental units can be more easily accomplished.

The wastes resulting from undertaking physical improvements before they are needed or in the wrong order, and in the undue lag in providing an improvement needed earlier, are largely avoided by intelligent programming.

The City is protected against the possible influence of pressure groups seeking to advance projects of special interests ahead of more pressing or more meritorious improvements, to the detriment of the best interest of the whole city. The Master Plan and the capital improvement program will help furnish proof in cases where demands of this kind are actually unreasonable, unwise or unfair.

Programs prepared in advance enable the City to take better advantage of grants-in-aid from higher levels of government. When the need is seen and made known long in advance, land needed for proposed public improvements can usually be obtained at more advantageous prices.

Local Long-Range Programming

The long-range programming procedure in Hamilton County, established in 1926, provides joint programming of capital improvements by the three principal local taxing units — the City of Cincinnati, Hamilton County and the Cincinnati School District. The co-operative aspect of the procedure is unofficial but preparation of the City's program and participation by the City government in the tri-unit arrangement have been formalized by a city ordinance.

Simplified by the omission of detail, the operation is substantially as follows: The city manager, as agent for the City Council, assembles lists of the projects proposed by the various administrative departments. These lists are then referred to Council by a City Joint Improvement Program Committee composed of the city manager, a member of Council and a member of the Planning Commission. The city auditor acts as secretary.

Thus the planning, operating, financial and legislative points of view are brought to bear upon the program. The financial analysis is prepared by the Bureau of Governmental Research as a part of an analysis which includes also the County and the School District.

From the list of needed projects the City Joint Improvement Program Committee makes up a tentative five-year program. The city ordinance requires that the program then be submitted to a wider-based Joint Improvement Program Committee made up of a representative of the City, the County and the School District, with the director of the Bureau of Governmental Research sitting as a non-voting member. The proposed programs of the County and the School District are also submitted simultaneously to the Committee for co-ordination.

The Committee reviews the three suggested programs and capital budgets in the light of the financial analysis and makes any necessary adjustments in accordance with the indicated relative importance of the needs of the several taxing units and the financial situation of the combined governmental units as a whole. The adjusted programs are then reported back to the separate legislative bodies for final adoption.

The procedure is repeated each year, an additional year being added for the one completed. Some revisions may be found desirable each year, one year closer to the time of execution of the projects listed in the original program.

While City Council acts only on projects to be included in the annual budget it benefits by having before it the longer-term plans and programs. Among other advantages to be cited presently, this procedure guards against ill-considered actions.

A revision and strengthening of this procedure, initiated by the Planning Commission, is now under consideration by the officials and bodies involved. The preparation of actual programs of projects is, of course, proceeding without interruption, all as planned segments of the co-ordinated and integrated Master Plan.

Money for Master Plan Effectuation

The governmental unit must know how much money is available from normal sources for capital improvements. If this money is inadequate to secure the improvements at a satisfactory rate, new sources must be found.

The capital budgetting procedure just described requires an accurate evaluation of money available during

the period covered by the capital budget. An appropriate financial agency should maintain continuous data on all fiscal matters and the best possible forecasts on valuations, receipts, operating expenditures, tax rates and similar data.

The speed with which projects can be realized depends on borrowing and revenues. The basic policy with respect to borrowing and taxing must be set by City Council and the other legislative bodies concerned. These bodies must responsibly determine such component matters as the desired relation of borrowing to "pay-as-you-go"; the amount of legal borrowing capacity to be used; the desired trend in the tax rate, whether in the direction of an increase or a decrease or the maintenance of a steady rate. They must canvass other possible sources of revenue through taxation such as an income or payroll tax, as well as the use of such devices as special assessments.

In addition, operating budgets must be properly co-ordinated with capital budgets; bond issues must be determined upon and submitted with intelligent strategy; Federal and state grants-in-aid must be applied to appropriate projects.

The capital improvement program should also include some projects "recommended but not scheduled." These are then ready in case of a sudden depression and potential unemployment.

The Council and other legislative bodies must be kept informed as to the long-term capital improvement programs and must participate in their formulation. Only then can they make the above-named and other basic determinations of financial policy on a realistic and responsible basis.

Private Improvements

The most important tools of planning administration in connection with private developments are zoning, subdivision control, and mapped street lines.

Zoning

Zoning consists of dividing the whole area of the governmental units into zones and regulating within those zones the use of land, and the use, height, and area of buildings for the purpose of conserving and promoting the general welfare. An area must be so divided because a single set of regulations would not be appropriate for neighborhoods which differ in character and function. Zoning is not so much a plan as an instrument for carrying the Master Plan into effect — a means to the end of furthering and bringing about the desirable development of the area.

Zoning is a legislative enactment growing out of the police power. Court decisions indicate that the factor of reasonableness which the law requires is strongly supported by a comprehensive, expertly-prepared master plan such as the Cincinnati Metropolitan Master Plan.

The purpose of zoning is positive and constructive rather than negative. While many of the regulations appear as prohibitions or restrictions, their purpose is affirmatively toward promoting more healthful, convenient, orderly and attractive communities. Like other tools of planning and the Plan itself, zoning has social and economic objectives which it seeks to further by the continuous improvement of the physical environment.

The first zoning ordinance in Cincinnati was passed in 1924 and it has served the City well. Other municipalities in Hamilton County have adopted zoning at later periods and the unincorporated areas of the County are only now in process of adopting it.

The Cincinnati Zoning Ordinance (as well as others within the Area) is in a degree out of step with present-day requirements, and modernization is needed. The greatest need is their rationalization in some respects, co-ordination with other features of the Master Plan and commitment to proper scale with actual needs and those realistically anticipated.

The ordinances should be brought up to modern standards in respect to height, bulk, area and density regulations based where possible on available scientific and engineering data, contemporary health and social standards, etc. In view of experience now gained there should be a refinement of earlier wording of the regulations.

The use regulations should be brought up to date by a careful modernization of the use categories. Somewhat too rigid definitions of the kind of residential districts tend to encourage even greater densities than those now existing which appear unjustifiable and unrealistic in the face of a prospective stabilized population. The regulations should also be so drafted as to encourage and invite urban development along more modern lines such as large-scale residential projects and industrial satellite communities.

There should be a further separation of conflicting uses. The present ordinance, for example, permits all other kinds of uses in industrial areas. It thus fails to protect the definitely limited acreage primarily suitable for industrial use from encroachment by residential developments or other uses which could as well seek locations not suitable for industry.

The present ordinance makes no provision for the zoning of areas subject to periodic flooding where only such uses should be permitted as are not necessarily

damaged appreciably by flooding, such as agriculture, recreation and certain kinds of industry.

There should be extension of zoning power to such new fields as off-street vehicular parking and loading, and airport approaches.

Legislation to solve the problem of the elimination of certain existing non-conforming uses should be given consideration, as well as the matter of co-ordination of the zoning regulations of the various political subdivisions of the Area into a harmonious pattern.

Subdivision Control

Like zoning, subdivision rules are a means for putting parts of the Plan into effect. In connection with new subdivisions they provide for securing portions of right-of-ways for thorofares and expressways, and other public ways and open areas. Through these regulations is largely determined at the start the quality of new residential developments which form component parts of new neighborhoods.

In subdivision control the planning commissions of the Area exercise their power to withhold the privilege of public record from plats which have been poorly or inappropriately designed, or which are not properly adjusted to the development or layout of adjoining areas or to the Master Plan.

The denial of the privilege of record to a plat may not of itself deter a developer from selling his land in small parcels by metes and bounds. Legislation granting authority for the control of subdivisions therefore empowers the municipality to prohibit the paving of a street and the laying of water mains and sewers in a street the location and design of which have not been approved by the planning commission. The issuance of a permit for the erection of a building on a lot abutting such a street may also be prohibited.

The planning commissions endeavor through subdivision control to improve the quality of new development by encouraging sound principles of design and by enforcing minimum standards. Lots must be adequate in size for the type of building development intended in order to afford sufficient open spaces for light, air, fire, safety and privacy. The street system must be designed to fit the character or type of subdivision contemplated. In large residential subdivisions sufficient land should be set aside for recreation uses. The planning commissions also require that a minimum of surface and subsurface service facilities, to an extent reasonably necessary to render the lots suitable as home sites, be installed by the developer at his own expense prior to the approval of the plat.

Platting control by the commissions makes possible the adjustment of proposed subdivisions to the Master Plan. The commissions may require that existing or proposed major streets bounding or crossing the tract proposed for subdivision be provided for in the subdivision layout. The commissions may also obtain through dedication by the subdivider open spaces such as recreation areas, school or public building sites shown in the Master Plan as desirable. When cession cannot be obtained the municipality can often purchase these sites at the price of raw land by taking the necessary steps before the land is developed.

For the past several years Regional and City Planning Commission staffs have been co-operating in studying desirable revisions of their subdivision rules to make them applicable as widely as possible throughout Hamilton County.

Mapped Street Plats

The mapped street plat is a legal device by which City Council declares its intention to acquire within a reasonable length of time right-of-ways for widening or extending an important street. No remuneration will be made for any improvements made during the interim period within the right-of-way as specified. The Cincinnati ordinance authorizes the City Solicitor to seek injunctions against threatened violations and provides heavy fines for violators.

Through this ordinance the municipality is enabled to preserve the integrity of the Master Plan, especially of the Motorways Plan, by regulations under the police power rather than by the costlier method of acquisition under eminent domain. By preventing the erection of buildings within the needed right-of-ways the City will not be compelled to abandon or greatly modify the plans of proposed major street improvements because of new construction erected contrary to those plans.

An intermediate step between adoption of the Master Plan and the actual acquisition of right-of-ways and the making of the improvement is taken. It involves the preparation and adoption of official or precise maps showing the exact lines of the future streets or other improvements. The required field surveys and the maps are usually made by the staffs of the planning commissions.

The mapped street lines in effect become police power building lines and prevent the construction of expensive structures which would, if permitted, jeopardize and often defeat the purposes the Master Plan is intended to serve. The procedure has proved a much needed practical method of protecting the integrity of plans and minimizing the cost of public improvements.

Needed Legislation

Throughout the textual presentation of the Master Plan attention has been directed, at appropriate places, to the need of further legislation at practically all levels from local to national, to assist in the full effectuation and administration of the Master Plan. While no effort is made here to present an exhaustive list of such legislation some of the most urgently needed powers may be briefly alluded to:

State legislation of the type referred to as "urban redevelopment legislation" is essential to make possible the clearance and redevelopment of slums and blighted areas, both residential and industrial. This legislation is probably required also for the most effective redevelopment of the Central Riverfront and some other features of the Plan.

Broadening of the authority of Ohio cities in connection with the acquisition of land for parking facilities is important and pressing.

Additional legal authority is needed for assistance in dealing effectively with non-conforming uses and other vexatious zoning problems.

Steps should be taken to promote passage in Ohio of legislation similar to the Michigan law which broadens the scope of mapped street lines beyond provision merely for streets, to assure preservation of future sites for other Master Plan features such as playgrounds, parks, schools, hospitals and other public buildings.

Revision of the zoning ordinances and building codes, and introduction of a separate housing code, are indispensable aids to the restoration of neighborhoods in various stages of deterioration.

Co-operation With and By Governmental Agencies

As stated earlier, while the Master Plan was prepared primarily by the City Planning Commission, active participation by other agencies contributed to the effort. An adequate and satisfactory plan could not be arrived at without complete collaboration and co-operation by a multitude of agencies, particularly those of the municipal, county, state and national governments in the Area.

In addition to working closely with the officials and administrative departments of the City of Cincinnati, officials of all municipalities were given the opportunity to participate in order that the planning program might have a broad base and official status. The governing bodies, the chief executives, and the various departments of all the local governments were made to feel that participating in and contributing to the Plan are an important part of their responsibility.

The City Planning Commission welcomes and requests the further and continued co-operation of all other interested agencies in the determination of fundamental policies to be reflected in the Plan as time goes on. The function of the Commission in having developed the Plan is to serve as a co-ordinating agency in the collection and analysis of the pertinent facts and in the translation of combined conclusions of all relevant thought into the Plan.

Public Education

In the long run planning cannot be successful without wide public support. The Master Plan is probably more dependent for its success on public understanding and interest than on any other factor.

Each positive action of government and each proposed change or improvement may seem arbitrary and harmful to groups whose interests are directly affected. The majority of the people should at all times understand what is being done or proposed well enough to judge whether or not it is in the public interest.

Every citizen has special personal or private interests. It may be to the special interest of an individual that a factory does not go near his home. In the case of another, it may be to his interest that his business go where, from the standpoint of the welfare of all, a recreational area is more appropriate.

Of course, the net aggregate of the special interests of each will, in the long run, coincide with the public interest. Nevertheless, some degree of conflict between the public interest and any individual's special interest at any given moment is inevitable.

The Planning Commission, representing the public interest in co-ordinated planning, must explain itself and its point of view to the public. It is important that it use every medium and method at its command to familiarize the public with the Master Plan and its specific proposals and projects.

As stated before, the public must be educated also to the relation of the periodic bond submissions to the total pattern of the Master Plan and the relation of the Plan to the future development of the Area.

The wider the knowledge and the greater the understanding and appreciation of the necessity for translating the Master Plan into streets, homes and other buildings of brick and steel and concrete, the better will be the chances that the Plan will be carried largely into effect.