

MONTHLY

# Business Review

CONTENTS OF SUPPLEMENT	
Areas leading in:	
Population . . . . .	10
Manufacturing . . . . .	12
Agricultural Income . . . . .	16
Retail Sales . . . . .	17
Finance . . . . .	18
Conclusions . . . . .	20

FINANCE • INDUSTRY • AGRICULTURE • TRADE

FOURTH FEDERAL RESERVE DISTRICT

Vol. 34—No. 5 Supplement

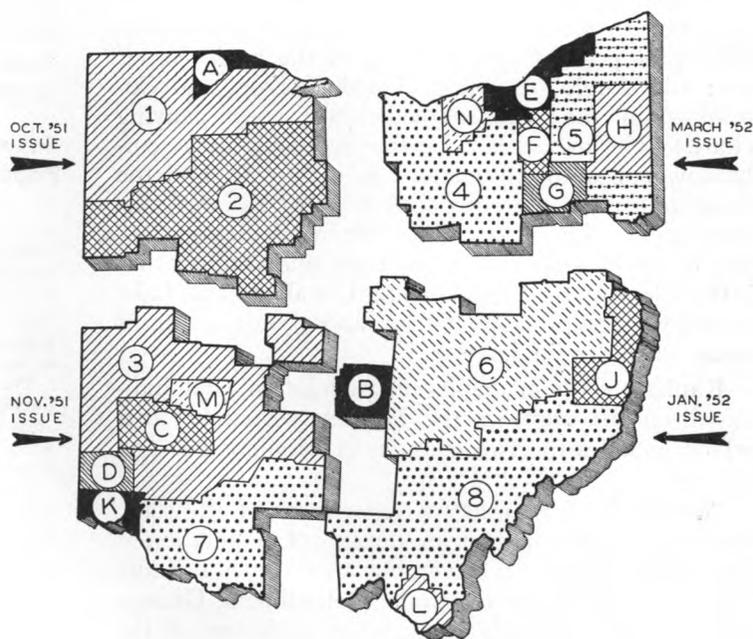
Federal Reserve Bank of Cleveland

Cleveland 1, Ohio

## Ohio Cross Sections (V)

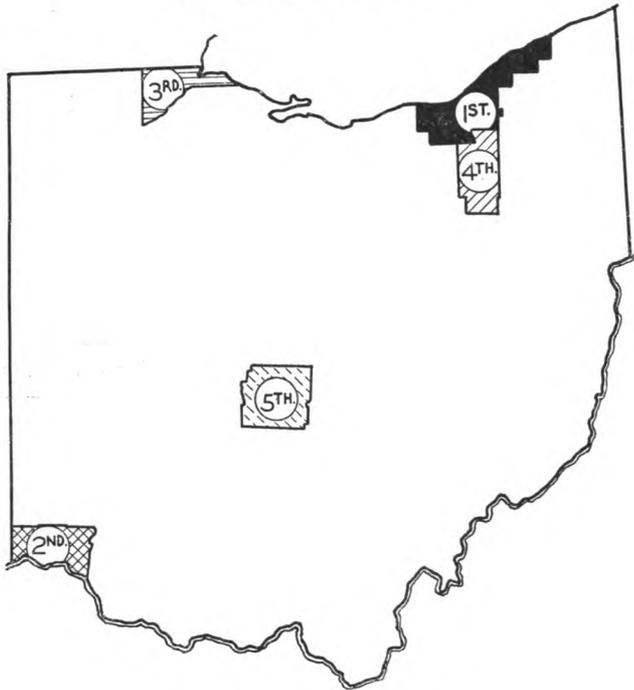
### Summary for the State

... 21 economic areas of Ohio, located in four sections of the state, have been analyzed in previous issues; this article summarizes the findings. For names of the areas and counties included, see Table III (insert in this issue) or March 1952 issue.



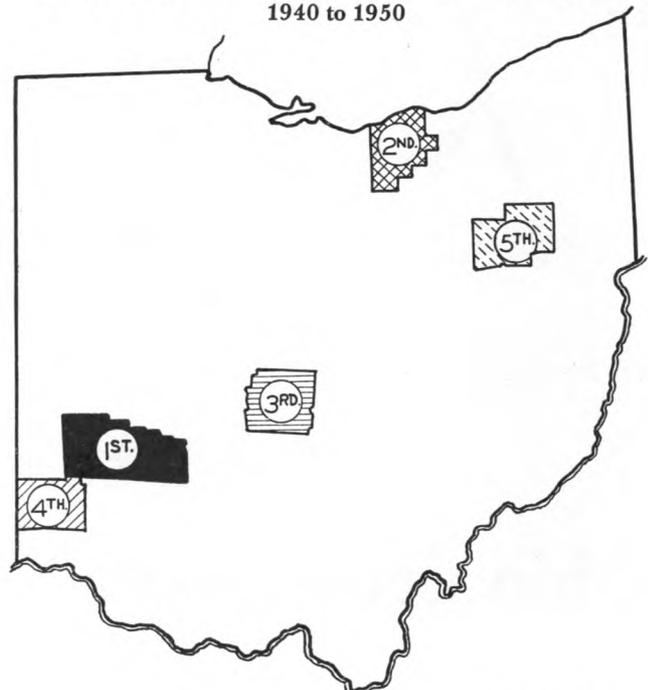
## Areas Leading in POPULATION

**DENSITY OF POPULATION—1950**  
Five Highest Ranking Areas



Area	Density
Cleveland .....	2,130 per square mile
Cincinnati .....	1,749 per square mile
Toledo .....	1,153 per square mile
Akron .....	993 per square mile
Columbus .....	936 per square mile

**GROWTH IN DENSITY OF POPULATION**  
Five Highest Ranking Areas in Rate of Growth from  
1940 to 1950



Area	1940-50 Pop. Increase
Dayton .....	38%
Lorain-Elyria .....	32%
Columbus .....	30%
Hamilton-Middletown .....	22%
Canton .....	22%

Of the 21 economic areas in Ohio previously described in this series, the five areas which lead in density of population according to the latest census are: Cleveland, Cincinnati, Toledo, Akron, and Columbus, in the order named. (See accompanying chart.) The areas refer to state economic areas embracing one or more counties in each case, and the measure used is that of population per square mile. Only one of the five areas leading in population density happens to include more than one county; that is the Cleveland area comprising Cuyahoga and Lake counties. (See previous articles, and also definition of areas as shown in insert.)

Ranking sixth in density of population (not indicated on the map) is the Dayton economic area which includes the two counties of Montgomery and Greene.

Among the 8 non-metropolitan areas of the state, the one ranking highest in density of population is the Ashtabula-to-East Liverpool area which includes the four counties of Ashtabula, Columbiana, Geauga and Portage, and which ranks as 13th out of the state's 21 economic areas with respect to density of

population. Other areas range downward to the least densely populated which is the Portsmouth-Marietta area, comprising 12 counties in the southeast portion of the state.

**Growth of Population** The percentage change in density of population between the Census of 1940 and that of 1950 gives a measure of

*Editor's Note:* This article is the final in a series of five which analyze Ohio's economic activity in terms of a concept of "state economic areas". Each of the first four articles, appearing in previous issues as listed on the cover page of this issue, dealt with a group of economic areas located in one of the four general sections of the state.

The purposes of this final article are: (a) to summarize the previous findings for the state as a whole, and (b) to show for the various areas some measures of growth over a decade period—a consideration which was omitted from the previous articles because of space limitations.

Boundaries of the economic areas (with exceptions noted in previous articles) are as shown in *State Economic Areas*, by Donald J. Bogue, Bureau of the Census, U. S. Department of Commerce, 1951.

Up to the present, the Bureau of the Census has designated the "non-metropolitan" areas by numbers only, pending the final determination of official names. Provisional and unofficial names of the non-metropolitan areas have been used for convenience throughout these five articles.

growth in the ten-year period. (See the second of the accompanying charts.) The five economic areas which lead in this measure of population growth are in order: Dayton, Lorain-Elyria, Columbus, Hamilton-Middletown, and Canton. It will be noticed that, with the exception of Columbus, the list of areas leading in population *growth* is entirely different from the list of those leading in population *density* today. Stated otherwise, it means that Columbus is the only one of the five most densely populated areas which has shown an outstandingly high rate of growth over the past decade.<sup>(1)</sup>

All but two of the 21 economic areas of the state registered some gain in population (and hence in population density) between 1941 and 1950. The two areas which declined in population are the Portsmouth-Marietta area (12 counties) and the Steubenville area (2 counties) in each of which the population declined by 4% over the ten-year interval.

#### Other Measures of Population

The above findings, together with the accompanying charts, and Table II, page 14, summarize the population information on an economic area basis, corresponding in coverage with the related information on manufacturing, agriculture, trade and finance

developed elsewhere in this and the preceding articles of the series.

There are, however, other ways in which the leading population centers of the state may be identified, as of 1950. While Cleveland and Cincinnati retain first and second place respectively in any of these current measures, the ranking below second place differs according to the measure used. (See Table I.)

The absolute populations of Ohio's 21 economic areas, for example, may be ranked without reference to the square miles of area included. On such a basis, the Columbus and Dayton areas score third and fourth, respectively, while Toledo is not included within the first seven economic areas.<sup>(2)</sup> (See column 1 of Table I.) Ranking fifth in absolute population is the Zanesville-Newark area comprising 11 counties; ranking sixth is the Lima-Marion area also embracing 11 counties; ranking seventh is the Youngstown area, which includes the two Ohio counties of Mahoning and Trumbull.

Still another way of ranking population centers is the easily understood and conventional practice of listing cities in order of population contained within the corporate city limits. (See column 3 of Table I.) On this basis, the seven leading cities of the state are: Cleveland, Cincinnati, Columbus, Toledo,

**TABLE I**  
**CURRENT RANKING OF OHIO'S LEADING POPULATION CENTERS**  
**According to Four Alternative Measures**  
**(All Based on 1950 Census of Population)**

	(1)	(2)	(3)	(4)
RANK	Population of state economic area	Population PER SQ. MI. of state economic area (As charted)	Population of corporate city	Population of "urbanized area"
1st	Cleveland.....(1,466,000)	Cleveland.....(2,130)	Cleveland.....(915,000)	Cleveland.....(1,384,000)
2nd	Cincinnati.....(724,000)	Cincinnati.....(1,749)	Cincinnati.....(504,000)	Cincinnati.....(669,000)
3rd	Columbus.....(503,000)	Toledo.....(1,153)	Columbus.....(376,000)	Columbus.....(438,000)
4th	Dayton.....(457,333)	Akron.....(993)	Toledo.....(304,000)	Akron.....(367,000)
5th	Zanesville-Newark area.....(456,770)	Columbus.....(936)	Akron.....(275,000)	Toledo.....(364,000)
6th	Lima-Marion area....(434,000)	Dayton.....(519)	Dayton.....(244,000)	Dayton.....(347,000)
7th	Youngstown.....(417,000)	Canton.....(494)	Youngstown....(168,000)	Youngstown....(298,000)

Note: Population figures of columns (1), (3), and (4) are rounded to nearest thousand except in cases where detail is necessary for ranking.

(1) For statistical reasons it may, perhaps, be expected that smaller centers will show larger percentage gains in a given period. In absolute numbers, or in numbers of people per square mile, however, the Cleveland area's increase of population outstripped all others.

(2) The reason why population per square mile rather than absolute

population has been stressed in this series is as follows: The designation of state economic areas by the Bureau of the Census involves a consolidation of a number of non-metropolitan or rural counties in order to achieve population totals more nearly comparable with the densely populated metropolitan areas. Hence the ranking of state economic areas in terms of absolute population contains a large factor of artificiality.

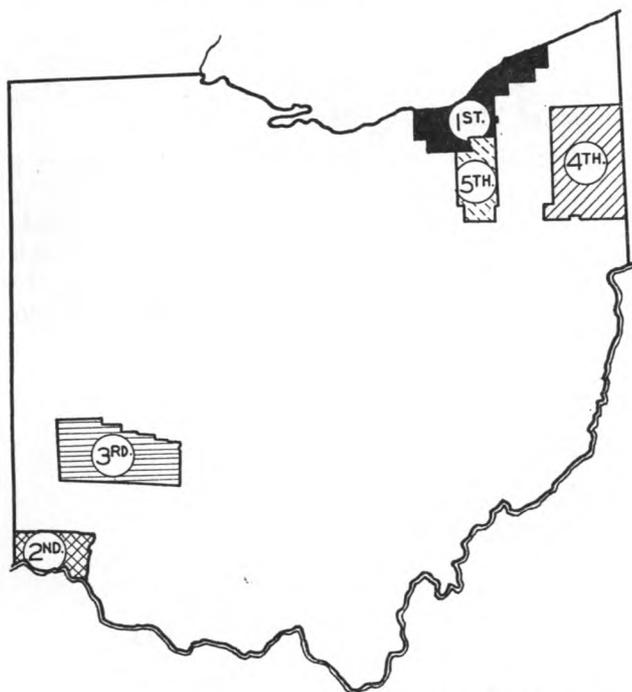
Akron, Dayton and Youngstown.

Finally, there is a relatively new census measure of population termed "urbanized areas". These areas cut across county lines, and include the densely populated fringes of leading cities.<sup>(3)</sup> The seven leading "urbanized areas" of Ohio, as shown in column 4 of Table I, are: Cleveland, Cincinnati, Columbus,

Akron, Toledo, Dayton and Youngstown. It will be seen that the order is the same as that of the corporate cities except that Akron and Toledo take fourth and fifth places respectively, thus reversing their order in the previous case. Akron's high rank in this measure is based in part on the large adjoining populations of Cuyahoga Falls and Barberton.

## Areas Leading in MANUFACTURING

**NUMBER OF PRODUCTION WORKERS**  
Five Highest Ranking Areas, 1947



Area	No. of Production Workers
Cleveland	219,000
Cincinnati	101,000
Dayton	79,000
Youngstown	77,000
Akron	75,000

**GROWTH IN NUMBER OF PRODUCTION WORKERS IN MANUFACTURING**

Five Highest Ranking Areas in Rate of Growth from 1939 to 1947



Area	1939-47 Increase in Production Workers
Ironton	123%
Dayton	98%
Ashtabula-E. Liverpool	90%
Akron	88%
Toledo	86%

Among the 21 economic areas of the state, the five areas which lead in number of production workers employed in manufacturing are: Cleveland, Cincinnati, Dayton, Youngstown and Akron. (See accompanying chart and Table II.) This ranking is based on the 1947 Census of Manufactures, the latest available.<sup>(4)</sup> The Dayton, Youngstown and Akron figures are quite close together.

Sixth, seventh and eighth places in respect to

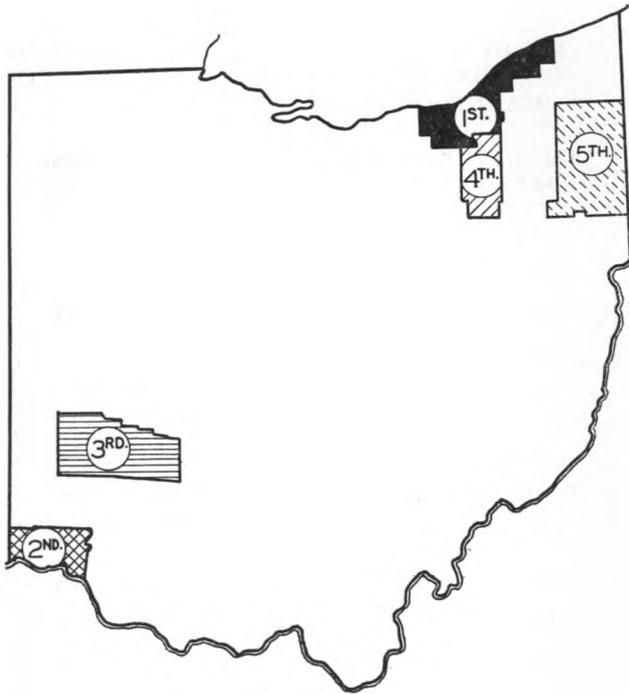
number of production workers in 1947 are held by Toledo, Canton, and Columbus areas, respectively. (This is not shown on the chart. See Table II.)

**Growth in Production Workers** The growth in number of production workers employed in manufacturing in the various areas, as measured by percentage change from the Census of

(3) The usefulness of the "urbanized area" type of measure is limited by the fact that it is not available on a comparable basis for years prior to 1950, and also by the fact that it has no applicability to the non-metropolitan areas under consideration here.

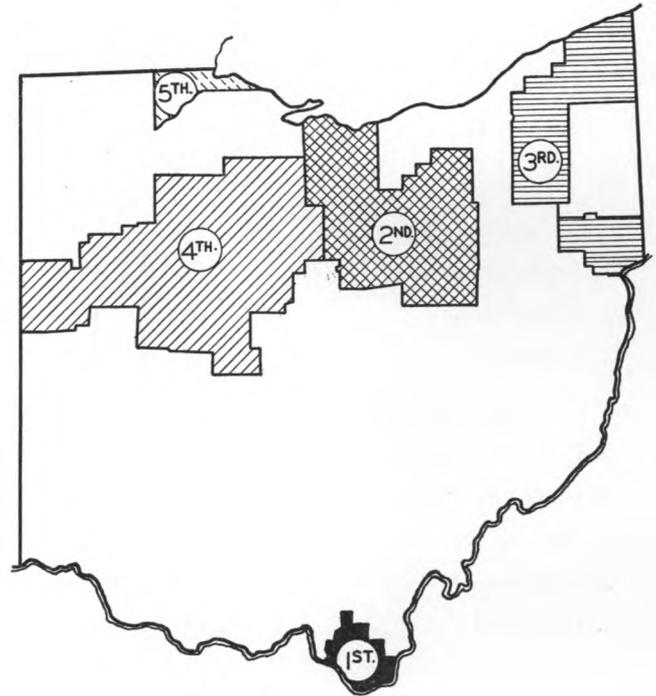
(4) Previous articles of this series showed an item called "percentage of population employed in manufacturing, 1950", computed from state sources. Data for the latter, however, are unavailable on a comparable basis for a ten-year-ago period; hence that measure is not used in this summary article which includes measures of growth.

**VALUE OF MANUFACTURING**  
Five Highest Ranking Areas, 1947



Area	Value Added
Cleveland .....	\$1,546,000,000
Cincinnati .....	732,000,000
Dayton .....	496,000,000
Akron .....	460,000,000
Youngstown .....	446,000,000

**GROWTH IN VALUE OF MANUFACTURING**  
Five Highest Ranking Areas in Rate of Growth  
from 1939 to 1947



Area	1939-47 Growth in Value Added
Ironton .....	550%
Sandusky-Mansfield .....	300%
Ashtabula-E. Liverpool .....	281%
Lima-Marion .....	276%
Toledo .....	251%

Manufactures of 1939 to that of 1947, is largest for the following areas: Ironton, Dayton, Ashtabula-to-East Liverpool, Akron and Toledo. (See chart.) Percentage gains among these leading five range from 123% for Ironton to 86% for Toledo. The outstanding gain for Ironton is associated with development of the chemical industry in that area.

It may be noted that Dayton and Akron are the only two areas of the state included *both* among the five currently leading and the five scoring the largest percentage increases in number of production workers.

**Value of Manufacturing**

The five leading areas with respect to the value of manufacturing, according to the Census of 1947, are: Cleveland, Cincinnati, Dayton, Akron and Youngstown. The value of manufacturing refers to the Census concept "value added by manufacture" which

excludes the value of raw materials entering into the respective products.

When attention is shifted to the *growth* in the value of manufacturing over a period of nearly a decade, it appears that not a single area among those now leading is included in the list of five areas showing the largest growth. Thus, the five highest ranking areas with respect to percentage gain in value of manufacturing from 1939 to 1947 are: Ironton, Sandusky-Mansfield (7 counties), Ashtabula-to-East Liverpool (4 counties), Lima-Marion (11 counties), and Toledo.

Percentage gains range from 550% for Ironton to 251% for Toledo. The large gain for Ironton, as mentioned previously in connection with number of production workers, is associated with the chemical industry. If allowance were made for the loss in the value of the dollar as measured by the wholesale price index, these percentage gains would be reduced to 253% for Ironton (first place) and to 90% for Toledo (fifth place).

**TABLE II**  
**SUMMARY TABLE OF BASIC ECONOMIC FACTS FOR OHIO'S 21 ECONOMIC AREAS**

AREA	(1)			(2)			(3)			(4)			(5)			(6)			(7)		
	DENSITY OF POPULATION			NO. OF PRODUCTION WORKERS IN MANUFACTURING			VALUE OF MANUFACTURING			AGRICULTURAL INCOME PER ACRE*			RETAIL SALES PER CAPITA			DEMAND DEPOSITS (YEAR END)			PER CAPITA "SAVINGS ACCOUNTS" (YEAR END)		
	Per Sq. Mile '50	Rank 1950	% Gain '40-'50	Thous. 1947	Rank 1947	% Gain '39-'47	Mil. \$ 1947	Rank 1947	% Gain '39-'47	\$ 1950	Rank 1950	% Gain '41-'50	\$ 1948	Rank 1948	% Gain '39-'48	Mil. \$ 1950	Rank 1950	% Gain '41-'50	\$ 1950	Rank 1950	% Gain '41-'50
<b>NORTHWEST</b>																					
1. Bryan-to-Fremont.....	71	19	8	22	15	78	143.7	12	236	52.58	1	97	835	14	204	91.3	13	249	502	11	185
2. Lima-Marion.....	88	16	10	42	9	82	257.9	9	276	50.20	3	107	933	9	202	169.2	6	224	582	5	142
A. Toledo.....	1,153	3	15	57	6	86	390.0	6	251	.....	..	....	1,120	1	168	260.1	4	134	521	9	141
<b>SOUTHWEST</b>																					
3. Piqua-Delaware.....	72	18	12	20	16	63	126.1	16	221	51.29	2	115	834	15	204	140.8	10	220	349	18	98
7. Chillicothe-Hillsboro.....	60	20	7	6	20	18	27.8	21	119	29.53	6	139	638	19	192	50.6	17	222	251	20	62
C. Dayton.....	519	6	38	79	3	98	496.4	3	201	.....	..	....	977	6	151	203.9	5	186	399	17	58
D. Hamilton-Middletown.....	313	9	22	23	14	55	137.4	13	198	.....	..	....	902	11	172	66.7	16	216	509	10	79
K. Cincinnati.....	1,749	2	16	101	2	51	732.2	2	191	.....	..	....	1,044	2	136	631.6	2	126	744	2	56
M. Springfield.....	278	11	17	16	18	52	113.2	17	136	.....	..	....	945	8	170	33.5	20	155	562	6	89
<b>NORTHEAST</b>																					
4. Sandusky-Mansfield.....	109	14	19	38	11	74	257.5	10	300	44.30	4	110	906	10	171	129.9	11	204	620	3	96
5. Ashtabula-East Liverpool....	125	13	19	24	12	90	136.9	14	281	41.07	5	105	807	16	155	81.2	14	192	482	14	105
E. Cleveland.....	2,130	1	16	219	1	69	1,546.1	1	206	.....	..	....	1,040	3	152	1,345.8	1	149	864	1	117
F. Akron.....	993	4	21	75	5	88	460.3	4	177	.....	..	....	983	5	154	166.5	7	219	454	16	163
G. Canton.....	494	7	22	48	7	65	280.2	7	160	.....	..	....	946	7	156	112.2	12	177	617	4	98
H. Youngstown.....	401	8	13	77	4	48	445.8	5	166	.....	..	....	884	12	154	155.3	8	187	496	12	108
N. Lorain-Elyria.....	299	10	32	24	13	66	131.6	15	132	.....	..	....	876	13	166	36.7	19	217	551	7	138
<b>CENTRAL AND SOUTHEAST</b>																					
6. Zanesville-Newark.....	82	17	7	40	10	41	212.1	11	196	27.97	7	108	753	17	181	141.0	9	207	458	15	117
8. Portsmouth-Marietta.....	59	21	-4	18	17	46	80.2	18	207	16.83	8	126	622	20	195	73.4	15	199	264	19	98
B. Columbus.....	936	5	30	42	8	67	277.8	8	209	.....	..	....	1,006	4	126	295.1	3	164	491	13	70
J. Steubenville.....	195	12	-4	13	19	5	72.7	19	123	.....	..	....	712	18	159	44.2	18	184	537	8	123
L. Ironton.....	108	15	5	4	21	123	30.0	21	550	.....	..	....	576	21	230	5.3	21	135	201	21	120
OHIO TOTAL.....	193	..	15	988	..	66	6,359	..	200	41.10	..	108	928	..	163	4,234	..	164	571	..	103
U. S. TOTAL.....	51	..	15	11,916	..	53	74,426	..	204	25.39	..	141	866	..	171	90,999	..	141	458	..	96

\* Ranked for 8 non-metropolitan areas, only.

Sources: (1) Census of Population, 1950 and 1940.

(2) Census of Manufactures, 1947 and 1939.

(3) Census of Manufactures 1947 and 1939; "value of manufacturing" refers to value added to product (i.e. excluding value of raw materials).

(4) Ohio State University and Ohio Agricultural Experiment Station; refers to gross cash income excluding government payments.

(5) Census of Business, 1948 and 1939.

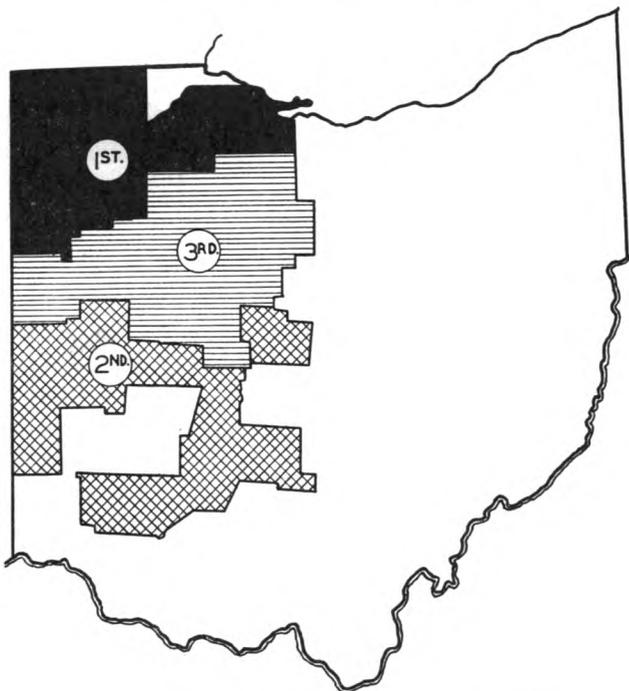
(6) Ohio Department of Commerce, Federal Home Loan Bank of Cincinnati, and Federal Reserve System; refers to time deposits of individuals, partnerships and corporations at commercial banks plus deposits at Ohio's few mutual savings banks, plus deposits and value of withdrawable shares of savings and loan associations (both state and federal-chartered).

## Areas Leading in AGRICULTURAL INCOME

In comparing the areas of the state with respect to agricultural income, only the 8 non-metropolitan areas are considered here, in spite of the fact that important agricultural enterprise is carried on also in many of the counties included within the 13 metropolitan areas of the state. Among the 8 non-metropolitan areas, the three which led in agricultural income per acre in 1950 were: Bryan-to-Fremont area, Piqua-Delaware, and Lima-Marion. (See chart.) The measure refers to gross cash income from sale of agricultural products per acre of farmland, with government subsidy payments excluded.

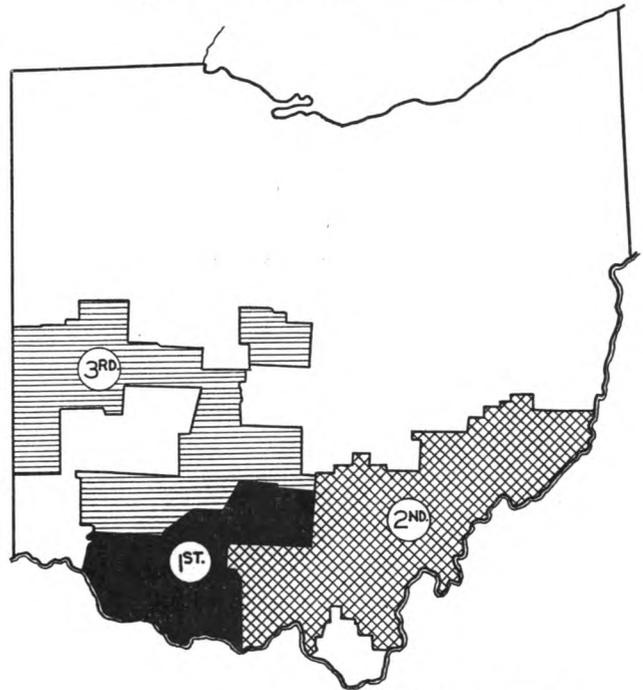
The income-per-acre averages for the three leading areas range from \$52.58 for Bryan-to-Fremont to \$50.20 for Lima-Marion. The averages for the three leading areas are thus quite close together, with the fourth ranking area scoring considerably lower. Fourth place is held by the Sandusky-Mansfield area with a 1950 income of \$44.30 per acre.

**CASH INCOME FROM AGRICULTURE, PER ACRE**  
Three Highest Ranking Areas, 1950  
(Out of 8 Non-metropolitan Areas)



Area	Cash Income Per Acre
Bryan-Fremont .....	\$52.58
Piqua-Delaware .....	51.29
Lima-Marion .....	50.20

**GROWTH IN AGRICULTURAL INCOME PER ACRE**  
Three Highest Ranking Areas in Rate of Growth  
from 1941-1950  
(Out of 8 Non-metropolitan Areas)



Area	1941-50 Rise in Cash Income Per Acre
Chillicothe-Hillsboro .....	139% (to \$29.53)
Portsmouth-Marietta .....	126% (to \$16.83)
Piqua-Delaware .....	115% (to \$51.29)

### Growth in Agricultural Income

Although the ranking of the 8 non-metropolitan areas with respect to agricultural income appears to change very little from year to year, there are noticeable differences in the rates of gain over a ten-year interval. Thus, the three non-metropolitan areas which show the largest percentage gains in agricultural income per acre from 1941 to 1950 are: Chillicothe-Hillsboro area, Portsmouth-Marietta and Piqua-Delaware. (See chart.)

The percentage gains of these three areas range from 139% for Chillicothe-Hillsboro to 115% for Piqua-Delaware. Some of these large percentage gains are registered from a relatively low base; for example, the 126% gain for the Portsmouth-Marietta area involves a rise from \$7.44 per acre to \$16.83 per acre, whereas the rise of 115% for Piqua-Delaware represents a rise from \$23.82 to \$51.29.

The Piqua-Delaware area is the only one which is included *both* among the first three in current income per acre and the first three in respect to growth over a decade.

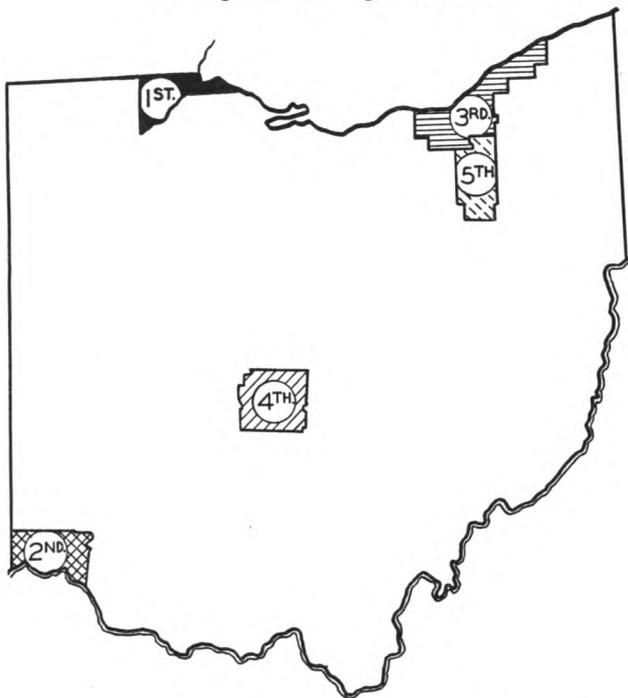
## Areas Leading in RETAIL SALES

Of the 21 economic areas of Ohio, the five areas which show the largest retail sales per capita, according to the Census of Business of 1948 are: Toledo, Cincinnati, Cleveland, Columbus, and Akron. (See chart.) This measure includes sales of all types of retail establishments which report to the Census, including automobile dealers as well as food stores, department stores, retailers of building materials, etc. The population data used for determining per-capita sales are drawn from the Census of Population of 1950.<sup>(5)</sup>

The per-capita sales, computed in this way, vary among the leading five areas from \$1,120 per capita for Toledo to \$983 for Akron. Sixth and seventh place (not shown on the chart) are held respectively by Dayton with \$977 per capita and Canton with \$946 per capita.

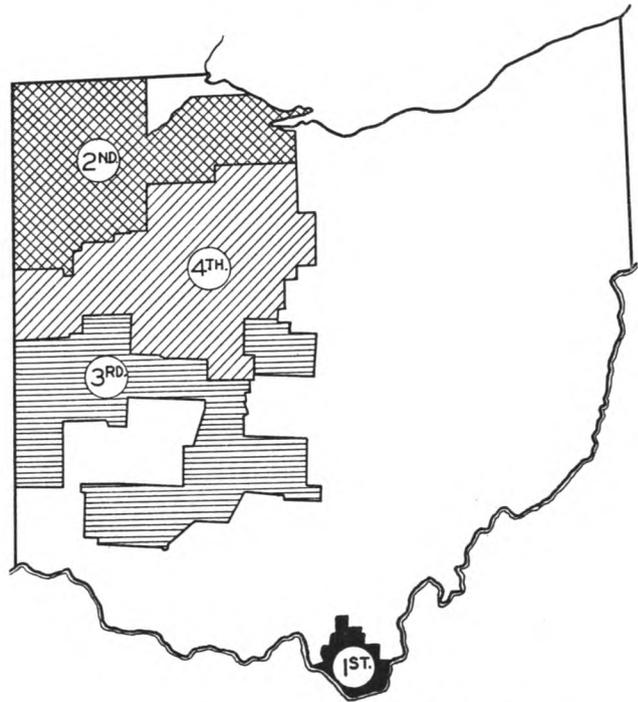
**Growth in Retail Sales** The increase in retail sales per capita from 1939 to 1948 appears to be particularly marked among the non-metropolitan areas of the state, especially in several

**RETAIL SALES PER CAPITA**  
Five Highest Ranking Areas, 1948



Area	Retail Sales Per Capita
Toledo	\$1,120
Cincinnati	1,044
Cleveland	1,040
Columbus	1,006
Akron	983

**GROWTH IN RETAIL SALES PER CAPITA**  
Four Highest Ranking Areas in Rate of Growth from 1937 to 1948



Area	1937-48 Rise in Retail Trade (Per Capita)
Ironton	230% (to \$576)
Bryan-Fremont	204% (to \$835)
Piqua-Delaware	204% (to \$834)
Lima-Marion	202% (to \$933)

of the western areas. (See chart.) Thus, the four leading areas with respect to percentage gain in retail sales per capita are: Ironton area, Bryan-to-Fremont, Piqua-Delaware, and Lima-Marion. Fifth, sixth and seventh places respectively (not shown on the chart) are held by Portsmouth-Marietta, Chillicothe-Hillsboro and Zanesville-Newark.

It is interesting that not a single area of the state appears *both* on the list of five highest ranking areas with respect to 1948 sales and five highest ranking areas in rate of growth from 1939 to 1948. However, the fact that the Toledo area ranks first on the current list, together with the fact that the adjoining Bryan-to-Fremont area ranks second on the list of areas showing the largest growth, is suggestive of outstanding strength in retailing in the northwest corner of the state.

(5) Population figures on a county basis for 1948 are unavailable. The inaccuracy in per-capita figures attributable to the use of 1950 population as applied to 1948 sales might be appreciable on an absolute dollar basis. The relative positions of the areas, however, would be affected little if at all.

## Areas Leading in FINANCE

### DEMAND DEPOSITS OF COMMERCIAL BANKS

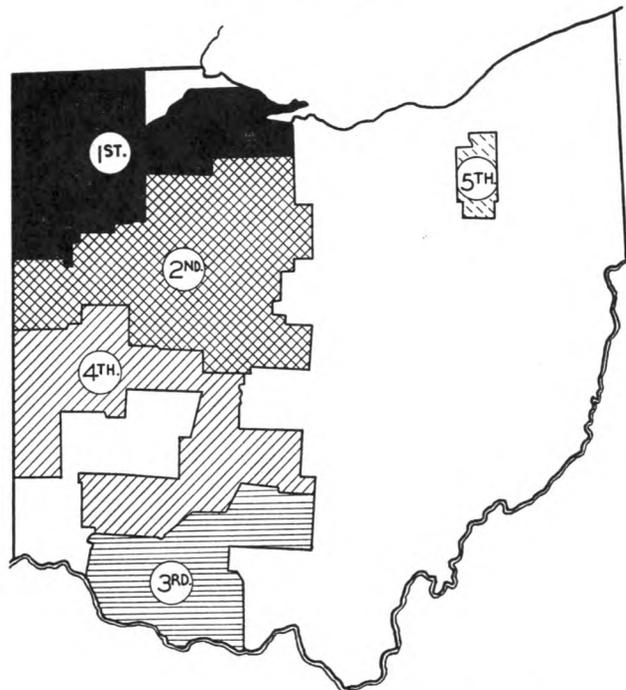
Five Highest Ranking Areas, Dec. 31, 1950



Area	Demand Deposits (End of 1950)
Cleveland .....	\$1,346,000,000
Cincinnati .....	632,000,000
Columbus .....	295,000,000
Toledo .....	260,000,000
Dayton .....	204,000,000

### GROWTH IN DEMAND DEPOSITS

Five Highest Ranking Areas in Rate of Growth  
from 1941 to 1950  
(Year Ends)



Area	Growth of Demand Deposits (1941-50)
Bryan-Fremont .....	249%
Lima-Marion .....	224%
Chillicothe-Hillsboro .....	222%
Piqua-Delaware .....	220%
Akron .....	219%

Of the 21 economic areas of the state, the five areas which reported the largest volume of demand deposits of commercial banks, as of December 31, 1950, are: Cleveland, Cincinnati, Columbus, Toledo and Dayton.<sup>(6)</sup> (See chart.) Cleveland and Cincinnati lead by considerable margins. The sixth and seventh ranking areas (not shown on the chart) are Lima-Marion and Akron, respectively.

The demand deposits shown in this measure are mainly the accounts of business firms in the various areas, although some portion of the demand deposits

also represents current funds and savings of individuals. Interbank and government deposits are excluded from the measure.

**Growth in Demand Deposits** The five areas which show the largest percentage gain in demand deposits of commercial banks between 1941 and 1950 (year-ends) are: Bryan-to-Fremont, Lima-Marion, Chillicothe - Hillsboro, Piqua-Delaware, and Akron. (See chart.) This list of growth leaders is entirely different from the list of areas which currently lead in demand deposits. The figures for the percentage gains scored by the growth leaders, however, are quite close together.

(6) Banking statistics for more recent periods are, of course, available. The advantage of using the year-end 1950 figures both for demand deposits and for savings accounts is the preserving of continuity with the corresponding items appearing earlier in this series of articles, prepared prior to the availability of year-end figures for 1951.

**Savings Accounts** The concept of "savings accounts" used in this series of articles is a special measure constructed as follows: a summation is made of the dollar volume of time deposits at commercial and mutual savings banks, and the dollar value of deposits and withdrawable shares of savings and loan associations. (The time deposits at commercial banks do not include any governmental deposits.) The entire sum for each area is divided by the population of the area to yield a measure called "savings accounts" per capita. Such a measure obviously fails to include all forms of savings, but it does comprise a practical measure of some of the most important forms of savings of individuals.

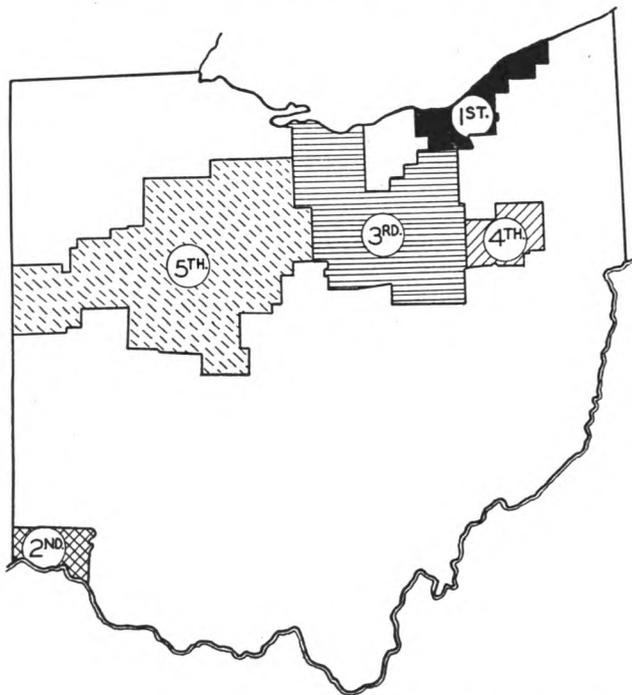
The per-capita "savings accounts", so measured, were largest at the end of 1950 in the following five areas: Cleveland, Cincinnati, Sandusky-Mansfield, Canton, and Lima-Marion. The amounts for these leading areas range from \$864 for Cleveland to \$582 for Lima-Marion. (It will be noted that if the measurement were taken in total dollar volume, rather than in per-capita amounts, Cleveland's margin of lead would be much greater.) Sixth and

seventh places in this measure of per-capita savings are occupied by Springfield and Lorain-Elyria, respectively.

**Growth in Savings** If the same measure of savings as previously described is taken in terms of relative percentage gains from 1941 to 1950 (year-ends), the five leading areas with respect to growth in savings are: Bryan-to-Fremont, Akron, Lima-Marion, Toledo, and Lorain-Elyria. One area of this list, Lima-Marion, also appears on the preceding list of the five areas whose "savings accounts" per capita are largest on a current basis.

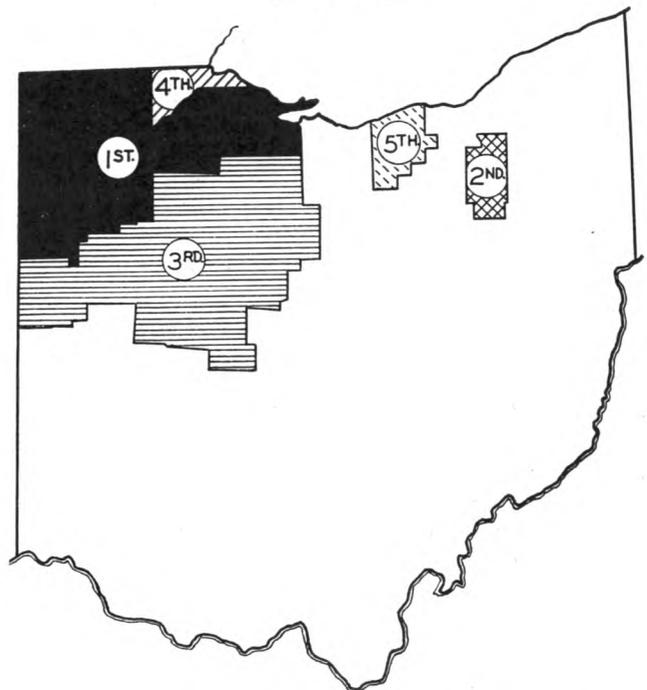
The percentage gains in per-capita savings for the five leading areas just mentioned range from 185% for the Bryan-to-Fremont area to 138% for Lorain-Elyria. "Deflated" for changes in the consumer price index over the nine-year interval, such percentage gains drop to 76% and 47%, respectively. (All but one of the 21 areas of the state showed some gain in per-capita "savings" after allowance for change in the dollar.)

**"SAVINGS ACCOUNTS" PER CAPITA**  
Five Highest Ranking Areas, Dec. 31, 1950



Area	Savings Accounts Per Capita
Cleveland	\$864
Cincinnati	744
Sandusky-Mansfield	620
Canton	617
Lima-Marion	582

**GROWTH IN "SAVINGS ACCOUNTS" PER CAPITA**  
Five Highest Ranking Areas in Rate of Growth from 1941 to 1950 (Year Ends)



Area	Growth in Savings Accounts Per Capita (1941-1950)
Bryan-Fremont	185%
Akron	163%
Lima-Marion	142%
Toledo	141%
Lorain-Elyria	138%

## CONCLUSIONS

As a summary of a summary, a few final observations may be made.

**Strength on the Diagonal** There is some consistency, as well as much variety, in the rankings of the various Ohio areas with respect to the selected items here discussed. If agricultural income is excluded, and if attention is paid to the measures of population, manufacturing, trade and finance, it appears that the areas of greatest economic strength at the present time tend to lie roughly along the northeast-to-southwest diagonal of the state. The most important exception to this generalization lies in the strong showing made by the Toledo area, located well to the northwest of the diagonal.

The strength of the northeast-to-southwest axis is, of course, not a new phenomenon. Much of Ohio's industrial history is bound up with it. A significant question, which can only be partly answered here, is whether or not the margin of lead enjoyed by such areas is being narrowed by time and events.

**Growth in the Northwest** A review of the series of "growth" charts previously described, as well as the data of Table II, indicates that certain areas of the state appear rather frequently in the list of five leading areas with respect to *growth* in the various indicators of population, manufacturing, trade and finance. For example, the Lima-Marion, Bryan-to-Fremont, and Toledo areas appear with outstanding frequency on the lists of areas showing the largest growth in the various measures over a decade period. These three areas geographically constitute the northwest section of the state. It seems, therefore, that the northwestern part of the state tends to be outstanding in the measures of economic growth selected here.

Outside of the northwest, the only state economic areas which show a broadly comparable frequency of scoring in the growth lists are Ironton and Akron. The remaining 16 economic areas of the state are represented, if at all, with less frequency on the lists of areas leading in growth, although appearances on more than one list occur in the cases of Dayton and Piqua-Delaware (in the southwest) as well as Lorain-Elyria and Ashtabula-to-East Liverpool (in the northeast).

In appraising the significance of the above find-

ings it should be emphasized that the generalizations apply only to the measures used here — measures which were selected both for their broad significance and for their practicality of computation. Other measures might point to other areas as leaders in growth. There is no such thing as a "fastest growing area" in general.

**Agricultural Income** With respect to agriculture, the single measure which has been used here (agricultural income per acre of farmland) points definitely toward the western half of the state as being currently the strongest, and to the southern half (both southeast and southwest) as being the locus of the largest relative gains over the past decade.

The outstanding agricultural prosperity of the western part of the state is based mainly on its corn-hog farming, as the eastern terminus of the nation's "corn belt". However, the agriculture of the eastern half of the state, which revolves particularly around dairying enterprise, is also highly lucrative by almost any standard of comparison. The average income per acre for the entire state of Ohio, for example, was 62% above the national average in 1950. Even more important, perhaps, is the fact that seven out of the eight non-metropolitan areas of Ohio had an income per acre in 1950 in excess of the national average. (See Table II.)

**Ohio and U. S. A.** While attention in this series of articles has been focused mainly on the parts of the state rather than the state as a whole, the showing of Ohio in comparison with the national average may be seen for all the items considered by referring to the last two rows of Table II.

For the per-capita items shown in the table, Ohio's current score is higher than the national average. With respect to the growth question, however, the picture is mixed. Ohio's rate of ten-year growth exceeds the national average in respect to the number of production workers employed in manufacturing, demand deposits of commercial banks, and per capita "savings accounts". The Ohio rate of gain falls below the national average with respect to growth in value of manufacturing, and rise in agricultural income per acre. In population growth, the state's rate of increase is the same as the national average for the period covered.