

MONTHLY
*Business
Review*

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FINANCE • INDUSTRY • AGRICULTURE • TRADE

FOURTH FEDERAL RESERVE DISTRICT

Vol. 33—No. 11 *Supplement*

Federal Reserve Bank of Cleveland

Cleveland 1, Ohio

Ohio Cross Sections (II)

Southwestern Ohio: Six Economic Areas

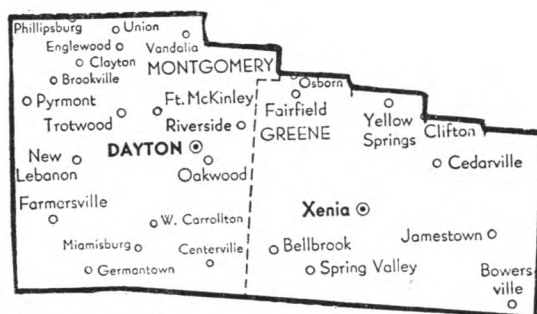
Including 21 Counties



Area C

DAYTON

(Montgomery and Greene Counties)



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Dayton's population is about 244,000, or 6th largest among the cities of the state. Montgomery county also includes Miamisburg (in the southern part of the county) with about 6,000. Xenia in adjoining Greene county⁽¹⁾ is a substantial city of about 13,000. Also in Greene county is Fairborn (a recent consolidation of Fairfield and Osborn) with a population of about 8,000. Altogether the population of the two-county area is nearly half a million.

The density of population of the Dayton area, including both Montgomery and Greene counties, is 519 per square mile or 6th among the state's economic areas. (See Table I.) Of Area C's population, 19% was employed in manufacturing in 1950, marking the area as 6th in the state in this respect also.

Dayton's Manufacturing Strength The value of manufacturing in the Dayton area, according to the 1947 Census, was about \$496 million, or 3rd highest of any economic area in the state. In total value of manufacturing, the Dayton area is exceeded only by the Cleveland and Cincinnati areas.

The value of manufacturing per employed worker in 1947 was \$5,206 or 9th among the state's economic areas.

Average weekly earnings of manufacturing workers in the Dayton area in 1950 were \$75.28, or 3rd among the state's economic areas. In this respect

(1) Boundaries of economic areas discussed in this series are as shown in *State Economic Areas*, by Donald J. Bogue, Bureau of the Census, U. S. Department of Commerce, 1951. For two modifications see Appendix.

An area designated by a numeral such as Area 1, is classified as "non-metropolitan", while "metropolitan areas" are denoted by letters, such as "Area C, Dayton". In general, a metropolitan area has a central city of at least 50,000 population and meets certain other Census tests of population characteristics.

Dayton is exceeded only by the Hamilton-Middle-town area and the Toledo area.

Data on manufacturing employment, however, are exclusive of the civilian employees of the federal government. Thus, in addition to employment in private manufacturing in the Dayton economic area, there are presently about 35,000 civilian employees of the federal government at the Wright-Patterson Air Force Base, largely engaged in experimental work in aviation. The location of Wright Field near Dayton has always played a significant role in the area's economic life,—a role which, of course, is intensified under current conditions.

Leading Industries There are 87 large manufacturing establishments, employing 100 or more people each, in the Dayton area according to the Census of Manufactures of 1947.⁽²⁾ Manufacture of auto and airplane parts, machinery and fabricated metal products constitutes the leading group of industries, accounting for 35 of the large establishments. Important products include cash registers, electric motors, refrigerators, air-conditioning units and special tools.

There are also 7 large plants in the primary metal industries, including foundries.

In Dayton, as well as in smaller towns in Montgomery county, are located numerous mills producing paper and paper products. They form part of the southwestern Ohio paper-mill concentration,

(2) The 1947 Census of Manufactures provides the latest data available on certain detailed aspects of manufacturing. More recent industrial information, however, has been utilized at various points of the text.

Editor's Note: This article is the second of a projected series of five which analyze Ohio's economic activity in terms of a concept of "state economic areas". This geographical grouping has recently been devised by the Bureau of Census to fill the wide gap between the county and the state as statistical units in discussing economic developments.

The first article, published in the October issue, discussed the northwestern part of the state. The present article deals with six economic areas (comprising 21 counties) in southwestern Ohio. Succeeding articles will cover in turn the various economic areas of central and southeastern Ohio, and of northeastern Ohio. A fifth and final article of the series will summarize for the state.

Ohio's 88 counties are grouped into 21 economic areas, each of which is relatively homogeneous as to industrialization, type of agriculture, levels of income, etc.

For each area, a selection of the most recent information available is brought to bear on the population, manufacturing, agriculture, trade and finance of the area, including comparisons with other areas of the state.

A complete list of Ohio's 21 economic areas, with counties included, appears as Table II. Detail maps of the 6 southwestern areas treated in this article adjoin the text.

which follows the course of the Miami River through Dayton, Middletown, Hamilton, etc.

Important chemical research centers are located at Dayton and Miamisburg.

Greene county manufactures include furniture, shoes, rope and twine in Xenia; cement in Fairborn; and non-ferrous castings in Cedarville.

Trade Sales by retail stores in the Dayton area totalled \$447 million in 1948, according to the retail census. On a per capita basis, this amounted to \$977, or 6th among the state's 21 economic areas. (See Table I.)

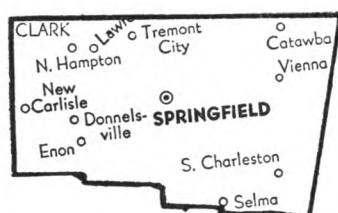
Agriculture Cash income from agriculture in Montgomery and Greene counties amounted to about \$29 million in 1949, or \$61.55 per acre of farm land, ranking 6th among the state's 21 economic areas.⁽³⁾ Hogs and corn together account for about 44% of this income, while dairy products account for 18% and poultry 9%. The two counties

are quite similar as to types of agriculture. Although hogs make up the leading agricultural product in both counties, hogs are more important in Greene county, while poultry is stronger in Montgomery than in Greene.

Finance Area C ranks 5th in the state in respect to demand deposits of commercial banks, as reported at the end of last year; the total amounted to \$204 million.

In respect to important types of savings accounts, however, the area appears to be relatively low. Thus, savings accounts (in the form of time deposits at commercial banks *plus* withdrawable shares of savings and loan associations) were \$183 million at the end of last year. This amounted to only \$399 per capita, for a rank of 17th among Ohio's 21 economic areas,—appreciably below the United States average as well as the Ohio average. On the other hand, Area C ranks relatively high in sales of government savings bonds, as well as in credit-union savings, neither of which is indicated in Table I.

Area M SPRINGFIELD (Clark County)



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The city of Springfield has a population of about 79,000, or 9th largest in the state. Clark county⁽⁴⁾ has a population density of 278 per square mile, or 11th among the state's 21 economic areas.

Manufacturing The fact that 16% of Clark county's population is employed in manufacturing (1950) marks the area as 10th of Ohio's 21 economic areas. (See Table I.) In this respect the Springfield area ranks lower than most metropolitan areas of the state, but higher than the Columbus area as well as all of the non-metropolitan areas of the state.

(3) 1949 data are used here for agricultural comparisons between areas, because that is the latest year for which certain detailed data are available. Changes since 1949 would probably affect the area comparisons very little, if at all.

(4) For purposes of this series of articles, Clark county has been added to the list of metropolitan state economic areas on the basis of the results of the 1950 Census of Population. For further explanation see Appendix.

Area M reported 32 large manufacturing establishments, employing 100 or more workers each, according to the Census of Manufacturers of 1947. Of these, 13 are classified in the machinery group of industries, and 4 as producers of fabricated metal products. There is one very large motor-truck plant in the area as well as a very large magazine-publishing establishment.

The value added by manufacture according to the Census of 1947 was about \$113 million, which is not as high as in numerous other manufacturing areas of the state. The value of manufacturing, however, is very high in relation to the number of workers employed. Thus, the value added by manufacture per employed worker was \$5,824 in 1947, or second highest in the state. The particular composition of the industries located in the Springfield area, including the presence of the large magazine-publishing establishment, probably contributes to this result.

Average weekly earnings of manufacturing employees in the area were \$65.20 in 1950, or 12th of the state's 21 economic areas.

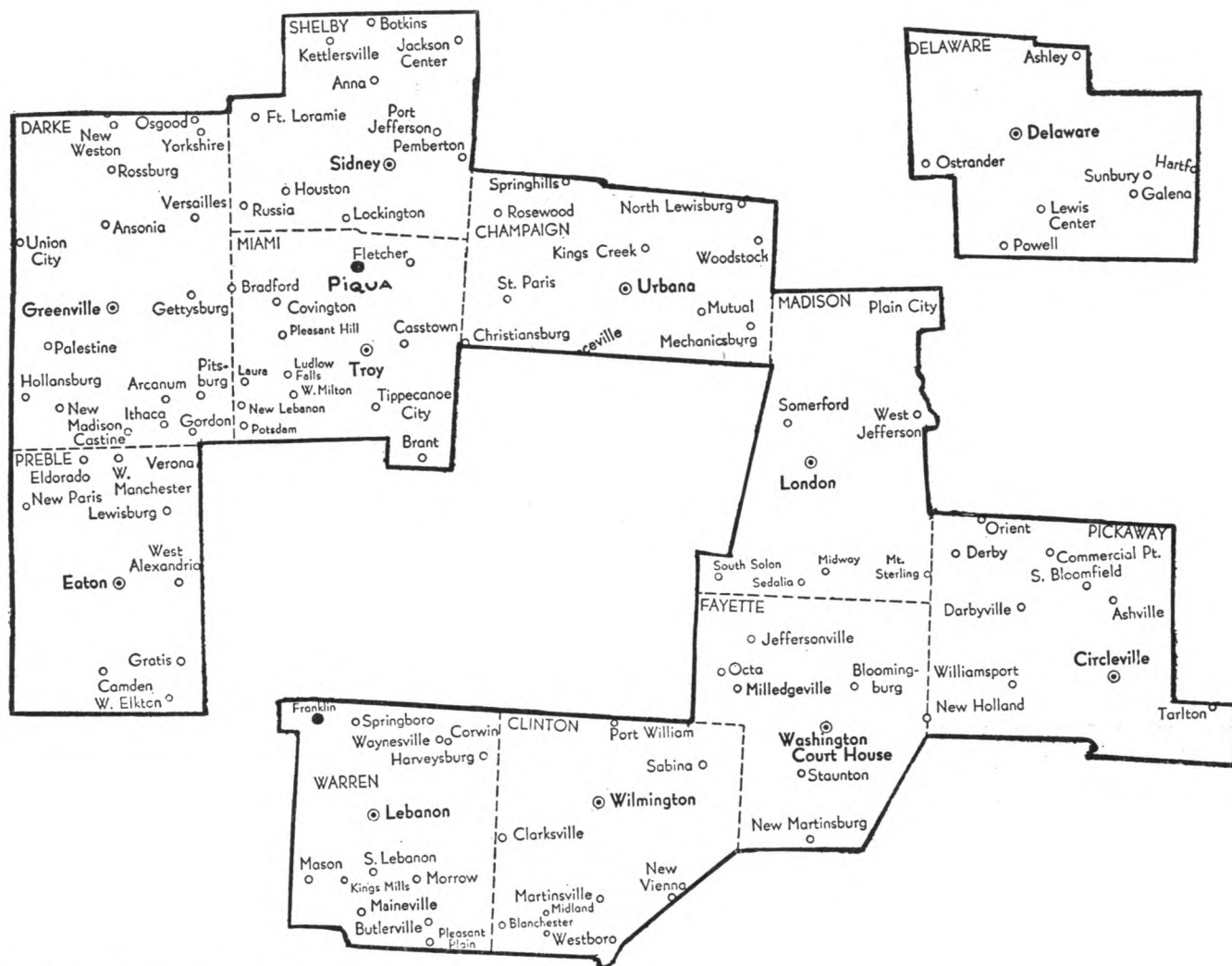
Trade Total sales by all retail outlets located in Area M amounted to \$106 million, according to the 1948 Census of Business. This was the

equivalent of \$945 per capita, ranking 8th among Ohio's 21 economic areas.

Finance Commercial banks in the Springfield area had about \$34 million of demand deposits at the end of last year. In this respect Area M ranks 20th of the 21 areas.

In respect to savings accounts, however, the area appears to be relatively stronger. Savings accounts (in the form of time deposits at commercial banks *plus* withdrawable shares of savings and loan associations) amounted to \$63 million at the end of last year; this is the equivalent of \$562 per capita, scoring the area as 6th among the state's 21 areas.

Area 3 PIQUA-DELAWARE Area (Eleven Counties)



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Area 3 is a non-metropolitan area composed of 11 counties shaped somewhat like a ring surrounding the Dayton and Springfield metropolitan areas and adjoining at points the Columbus and Cincinnati metropolitan areas.⁽⁵⁾ The area is related to Dayton, Springfield, Columbus and Cincinnati, not only in respect to trade and financial connections, but also

by way of a considerable volume of commuting-to-work from parts of Area 3 to the four large cities,—

(5) In *State Economic Areas*, op. cit., Ohio's Area 3 includes Clark county (containing Springfield) along with the 11 counties here included in Area 3. Insofar as Clark county is here treated separately as a metropolitan area, the remaining 11 counties of Area 3 show more heavily accented rural characteristics in the statistical averages than would otherwise be the case.

frequently entailing daily transportation of substantial mileages.

The largest city in the area is Piqua, in Miami county, with a population of about 17,000, according to the 1950 Census. Next in order are Delaware, Sidney, Troy, and Washington Court House, respectively, each with approximately 11,000 to 12,000 population. Smaller centers in descending order of population include: Urbana, Greenville, Circleville, Wilmington, Franklin, London, Lebanon, Eaton. (All above mentioned are county seats except Piqua and Franklin.)

The urban population in Area 3 makes up only about one-third of the entire population which numbers about 354,000. The remaining two-thirds live in rural areas: about 40% on farms and about one-quarter in the country but not on farms.

Corn-Belt Agriculture

Factors which help to make agriculture successful in this area are the following: First, most of Area 3 lies within the corn belt and has a very productive soil, and secondly, it surrounds and is adjacent to substantial metropolitan areas which serve as ready markets for its agricultural products.

Gross cash income received by farmers in 1949 from the sale of agricultural products totalled \$163 million, or \$54.25 per acre of farm land. Area 3 was second only to Area 1 of northwestern Ohio in cash income per acre among the non-metropolitan areas.

Leading Farm Products

Four products — hogs, dairy products, poultry, and beef cattle—make up about three-fourths of total cash income. These products find a ready market in the neighboring metropolitan centers. Revenue from hogs, 35% of total cash income in 1949, is the most important single source of the farmer's income. Large plantings of corn help to support hog and other livestock production, while corn alone brought in only about 8% of total cash income in 1949. Other leading products in order of importance are dairy, 19%; wheat, 10%; poultry, 9%; beef cattle, 7%, and soybeans, 2%.

Of the individual counties, Preble county, which is adjacent to the Dayton and Hamilton metropolitan centers, has the highest income per acre within the area. In 1949, approximately \$61.00 per acre of farm land was received by Preble county farmers. Clinton county, with a return of nearly \$60.00 per acre is the second highest county. In each county hogs are the leading income producer, accounting for 46% of farm cash income in Preble county, and 54% of farm income in Clinton county.

Manufacturing About 7% of Area 3's population was employed in manufacturing in 1950. In this respect, the area ranks 19th among the state's 21 economic areas. The proportion is below the United States average as well as the Ohio average.

There are, nevertheless, 51 large manufacturing establishments, employing 100 or more employees each, according to the Census of 1947.

In Miami county (including Piqua and Troy) are found a number of substantial plants whose products exhibit an unusual degree of balance between hard and soft-goods lines. The hard-goods lines include manufacture of steel tubes, machinery, Venetian blinds, wood products, and metal and plastic toys; soft-goods lines include meat packing, making of malt and animal feeds, and weaving of blankets and underwear.

Shelby county is the second most important manufacturing county in the area; located in Sidney are plants producing machine tools and machinery, as well as a large electroplating establishment.

In Darke county (including Greenville) men's apparel is manufactured; there are also several canneries and a plant manufacturing filters for autos and tractors.

In Delaware county, at the eastern edge of Area 3, truck bodies, auto heater controls and screw-machine products are manufactured.

Pickaway county (including Circleville) has several vegetable canneries as well as a large plant for soybean processing and manufacture of livestock feed. Located at Circleville also is a new plant manufacturing fluorescent light tubes.

Manufactures in Fayette county (with Washington Court House as county seat) include shoes, gloves, and food products; there are also wood-working establishments and a new plant producing culvert pipe and structural steel products.

Among other manufactures in Area 3 are paper products in Champaign and Warren counties, auto parts in Madison county, and metal products in Clinton county.

The value of manufacturing in all 11 counties of Area 3 amounted in 1947 to about \$126 million. The value of manufacturing *per employed worker* was \$5,439, or 8th among the state's 21 economic areas, exceeding that of such large metropolitan areas as Akron, Canton, Dayton, and Columbus.

Average weekly earnings of manufacturing workers in Area 3 (1950) were \$59.56, or 18th of the 21 areas.

Trade Sales by retail outlets located in Area 3 totalled \$295 million in 1948, according to the Census of Business. Expressed on a per-capita

basis, this amounted to \$834, which places the area as 15th among the state's 21 economic areas.

Finance The Piqua-Delaware Area ranks 10th in the state in respect to demand deposits of commercial banks, with \$141 million reported at the end of last year.

Savings accounts (in the form of time deposits at commercial banks *plus* withdrawable shares of savings and loan associations) amounted to \$124 million on the same date, the equivalent of \$349 per capita.

(Please turn to page 20 for discussion of Chillicothe-Hillsboro area)

BASIC ECONOMIC DATA

POPULATION

1. Population, 1950.....thous.
2. Land area.....Square miles
3. Population per square mile, 1950.....
Rank among Ohio's 21 economic areas.....

MANUFACTURING

4. % of population employed in manufacturing, 1950.....
Rank among Ohio's 21 economic areas.....
5. No. of establishments employing 100 or more, 1947.....
6. Value of manufacturing, 1947.....mil. dol.
7. Value of manufacturing per mfg. employee, 1947.....dol.
Rank among Ohio's 21 economic areas.....
8. Average weekly earnings per mfg. worker, 1950.....dol.
Rank among Ohio's 21 economic areas.....

AGRICULTURE

9. Cash income from agriculture, 1949.....mil. dol.
10. Cash income from agriculture per acre, 1949.....dol.
Rank among Ohio's 8 non-metropolitan areas.....

TRADE

11. Retail sales, 1948.....mil. dol.
12. Retail sales per capita, 1948.....dol.
Rank among Ohio's 21 economic areas.....

FINANCE

13. Demand deposits at commercial banks, Dec. 31, 1950....mil. dol.
Rank among Ohio's 21 economic areas.....
14. Savings accounts (commercial banks and savings & loan assoc.)
Dec. 31, 1950.....mil. dol.
15. Savings accounts per capita, Dec. 31, 1950.....mil. dol.
Rank among Ohio's 21 economic areas.....

Sources of Items Shown in Table I. Specific sources of items shown in Table I, together with explanations of certain items, are given below: :

Item 1 and all per capita items: Census of Population, 1950

Item 2: Webster's Geographical Dictionary

Items 4 and 8: Division of Research and Statistics, Ohio Bureau of Unemployment Compensation, 1950

Table I

ECONOMIC FACTS FOR SIX ECONOMIC AREAS OF SOUTHWESTERN OHIO

METROPOLITAN				NON-METROPOLITAN		OHIO	U.S.
Area C DAYTON (3 counties)	Area M SPRINGFIELD (1 county)	Area D HAMILTON- MIDDLETOWN (1 county)	Area K CINCINNATI (1 county)	Area 3 PIQUA, etc. (11 counties)	Area 7 CHILLICOTHE etc. (5 counties)		
457	112	147	724	354	168	7,947	150,697
881	402	471	414	4,938	2,778	41,122	2,977,128
519	278	313	1,749	72	60	193	51
6th	11th	9th	2nd	18th	20th	.....	.....
19.4	16.0	20.1	17.5	6.5	4.1	15.0	9.9
6th	10th	4th	8th	19th	21st	.....	.....
87	32	45	276	51	14	1,946	24,542
496.4	113.2	137.4	732.0	126.1	27.8	6,359	74,426
5,206	5,824	5,080	5,783	5,439	4,025	5,323	5,206
9th	2nd	10th	3rd	8th	20th	.....	.....
75.28	65.20	75.87	67.72	59.56	56.98	69.56	.....
3rd	12th	1st	9th	18th	20th	.....	.....
28.7	14.1	13.5	8.7	163.1	47.9	954.4	28,127
61.55	59.54	49.86	65.11	54.25	31.00	43.52	24.64
.....	.....	.....	.....	2nd	6th	.....	.....
446.6	105.6	132.8	756.0	295.2	106.8	7,373	130,520
977	945	902	1,044	834	638	928	866
6th	8th	11th	2nd	15th	19th	.....	.....
203.9	33.5	66.7	631.6	140.8	50.6	4,234	90,999
5th	20th	16th	2nd	10th	17th	.....	.....
182.6	62.7	74.9	538.6	123.6	42.1	4,539	68,970
399	562	509	744	349	251	571	458
17th	6th	10th	2nd	18th	20th	.....	.....

Items 5, 6, and 7: Census of Manufactures, 1947; "value of manufacturing" refers to value added to product (i.e. excluding value of raw materials)

Items 9 and 10: Ohio State University and Ohio Agricultural Experiment Station; refers to gross cash income excluding government payments.

Items 11 and 12: Census of Business, 1948

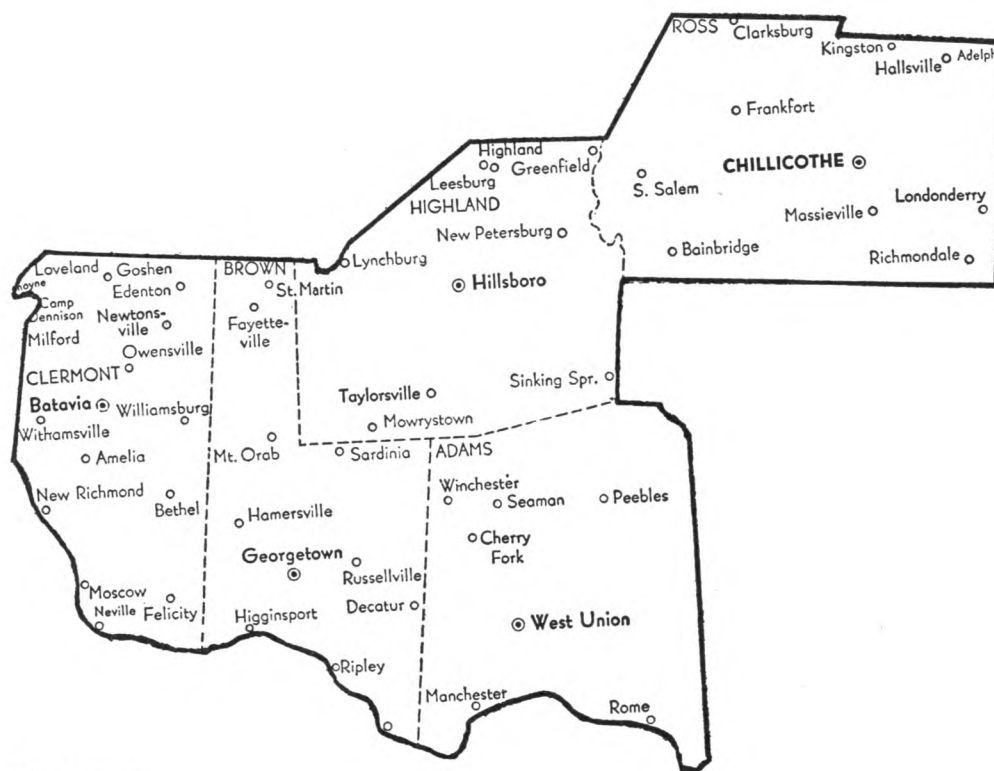
Item 13: Federal Reserve System; refers to demand deposits of individuals, partnerships and corporations.

Items 14 and 15: Ohio Department of Commerce, Federal Home Loan Bank of Cincinnati, and Federal Reserve System; refers to time deposits at commercial banks *plus* deposits at Ohio's few mutual savings banks, *plus* value of withdrawable shares of savings and loan associations (both state and federal-chartered)

Area 7

CHILLICOTHE-HILLSBORO Area

(Five Counties)



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The largest cities or towns in Area 7 are Chillicothe (Ross county) with about 20,000 according to the 1950 Census, and Hillsboro and Greenfield (both in Highland county) with about 5,000 each. The three counties bordering the river — Adams, Brown and Clermont — are completely rural or suburban, with no village as large as 3,000. Clermont county, adjoining Cincinnati on the east, has suburban characteristics.

Basic economic data of this area, averaged for the entire five counties, are shown in Table I. It should be realized, however, that differences within the area are more marked than in many of the state economic areas treated in this series. For example, Chillicothe (Ohio's first capital) has a foundation of industrial development greater than that of other parts of the area; furthermore, the types of agriculture found in Ross and Highland counties differ in important respects from those of Adams, Brown and Clermont counties.

Chillicothe's Industries

The leading industry in Chillicothe is paper making. One of the nation's largest and most diversified paper

manufacturing concerns has its home plant in the city; another paper company produces at Chillicothe only.

Other products made in large quantities are shoes and aluminum kitchen utensils.

Although manufacturing in Chillicothe is outstanding within Area 7, only about 7% of Ross county population is employed in manufacturing (1950)—a ratio which is lower than the Ohio or national average. A substantial number of residents, however, commute to work in Columbus and Dayton.

The value of manufacturing in the county was about \$16 million, according to the 1947 Census of population, or about \$4,800 per worker employed in manufacturing.

Retail sales in Ross county were the equivalent of \$706 per capita, according to the Census of 1948,—a figure somewhat below the national average.

Manufacturing in Four Counties

Outside of Chillicothe, Area 7 has relatively few manufacturing establishments of appreciable size. Shoes are produced in Greenfield (Highland county) and

in Georgetown and Ripley (Brown county.) Men's apparel is manufactured in Hillsboro (Highland) and furniture is produced in Williamsburg (Clermont county).

The four counties together (Highland, Adams, Brown and Clermont) account for about \$11 million in value of manufacturing according to the 1947 Census of Manufactures. Only 2.7% of the population of the four counties was employed in manufacturing in 1950.

Agriculture in Ross and Highland Counties

Substantial parts of Ross and Highland counties are in the level corn-belt area, while the remainder is in the hilly and wooded (non-glaciated) country characteristic of southern Ohio. Hogs are the leading income producer in both counties, with sale of dairy products in second place, although substantially below income from hogs.

In total cash income from farming, Highland county scored \$38.40 per acre of farmland, while Ross county farmers received \$30.28 per acre (1949 data). In both counties, the return per acre was

above the United States average, but below the Ohio average.

Agriculture in Adams-Brown-Clermont

The three counties of Area 7 which border the Ohio River are entirely within the hilly woodland area of the state. Tobacco is the leading income producer in Adams and Brown county, and is also of importance in Clermont county. Dairy products, hogs and poultry are important income producers in all three counties. Cash income per acre, according to the 1949 returns, varied from \$22.64 in Adams county to \$31.93 in Clermont.

Finance in Area 7

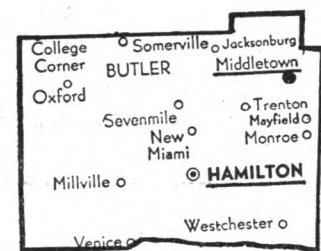
Commercial banks located in the five counties of Area 7 had demand deposits at the end of last year amounting to \$51 million, of which \$16 million was in Ross county.

Savings account (in the form of time deposits at commercial banks *plus* withdrawable shares of savings and loan associations) amounted to \$42 million or the equivalent of \$251 per capita. Ross county alone accounted for about \$15 million of the savings accounts in the area, or the equivalent of \$282 per capita.

Area D

HAMILTON-MIDDLETOWN

(Butler County)



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The population of Hamilton according to the 1950 Census is about 58,000; that of Middletown is 34,000. In the northwest part of Butler county is Oxford, with about 7,000.

The density of population in Area D is 313 per square mile, or 9th among the state's 21 economic areas.

A Steel and Paper Center

Of the total population of Butler county, about 20% is employed in manufacturing, ranking the area as 4th among Ohio's 21 economic areas.

In this respect the Hamilton-Middletown area is ex-

ceeded only by the Youngstown, Lorain-Elyria and Canton areas.

The area is primarily a paper and steel center, although other industries are also significant.

There are 45 large manufacturing establishments in Area D, with 100 or more employees each, according to the Census of 1947. These include 13 large paper-manufacturing establishments, and 4 plants classified by the Census as primary metal industries, including in Middletown the home plants of one of the nation's prominent steel concerns. There are also 9 large plants in the machinery group and the same number in the fabricated metal-products group of industries.

Products manufactured in the area, besides steel and paper, include auto stampings, aircraft, diesel engines, stoves, safes, wool blankets and paper-mill felts.

The value of manufacturing in the area was \$137 million according to the 1947 Census of Manufactures. Value of manufacturing per employed worker was \$5,080, or 10th among the state's 21 economic areas.

The Hamilton-Middletown area led all economic areas of the state in respect to average weekly earnings of manufacturing workers in 1950, with an area-wide average of \$75.87.

Trade Sales by retail stores in Area D totalled \$133 million in 1948, according to the Census of Business. On a per-capita basis this amounted to \$902, or 11th of the state's 21 economic areas.

Finance Demand deposits at commercial banks located in Area D amounted to \$67 million at the end of last year, ranking 16th of Ohio's 21 areas.

Savings accounts (in the form of time deposits at commercial banks *plus* withdrawable shares of savings and loan associations) totalled \$75 million on the same date. This was the equivalent of \$509 per capita, marking the area as 10th of the state's 21 economic areas.

Area K

CINCINNATI

(Hamilton County)



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The city of Cincinnati, according to the 1950 Census, has a population of about 501,000, or the second largest city of the state and 18th largest in the nation. The density of population of the Hamilton county economic area is 1,749, or second among Ohio's 21 economic areas.⁽⁶⁾ In this respect, as in many others, the Cincinnati area is exceeded only by the Cleveland area.

The economic life of Cincinnati has always been closely associated with its position as a leading river port on the Ohio. The river affords transportation of coal, limestone and other incoming industrial materials as well as shipment of finished products, and provision of water for direct industrial uses.

Manufacturing Of the area's total population, 18% was employed in manufacturing in 1950, or 8th among the state's 21 economic areas. (As noted below, an unusually high proportion of the area's population is engaged in trade.)

The area has 276 large manufacturing establishments, employing 100 or more workers each, according to the Census of 1947. The greatest number of large plants is found in the heavy-industry group;

thus, there are 58 in machinery, 29 in fabricated metal products, 14 in primary metal industries and 7 in transportation equipment.

The machine-tool industry in Cincinnati is especially strategic. In respect to transportation equipment, important products are auto assembly and parts, truck and bus bodies, aircraft engines and parts.

The chemical industry is also of outstanding importance in Cincinnati, including large-scale production of soap and fertilizers among other products.

Balance of Hard and Soft Goods

In spite of a predominance of the heavier industries in Cincinnati, the balance between production of hard-goods lines and soft-goods lines is closer than in several other large cities of the state, including Cleveland. Thus, for example, the area has 33 large plants producing food products and related items, including meats, canned goods, animal feeds, crackers, soft drinks and beer. (A larger number of workers are employed in the food-producing group of industries in the Cincinnati area than in the Cleveland area.)

Printing and publishing accounts for 25 of the large establishments in the area. There are 22 large plants manufacturing apparel and related products, especially shirts, overalls and shoes. The large establishments also include 16 in the field of paper and paper products; and 9 in furniture and fixtures.

The value of manufacturing in Area K was \$732 million according to the 1947 Census of Manufactures. The value of manufacturing per employed worker was \$5,783, or 3rd among Ohio's 21 economic areas. In the latter respect the Cincinnati area is exceeded only by the Ironton area and the Springfield area. Contributing to its high rank in this respect is probably the fact that the chemical industry is strong in the Cincinnati area, and this industry characteristically produces a large value of product in relation to number of employees.

(6) In addition to Hamilton county, Ohio, two Kentucky counties (Campbell and Kenton) are part of the broad Census definition of the Cincinnati metropolitan area. However, in the state economic area classification the Census Bureau lists Hamilton county, Ohio, as one of Ohio's state economic areas, or Area K. The latter practice is followed in this study; that is, Hamilton county, Ohio, is considered as a separate area for purposes of comparison with Ohio's other economic areas.

Average weekly earnings of manufacturing workers in 1950 in the Cincinnati area were \$67.72, or 9th among Ohio's 21 economic areas.

Trade The Cincinnati area ranks 2nd highest of Ohio's 21 economic areas in retail sales per capita, according to the 1948 Census of Business. (It is exceeded only by the Toledo area.) Total retail sales on 1948 were \$756 million, or \$1,044 per inhabitant of the area. A considerable proportion of the trade is derived from serving a trading area extending into adjoining counties of three states.

In connection with the strong trading position, it may be noted that a larger proportion of the

area's population (nearly 9%) is employed in trade occupations than the corresponding proportion in any of the other 20 areas of the state.

Finance The Cincinnati area also ranks second in respect to demand deposits at commercial banks as of December 31, 1950, with a total of \$632 million.

Savings accounts (in the form of time deposits at commercial banks *plus* withdrawable shares of savings and loan associations) amounted on the same date to \$539 million. This was the equivalent of \$744 per capita,—once again ranking 2nd among Ohio's 21 economic areas.

Table II LIST OF OHIO'S 21 ECONOMIC AREAS

Each area designated by a letter is a metropolitan area, while the numbered areas are "non-metropolitan".

NORTHWESTERN OHIO

(See October issue)

1. Bryan-to-Fremont area

Counties included: Defiance, Fulton, Henry, Ottawa, Paulding, Putnam, Sandusky, Van Wert, Williams, Wood.

2. Lima-Marion area

Counties included: Allen, Auglaize, Crawford, Hancock, Hardin, Logan, Marion, Mercer, Seneca, Union, Wyandot.

A. Toledo area

Lucas county

SOUTHWESTERN OHIO

(Current issue)

3. Piqua-Delaware area (p. 16)

Counties included: Champaign, Clinton, Darke, Delaware, Fayette, Madison, Miami, Pickaway, Preble, Shelby, Warren.

7. Chillicothe-Hillsboro area (p. 20)

Counties included: Adams, Brown, Clermont, Highland, Ross.

C. Dayton area (p. 14)

Montgomery and Greene counties

D. Hamilton-Middletown area (p. 21)

Butler county

K. Cincinnati area (p. 22)

Hamilton county

M. Springfield area (p. 15)

Clark county

NORTHEASTERN OHIO

4. Sandusky-Mansfield area

Counties included: Ashland, Erie, Holmes, Huron, Medina, Richland, Wayne.

5. Ashtabula-East Liverpool area

Counties included: Ashtabula, Columbiana, Geauga, Portage.

E. Cleveland area

Cuyahoga and Lake counties

F. Akron area

Summit county

G. Canton area

Stark county

H. Youngstown area

Trumbull and Mahoning counties

N. Lorain-Elyria area

Lorain county

CENTRAL AND SOUTHEASTERN OHIO

6. Zanesville-Newark area

Counties included: Carroll, Coshocton, Fairfield, Guernsey, Harrison, Knox, Licking, Morrow, Muskingum, Perry, Tuscarawas.

8. Portsmouth-Marietta area

Counties included: Athens, Gallia, Hocking, Jackson, Meigs, Monroe, Morgan, Noble, Pike, Scioto, Vinton, Washington.

B. Columbus area

Franklin county

J. Steubenville area

Belmont and Jefferson counties

L. Ironton area

Lawrence county

APPENDIX

General Sources. Grouping of counties into economic areas is drawn from *State Economic Areas*, by Donald J. Bogue, Bureau of the Census, U. S. Department of Commerce, 1951. (Exceptions in the case of two areas are explained below.)

Data on individual counties are from latest available official sources. Combination of county data to compute area totals and ranks was done by this Bank.

Characterization of areas in the text has been checked in each case by local consultants, whose advice is gratefully acknowledged.

Modification of Census Areas. The Census volume entitled *State Economic Areas*, cited above, includes Clark county (containing the city of Springfield) within non-metropolitan Area 3, along with 11 other counties. The same volume likewise includes Lorain county (containing the cities of Lorain and Elyria) within non-metropolitan Area 4, along with 7 other counties.

The results of the 1950 Census of Population, however, were not completely available at the time the Census delineation of state economic areas was made. As a result of the 1950 Census of Population it appears that Clark county and Lorain county, respectively, now meet the tests for determining metropolitan state economic areas. They are so treated in this series of articles, and non-metropolitan Areas 3 and 4 are correspondingly reduced.

The designations "M" and "N" for metropolitan Clark and Lorain counties, respectively, have been used here, pending publication by the Census Bureau of revised classifications of state economic areas.

Names of Economic Areas. In the case of metropolitan areas, the names used in this series of articles are the standard names used in *State Economic Area* and approved by the Federal Interagency Committee. (e.g. "Cleveland" for Cuyahoga and Lake counties.)

In the case of non-metropolitan areas, however, standard names have not yet been designated. (*State Economic Areas* refers to each non-metropolitan area merely by its number and by a listing of all counties included.) To facilitate recognition of the areas described in these articles, provisional names have been devised; they are based in most cases on the two largest cities contained within the particular area. (An exception is Area 1 where the names of the two largest cities would give a mistaken impression of the geographical location of the area; hence the use of "Bryan-to-Fremont" to designate Area 1.) Inclusion of detail maps accompanying the text should make clear the entire compass of the respective areas.

Official names of the non-metropolitan areas are now being prepared by the Census Bureau, with the aid of local consultants.