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 area 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 5800 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
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:

<table>
<thead>
<tr>
<th>Size of Site</th>
<th>Cincinnati</th>
<th>Remainder Hamilton County</th>
<th>Kenton and Campbell Counties</th>
</tr>
</thead>
<tbody>
<tr>
<td>½ to 5 acres</td>
<td>84</td>
<td>11</td>
<td>24</td>
</tr>
<tr>
<td>5 to 25 acres</td>
<td>18</td>
<td>10</td>
<td>0</td>
</tr>
<tr>
<td>25 to 50 acres</td>
<td>6</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>50 to 100 acres</td>
<td>3</td>
<td>8</td>
<td>2</td>
</tr>
<tr>
<td>100 acres and over</td>
<td>0</td>
<td>17</td>
<td>4</td>
</tr>
<tr>
<td>Total sites</td>
<td>111</td>
<td>40</td>
<td>30</td>
</tr>
</tbody>
</table>

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 is 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 something form of positive approach which can deal with or encourage the solution of the many 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 central point which, 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 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 potentials 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 come directly with the problem of assuring that an adequate supply of suitable industrial sites will be available to industry at reasonable prices.