Manufactural Geography of Michigan City, Indiana[1]

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Forty miles to the east of Chicago is Michigan City (Fig. 1), a small to moderate-sized summer resort and industrial city of 30,000 people. A port on Lake Michigan, it was once considered a competitor of Chicago and thought to be the best place for the development of a head of Lake Michigan port. Chicago with its Illinois waterway connections, however, achieved this distinction, and for decades Michigan City was in the backwash of Chicago's rapid growth. Today, however, Michigan City derives many benefits from proximity to the Midwest metropolis. Dunes, sand beaches, harbor, and the International Friendship Gardens enhance its role as a summer resort for many hundreds of Chicagoans. Most important, however, are local industries which take advantage of Chicago's markets, products, and transportational facilities. Located in the extreme eastern edge of the Greater Calumet Region, Michigan City will increasingly be linked to Chicago as that city's metropolitan area creeps continually outward.

Metal-working is the predominant manufactural activity, with 60 percent of the total plants and 80 percent of the total manufactural labor force. Within the general category of metals, metal fabrications is easily dominant (15 plants). Compared with the nearby town of LaPorte, there are, singularly, only five machinery-producing establishments. More economically significant than this, however, is the fact that for decades this city has been known as a "one-factory" town.

The Historical Geography Factor of Industrial Development

The history of geographic "planning" for a commercial-industrial metropolis for the Midwest at the head of Lake Michigan may be said to go back to the early decades of the nineteenth century. The primary Calumet pioneer interest centered on the shoreline of Lake Michigan or on the lower courses of streams confluent with the lake. Of unusual interest here is the competition between various lake-river sites extending from Michigan City on the east to Chicago (Fort Dearborn) on the west. Such were the paper-platted communities of Michigan City itself at the mouth of Trail Creek, City West at the mouth of Fort Creek (presently Waverly Beach), and Indiana City at the east (now extinct) mouth of the Grand Calumet River (See Fig. 1). Included also were the "phantom" city river sites of Baileytown on the Little Calumet River, Manchester near the confluence of Salt Creek with the Little Calumet, and Liverpool near the juncture of Deep River with the Little Calumet. All of these

1. This study is based on a field survey conducted by means of a questionnaire, personal interviews, and local field observations. It is the second of a series of geographic surveys of manufacturing establishments of the leading industrial communities of the Calumet region, the first, that of LaPorte, having been published previously in the *Proceedings* (7). Some fifty classified items have been inventoried and analyzed. Attention has been focused on those elements of the manufacturing pattern which most significantly reflect relevance to the locational factors and areal features.

speculative real estate developments proved abortive except, of course, Michigan City and Chicago.

Michigan City, laid out in 1832, vied with Chicago for industrial-commercial supremacy. It's early industry was centered on lumbering and flour milling. Located in a well-timbered section stocked with both hardwood and conifer trees of good merchantable quality (8), the community early became a center of lumber supply not only for the northern part of Indiana, but for export as well, notably helping build Chicago in the prairie section of northeast Illinois.

Michigan City was also noted for its milling and trade in flour, merchants coming from as far as Chicago, Joliet, Galena, and Rockford, in Illinois (1). With various appropriations for the improvement of the Michigan City harbor by Congress, starting in 1836 in President Jackson's administration, both industries and commerce came to have increasing significance.

However, Michigan City was eventually to lose the race with Chicago. For one thing, Trail Creek was not quite the equal to Chicago River in commercial importance, particularly since its headwaters could not be tied into such a navigable system as the Michigan-Illinois-Mississippi waterways. Accordingly, when the Illinois-Michigan Canal was built (1848), Chicago had a great commercial advantage. There were additional factors.

The era of railroad building in the Calumet area resulted in a new industrial setting beginning, as far as Michigan City is concerned, with the building of the Michigan Central in 1851, followed by the Lake Shore in 1852. Factory buildings of considerable magnitude came to be established. The earliest and most important among these was the Haskell-Barker plant, now known as the Pullman Standard Car Manufacturing Company, manufacturers of freight cars, founded in 1851, and still operating.

A summary periodic inventory on the increasing number of plants built and still extant may give some idea as to the subsequent manufacturing growth: Three or more of such buildings, still standing, belong to the period 1875-1900; 16 were built during 1900-1925; and 17 were started in the last several decades.

The Chorographic and Topographic Factors of Industrial Locations

Since this is a study in economic geography rather than in economics, it is essential to focus our attention on manufacturing establishments from the angle of the space relationships (relative location) of all relevant phenomena. This includes consideration of location, of topographic site, of the region, of sources of raw materials, of the markets, of labor, and of transportation facilities. The authors recognize that the specific factor of location does not in itself determine the selection of a site for a factory. It would, therefore, be unrealistic for a geographer to conclude that any one site factor or even a combination of site factors is a determining issue. However, when industrialists themselves, upon interviews, declare specific reasons for locating in the area, such reasons establish explanatory validity. Accordingly, we have

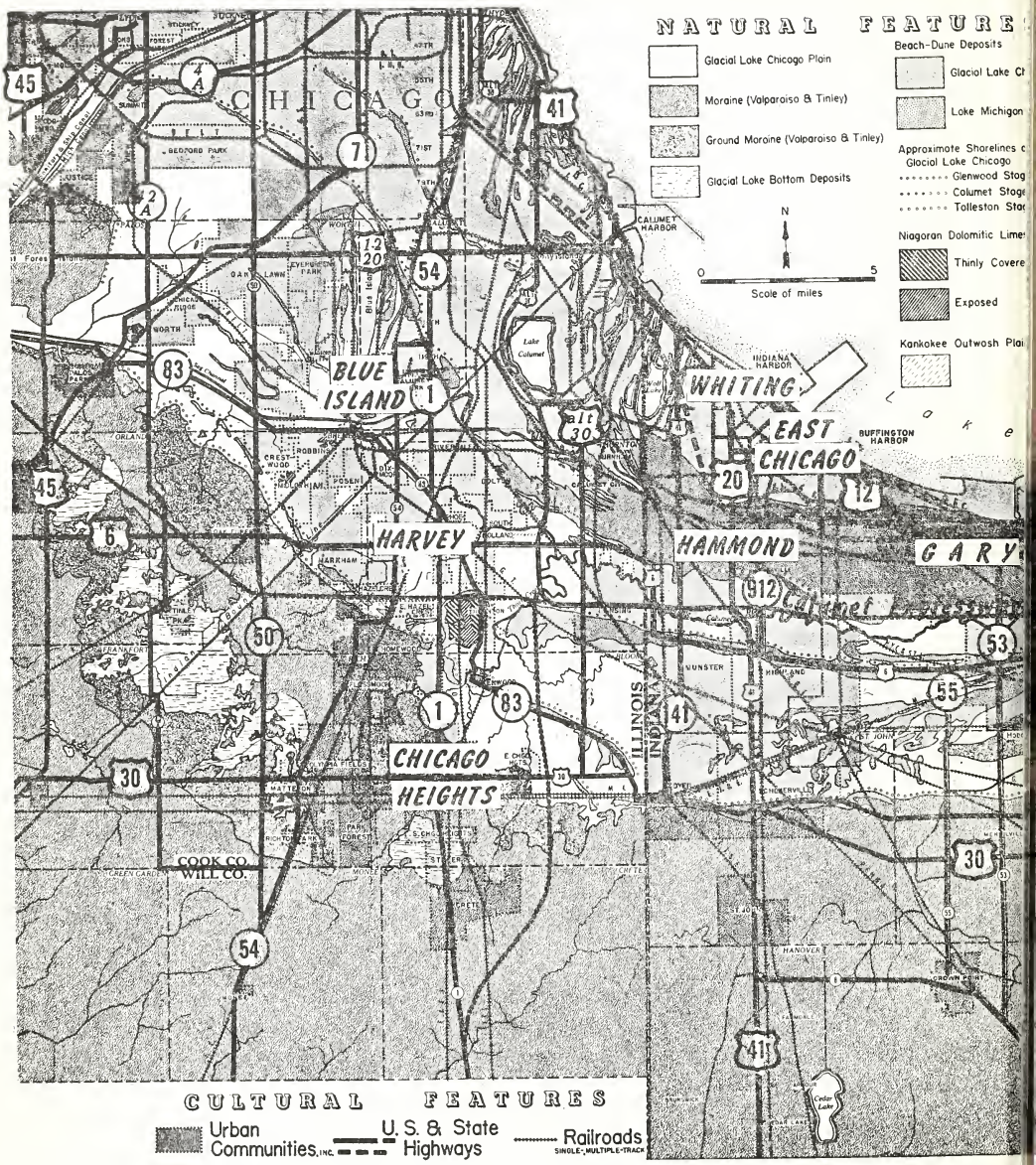
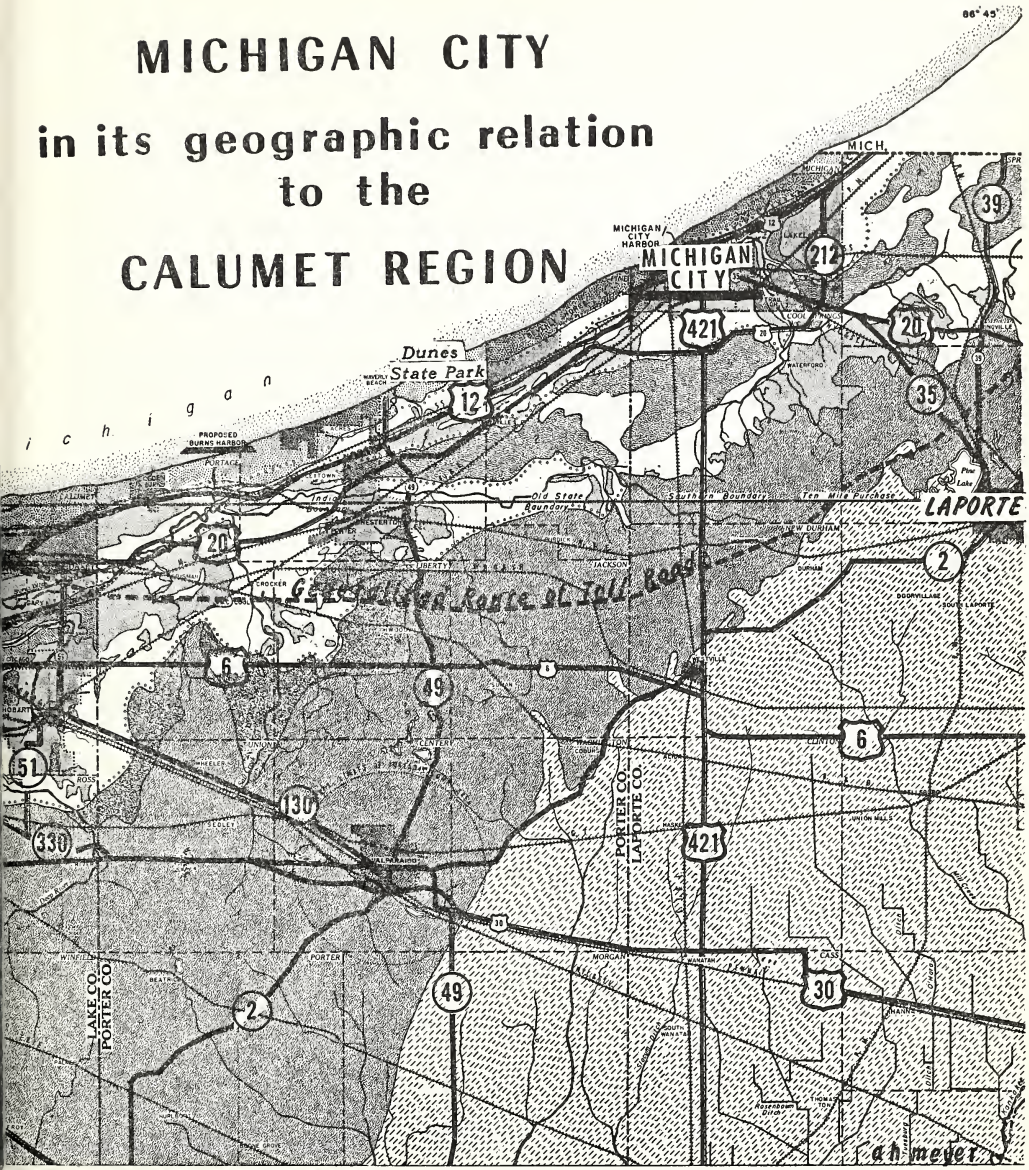


Fig. 1—Michigan City, at the eastern shoreway entrance to the Calumet region, originally vied with Chicago for head of Lake Michigan port and industrial supremacy. Besides exhibiting the geographic character of the Michigan City locale, this map features its present transportation tie-up with the Chicago metropolitan community and the other chief industrial centers with which there are close commercial relations, involving movement of both raw materials and manufactured products.


MICHIGAN CITY
in its geographic relation
to the
CALUMET REGION
MICHIGAN CITY
MICHIGAN CITY HARBOR
Dunes State Park
PROPOSED BURNS HARBOR
Old State Roundary
Ten Mile Purchase
LAPORTE
LAKE CO.
PORTER CO.
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explored and tabulated into several categories such reasons, listing them as follows in the order of approximate relative importance, the most frequent and significant occurring first.

1. Regional Situation—At least a third of respondents indicated regionality to be a leading factor in industrial location. Thus such observations as: central location; close in to midwestern plants; centrally located markets; closeness to raw materials; branch plant needed near the Calumet region for supplying the refineries in the area since Dallas, Texas plant made cost of shipping materials to the region expensive; no other job electroplating in this territory. Six industrialists in this category mentioned specifically the proximity to Chicago as a geographic selective factor of plant location.

2. Transportation—Transportation facilities, as we might expect, played a leading role as a plant location factor. The following comments are representative: good transportation; must be on a railroad; good railroad location, proximity to railroads; favorable freight rates; located beside harbor; harbor and railroad significant; close to Chicago trucking lines.

3. Land and Building Availability—Reasonably priced land and the possible occupance of pre-existing structures also at a reasonable figure have played an important role, sometimes the "determining" one in plant location or relocation. Available land; acreage suitable; land abundant; room for expansion; no room in Chicago are typical expressions in this category.

And as for buildings, about a half score indicated this as a leading consideration, of which the following comments are representative: suitable building which didn't cost much, purchased from another company which was moving out; plant just happened to be for sale at a time when such facilities were needed for expansion.

4. Labor Availability—The adequacy and quality of skilled workmen in Michigan City have been significant factors in attracting industry. Representative comments are: an advantageous labor market; good and abundant labor supply; skilled or trained labor supply; labor supply immediately surrounding building.

5. Living Conditions—Michigan City prides itself on the high cultural standards of its citizenry; also on its beautiful varied homesites in the city proper, on the beach, in the dunes, and in the forested section. Consequently, management and employees alike are attracted to this area; in some cases it was the plant owner's home, to start with. The eight responses on this may be simply summarized by the statement of two of the interviewees: "Michigan City is a nice place to live"; and "This was the owner's own home town."

6. Miscellaneous Factors—Cheap water; reasonable taxes; donation of land; a government contract calling for expansion most favored here are among the varied other reasons given for plant location in the community. It should perhaps be added here that "no particular reason," as given in some cases, may represent unconsciously a complex set of circumstances not readily recalled or analyzable.

The Manufactural Pattern

The distribution of manufacturing establishments (Fig. 2) can be explained essentially by the factors of transportation, land values, and historical centricity. These and such other factors as availability of factory buildings and land-use competition combine to effect a pattern of plants peripheral to the residential and commercial area. The total historical importance of transportational facilities is the primary element underlying the pattern of the several districts. Its 43 factories can be areally related to four concentrations, each of which displays a certain homogeneity in terms of varying factors. The four districts are Trail Creek, Western Railroad, Eastern Railroad, and the Dunes.

The Trail Creek District (No. 1 on the map), the oldest of the four, is situated at the local focus of transportation. Converging here are the Michigan Central, the Monon, and the Nickle Plate railroads and the city's harbor. Several of the plants in this district were located here to take advantage of the water-borne trade of lumber and other commodities. Initially marshy and vacant, this area is not static, for the city's growth has enfolded it. Here stand the old relict box-like three-story brick buildings, some of which are still functional. Sub-standard housing in part envelopes this area.

The Western Railroad District (No. 2) is centered upon the junction of the Michigan Central, the Monon, and the South Shore railroads. The two factories of Pullman-Standard easily dominate this area. Although some new plants are situated here, this district is moderately old. New residential developments have bypassed these factories, thus enclosing this once peripheral district. Three of the five clothing establishments are concentrated here.

The Eastern Railroad District (No. 3) is centered around the crossing of the South Shore and the Nickle Plate, where both lines have switching yards. The land adjacent to the Pere Marquette Railroad, with two plants, is also included within this district. This section is distinctive for two reasons. All of the establishments manufacture metal goods. Also the buildings were constructed in the period 1908 to 1927 when land was available. With town growth, however, residential development is enveloping this district.

The Dunes District (No. 4) sprawls out eastward from the junction of the Michigan Central and the Nickle Plate railroads. With few exceptions, this region is composed of buildings constructed in the decade 1940-1950. Chief among the locational advantages of this area is that of land availability. Tracks of sandy and marshy land at lower cost and without zoning restriction are still available there. Transportation is provided by the Michigan Central Railroad and highway US 12.

Consideration of Alternative Plant Sites

Interviewees were asked whether alternative sites had been considered. The number of those responding in the negative outnumbered those responding in the affirmative, about two to one. From this it would appear that manufacturers as a group are regionally discriminating only to a limited extent. Those who did consider alternate

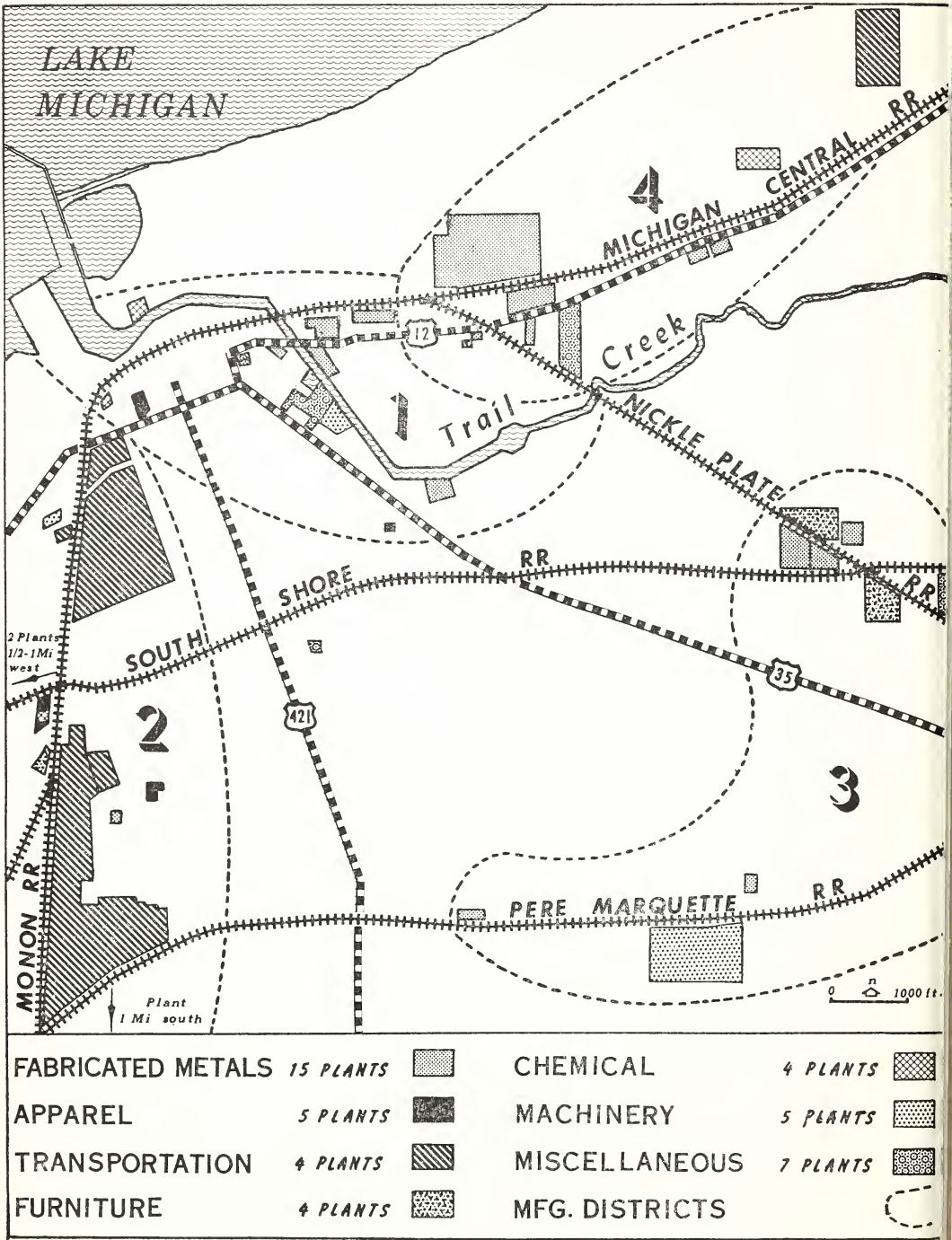


Fig. 2—Manufactural pattern of Michigan City and its relation to transportation facilities. For mappable reproduction expediency, the various types of manufacturing have been reduced to seven groups. The geographic pattern lends itself to a four-fold area differentiation shown on the map and described in the text, namely: 1. The Trail Creek District, 2. The Western Railroad District, 3. The Eastern Railroad District, and 4. The Dunes District.

locations had in mind places like Elgin, Aurora, Rockford, and Chicago, Illinois; St. Louis, Missouri, and Benton Harbor, Michigan. In weighing the advantages of the Michigan City site, geographic factors such as the following were considered: East Chicago being close to the refineries of Whiting and surrounding area; centrally located in midwest; centrality of location; iron and timber from the north, coal from the south (Pullman Standard Car Manufacturing Company); St. Louis, center of distribution, but further from material supply than Michigan City.

Reasons given for some plants being moved from a former location to Michigan City included: expansion of plant couldn't be considered in Chicago, taxes lower in Michigan City; better living conditions for the owners in Michigan City; Chicago plant was given up after being leased to government; expansion room in Chicago not sufficient.

Original location of plants included Niagara Falls, Little Falls and Poughkeepsie, New York; Claremont, New Hampshire; Marshaltown, Iowa; Covington, Kentucky; Greensburg and LaPorte, Indiana; Geneva, Illinois; Cincinnati, Boston, and Chicago. At least thirteen Chicago firms moved their main plant to Michigan City or established branch plants in Michigan City.

Manufactural Structure

The following table is a breakdown of employment by plant type classification of the total Michigan City manufactural labor force.

TABLE I

Group	Total Employed	Per Cent in Michigan City	Per Cent in Indiana (2, 4)
Clothing	600	8.0	2.7
Furniture	620	8.3	3.5
Chemicals	150	2.0	3.7
Primary metals	0	0.0	15.0
Fabricated metals	2200	29.3	7.0
Machinery (Elec.; Non-Elec.)	1000	13.3	23.0
Transportation equipment	2150	28.7	17.0
All other	780	10.4	—

Three striking percentages are portrayed by these data. Fabricated metal products are the single most important manufactural category with fifteen plants and 29.3 per cent of the local manufactural labor force. Within this type are seven factories producing heating and plumbing equipment. The transportation equipment industry is represented by four plants with 28.7 per cent of the local total. In order of importance, this group includes boxcars, automotive parts, and bicycles. The producer of boxcars is the largest factory employing 2½ times as many as the next largest. As local diversification has progressed, this

category is becoming relatively less important. Only five plants, with 13.3 per cent of the labor force, produce machinery products. The largest of these, the Joy concern, is world-known for its mining machinery. Three plants produce radio or television equipment. The four furniture producers utilize 8.3 per cent of the labor total. Three of these use metal and are important makers of non-residential metal furniture. Five smaller concerns, with 8 per cent, make clothing and are the contemporary representatives of a well-established type of local manufacturing. Three plants, with 2.0 per cent of those employed, manufacture chemical products. American Cyanimid's plant is that concern's regional producer of catalysts. Besides the above listed, there are seven plants, with 10.4 per cent of those employed, which produce varied products. The largest, Blocksam and Co., produces curled hair for packing.

The structure of manufacturing in Michigan City differs from that of Indiana generally in three ways. In Indiana as a whole, machinery, transportation equipment, and primary metals, in that order are the outstanding manufactures. Michigan City deviates from the state averages in that fabricated metals are pre-eminent, transportation equipment is even more significant than the high state figure, and machinery (both electric and other) is locally comparatively minor (2). Michigan City's distinctiveness is based upon the presence of many factories producing a wide variety of metal manufactures.

Related Elements

Materials—With such an emphasis upon metal goods, Michigan City is well situated to receive the steel and diverse steel products of the Chicago-Calumet complex. Because of this, the Chicago-Calumet region is the chief source of raw and processed materials. To a lesser extent, however, steel is gotten from Ohio, Pennsylvania, and even from Germany. Wood is imported from Memphis and the Northwest; Hardware from New England; a variety of other materials is procured from local, national, and foreign sources.

Markets—There is a definite concentration of markets in the eastern two-thirds of the United States. Especially important within this region is the Chicago Metropolitan area and the large cities in the American Manufacturing belt. Eleven manufacturers export to foreign countries, notably Canada, Cuba, and Venezuela. Goods are also sent to Europe, Africa, South American countries and certain Pacific countries. Although the percentage exported is generally small, 14 per cent of the mining machinery and 10 per cent of the refrigerators are sent to foreign markets. Four plants produce for the county market such manufactures as packing materials, boxes, and concrete objects. Several concerns mentioned an intensified marketing effort through the introduction of new products and concentration upon the southern and western states.

Labor—The 43 manufacturing establishments employ approximately 7500 persons. The accompanying table indicates that this total has varied by as much as 2300 in a one-year period. Of the total employed, about 1500, or 20 per cent are female. In the decade 1940-1950, there

TABLE II (6)

Labor Trends
(Based upon 27 Reporting Industries)

	Nov. 53	Sept. 54	Jan. 55	Mar. 55	July 55	Sept. 55
Employment	7667	5364	5882	5891	6210	6691
Unemployment (Compensation claims)	566	4112	2460	1448	1185	494

was an increase in the non-white population from 4.0 to 6.5 per cent of the total.

Compared with such nearby communities as LaPorte and Valparaiso, the labor source of Michigan City is rather restricted in terms of radial dimensions. The competitive labor attraction of South Bend, LaPorte, and Gary serves to limit the source area to a general radius of 15 miles. The great majority of labor, then, is local and comes from Michigan City and its satellite rurban periphery. To a very limited extent, however, labor also comes from Gary and LaPorte, Indiana; and New Buffalo, Michigan. The comparatively poor farm country found in this region of moraine, marsh, and dune, limits the number of farm help for industry.

In 1932, about 4,400 people were employed in local manufacturing (9). On the basis of the 1930 population census (26,735), the percentage of those employed in manufacturing was 16 per cent. In 1955, with a population of 30,000 and a manufactural labor force of some 7,500, this percentage has increased to 25 per cent. Not only has there been an increase in the ratio of the manufacturally employed to the total population, but this increase has been synchronous with local diversification of manufacturing. Indicative of this trend is the change in relative importance of the Pullman Standard plant. Although this concern employed one-half of the local total in 1932, the contemporary ratio is now less than one-fourth. It should be apparent that such a change is for the economic well-being of the community. That this trend is not yet adequately developed can be illustrated by recent unemployment statistics. Of the 27 Indiana cities for which data is given in the September issue of the *Indiana Business Review* (3) only one, Hammond, had a smaller improvement in the unemployment situation. The statistics compare the year ending in August 21, 1955 with the previous year. Although the average improvement of the reporting cities was 41.5 per cent, Michigan City showed only a 10.6 per cent improvement.

Michigan City has been described as a labor surplus area, a fact which, to a great extent, can be attributed to the presence of Pullman Standard. The situation was described in the Area Labor Market Letter (5) as follows: "Manufacturing establishments indicated only a slight total increase. Gains of only slight proportions are expected by most of the firms. The gain will be wiped out by a loss in one firm. This firm in the transportation equipment category still influences the total picture.

It has been difficult for them to maintain stable employment, because of lack of orders."

Often a new order in this plant means the re-employment of a few hundred workers, while the completion of an order signals a lay-off. Still another instance of manufacturing instability is the presence of an ordnance plant under government contract. With a peak employment of 550, this establishment, because of its smaller size, does not have the same effect as the aforementioned concern. Although an employment surplus is not favorable for the community as a whole, this surplus assures local industry an ample pool of available workers. In interview, several plant managers specifically mentioned the abundant labor supply as a major location factor.

Transportation

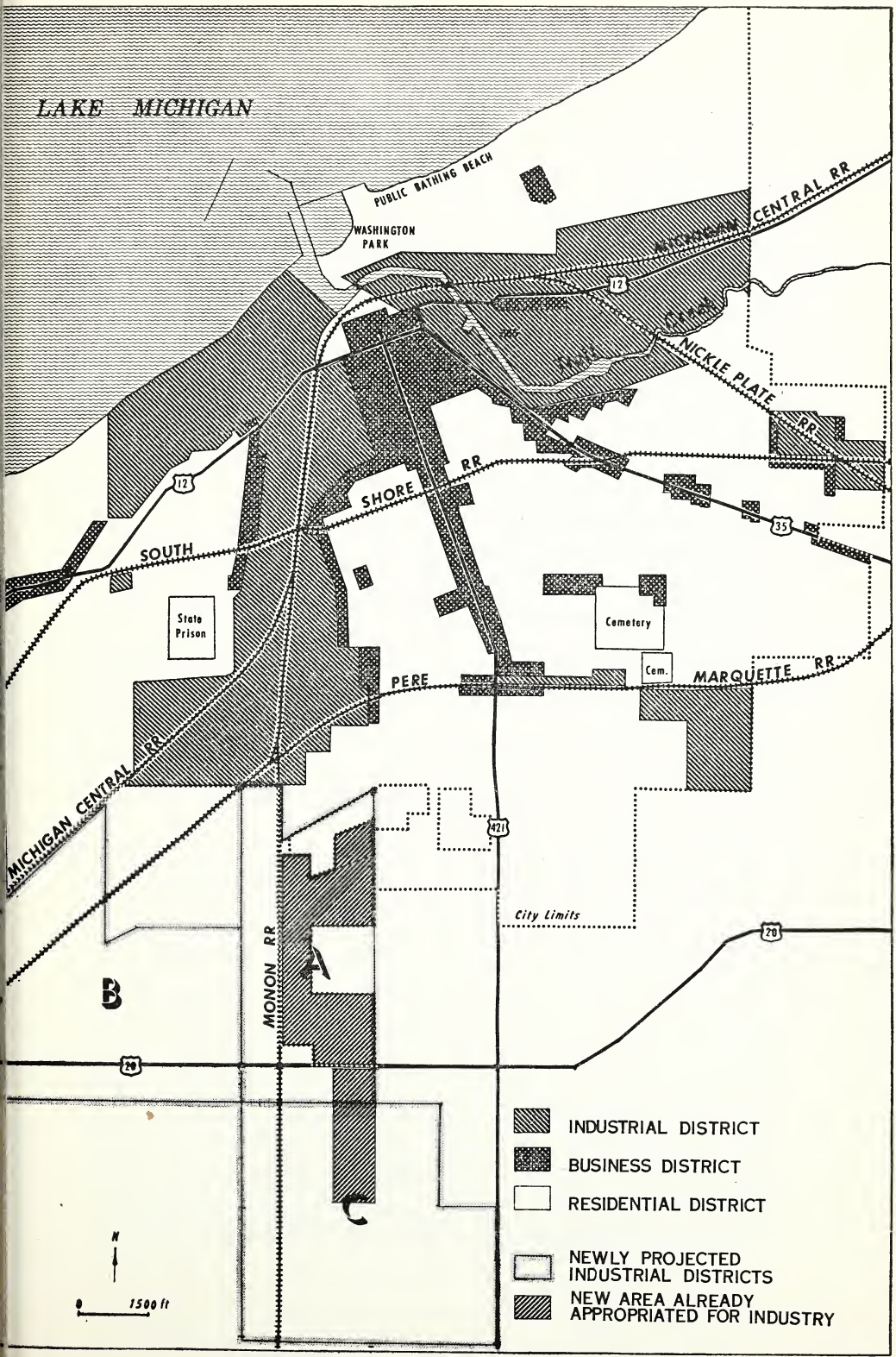
Focusing upon Michigan City are five rail lines (one electric), highways US 12, 20, 35, 421 and State highway 212 (Figs. 1, 2 and 3). In addition to these, the other major transportation lines of the Greater Calumet are accessible to Michigan City. Of the forty-four truck lines that service this community, eight maintain local offices. Michigan City will also have ready access to the East-West Toll Road, scheduled to be completed by the close of 1956 (Fig. 1). This route will make possible 24-hour truck service to New York City.

To the extent that local manufacturers ship eastward, Michigan City is advantageously located ratewise. If goods are shipped by rail to New York City, there is a 3 per cent first class rate advantage over the Chicago district. Likewise, there is 5 per cent advantage, when first class goods are shipped by truck to Detroit. However, in shipping westward and southward, Chicago generally has a definite freight rate advantage. Shipping to the West Coast by rail, for example, Michigan City has a 11¼ per cent disadvantage on first class goods in comparison with Chicago.

Industrial Planning and Zoning

In this section of our questionnaire the question was asked, "Are local and regional zoning and geographic planning ordinances adequate to meet all the needs of your plant for present operations?" In terms of present needs it appears that in the majority of cases site conditions of place and space were satisfactory. Several indicated specific need for additional parking space for commercial vehicles and warehouse space for storage. A few respondents associated the present needs with those of the near future with such comments as the following: "There is a lack of good industrial area for plant location," and "City should have more zoned industrial land within city limits." A casual look at the zoning map (Fig. 3) may give the impression that areawise there is

Fig. 3—Reflective of Michigan City's geographic thinking, past and present, on community zoning and planning, this map features the space relationships of the industrial districts to the districts zoned for business and for residence, as well as the new industrial districts (A, B, and C) being opened up on the south side. (Adapted after the Michigan City Zoning Map of 1940 and the new plat extension map, The Greater Michigan City Industrial Area, as of October, 1955.)


LAKE MICHIGAN
PUBLIC BATHING BEACH
WASHINGTON PARK
MICHIGAN CENTRAL RR
12
NICKLE PLATE RR
SHORE RR
35
SOUTH
State Prison
Cemetery
Cem.
PERE MARQUETTE RR
MICHIGAN CENTRAL RR
421
City Limits
70
MONON RR
20
B
INDUSTRIAL DISTRICT
BUSINESS DISTRICT
RESIDENTIAL DISTRICT
NEWLY PROJECTED INDUSTRIAL DISTRICTS
NEW AREA ALREADY APPROPRIATED FOR INDUSTRY
N
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enough land now within the city zoned for industry. It is not infrequent to find communities in the state which have mapped out more industrial area than apparently will be needed. But adequacy of industrial land must be evaluated in terms of both quality and quantity. In the case of Michigan City various aspects of industrial occupance of site must be considered, such as: future expansion of several of the larger plants already on site; land on lakeshore under riparian rights or held for harbor facilities; sites at the moment unadapted, such as dune land or poorly drained areas; sites remotely distant from sewer and water facilities; and sites occupied in part by residences held at too high a figure.

Mr. William R. Bartlett, Chairman of the Michigan Zoning Board, points to the following main reasons for choosing an industrial location: "1. A location that is visible from a well-traveled highway, because of the tremendous values in advertising and accessibility; 2. availability of water, power, and sewage disposal; 3. well graded and drained land; and 4. an area free from substandard housing."

The next question asked was with reference to anticipated future plant expansion. Practically all interviewees agreed that the new tracts of land now being purchased and allocated to industrial use on the south end of the city will take care of the industrial needs for the foreseeable future. Part of this newly acquired industrial land has already been annexed to the city (Fig. 3). The projected program for industrial land expansion on the south side is based on the philosophy that a growing community must be areally conscious of the growing needs of the various components of society and industry, properly co-ordinated. Significantly relevant here also are the observations by Mr. Bartlett. After pointing out such industrial advantages as adequate utilities, including an abundance of water and proper sanitation and sewage disposal, Mr. Bartlett emphasized the need of maintaining and further developing high standards of livability, including the promotion of a good school system, recreational functions, and resort facilities.

Because of this emphasis on a "good life" as well as a "good living," it was stated that the community is preparing to expand opportunities for the smaller and lighter industries rather than planning for the larger and heavy industries. And types of industries which would in any major way interfere with the wholesome residential development of Michigan City are not being sought. It was further noted that the community is not aspiring to become a very large industrial center, but rather seeking a goal of population expansion of perhaps not much more than two times the present size.

When asked specifically about the attitude of the community towards the possible development of a deep harbor at Michigan City, proposed as part of the new St. Lawrence Seaway project, Mr. Bartlett replied that here also lighter commercial vessels in the harbor would be preferable to large ore boats. It was his conviction that most of the commercial establishments and the community would profit more by such a harbor established at the mouth of Burns' Ditch, less than fifteen miles to the west, a site currently approved by many Indiana harbor proponents (Fig. 1).

Despite the emphasis on the maintenance of a high cultural level in the community, there is a strong promotional program for expanding industrial facilities. Again quoting Mr. Bartlett: "We are experiencing today a new and awakened interest in many groups and individuals that have heretofore remained indifferent to or even hostile to Industrial Development. Many of these people are discovering that more important and above all, industries provide jobs for a growing population; lessen the risk of dependance upon a single industry; widen the tax base; and thereby lessen the burden of increasing cost of municipal service.

"Inviting industries into our city does not necessarily mean the destruction of surrounding residential neighborhoods or abuse of our existing streets or utilities. The demands of industry also require a well-planned district, for industry insists on assurance against encroachment or other uses which may affect its proper operation and expansion adversely."

The manner in which the Michigan City community is attempting to realize these objectives is rather unique. Instead of waiting for the city to annex new territory with the object of zoning it for industry, public-spirited citizens are concertedly purchasing new tracts of land south of the corporate limits and holding such land for future incorporation within the city. The so-called Greater Michigan City Industrial Committee thus formed co-operates with the City Planning Commission in extending industrial facilities. A well-mapped plan is already in operation as shown in Figure 3. On this map are delineated three districts—A, B, and C—in which parcels of land are sought for future industrial use. In the same figure are indicated also such sections which already have been purchased and allocated for industry.

The newly planned Industrial District will be developed in such a manner as to "guarantee a harmonious co-existence with varied industries and their residential and commercial neighbors." Restrictive covenants for such newly incorporated industrial areas have already been formalized. Briefly, these include specifications as to limited uses so that any facility may not become noxious or offensive to the community. Plans provide for such building space, setbacks, and structural design as will accord with the most modern innovations in attractive landscaping as well as practical utility of industrial sites.

Attitude of Industrialists to a "Seaway" Michigan City Harbor

The question on this matter was: How would an Indiana (St. Lawrence Seaway) port affect your industry if located (a) at Michigan City; (b) at Burns' Ditch; (c) at Lake Calumet (in southeast Chicago)? Our concern here is primarily, of course, the possible location of a St. Lawrence deep waterway harbor at Michigan City. Reactions to these questions may be said to fall into three groups—those favoring such a harbor at Michigan City, those opposed, and those who are non-committal. Fifteen were in favor of such a development, pointing out such factors as the following: It would provide more employment, more business, and more new factories; it would effect savings on freight rates, particularly on export goods (some indicated that commodities now had to be trans-

ported to Calumet Harbor); it would provide cheaper freight rates on raw materials; it would in general facilitate transportation and contribute to the growth of the community.[1]

About a half score were generally skeptical about such benefits and cognizant of disadvantages to offset possible advantages, contending that it would "destroy" the fine beach as well as "destroy" Michigan City as a resort town; it would likewise "destroy" in general the residential qualities of the community by bringing in undesirable people; it would also be a detriment to the community in tightening the labor supply when construction begins.

Among those who are non-committal in their attitude was one respondent who pointed out that what was needed more than anything else was "a complete objective attitude on the matter." Some would favor a deep harbor location at the mouth of Burns' Ditch, presently having in general the greatest number of regional and state supporters. It was pointed out by a proponent of this group that such location would "help the city economically to maintain its quality." The general sentiment seems to be that a deep harbor location as far west as Lake Calumet, Chicago area, would have little or no effect upon the Michigan City industrial development.

Summary and Conclusions

Interview and field work in this study indicate a varied selection of location factors of region and site in the localization of manufacturing establishments in Michigan City. From their position within the United States manufacturing belt and in proximity to Chicago, the greatest railroad center in the United States, local manufacturers derive the benefits that accrue from such transportation and marketing facilities. The community profits from favorable freight rates to points in northeastern United States as compared with Chicago. It will soon share in East-West toll road transportation, and the possibilities also of proximate deep harbor port facilities now contemplated in the Burns' Ditch area as part of the St. Lawrence Seaway project.

Another significant regional locative factor is Michigan City's position within the largest contiguous township area experiencing the most rapid population growth in Indiana.

The city's manufactural structure is characterized by metalworking establishment, 26 of the 43 manufacturing establishments producing metal goods. Thirty-four of them have markets national and even international in scope.

Employment and production fluctuates more in Indiana than they do on the average for the United States. This is because of the dominance of durables in Indiana, especially steel and transportation equipment. The same is true of Michigan City, with its emphasis upon the metal durables, especially transportation equipment. Because of this, Michigan City should attract diversified industry, especially those types that are least susceptible to rapid and significant fluctuations. The addition of

1. At present the harbor is used for pleasure craft, and the only steady commercial cargo is the animal catch of 500 tons of Lake Michigan fish.

a number of factories in the past several decades has effected a more diversified industrial base than was the case for many decades when the Pullman Standard Car Manufacturing Company dominated the scene.

The several industrial districts, especially the more recently developed ones, are on the periphery of the city's core area. Because of this areal pattern, most plants have room for expansion. However, it is locally recognized that additional land is needed for new industries. Joint planning on the part of both public and private agencies is now developing new industrial tracts, particularly on the south side of the community, presaging a new era of industrial expension. The program is projected on the basis of types of industries which in form and function will contribute to rather than detract from the "livability" of the community.[1]

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