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GEORGIA MANUFACTURING ATLAS



INDUSTRIAL DEVELOPMENT DIVISION/ENGINEERING EXPERIMENT STATION/GEORGIA INSTITUTE OF TECHNOLOGY

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GEORGIA MANUFACTURING ATLAS

by
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Foreword

This revision of the Georgia Manufacturing Atlas is a product of the Industrial Development Division's continuing effort to analyze the expanding industrial base of Georgia. Mrs. Collins has done her usual competent job in preparing this revision.

In addition to identifying the distribution of plants and industrial employment by Standard Industrial Classifications (SIC), this report reviews progress of Georgia in manufacturing between 1963 and 1966. Georgia increases in both manufacturing employment and value added by manufacture in this period exceeded the national averages. However, Georgia did not improve its position as 15th state in the number of manufacturing employees and 16th state in value added by manufacture.

This study emphasizes the findings of previous IDD reports. Manufacturing in Georgia continues to be dominated by low-wage industries with a low value added per employee. While these are excellent industries in their own right, there is a pressing need to develop the high-wage industries (such as metalworking, machinery, and chemicals) to a greater degree.

The fact that Georgia is making significant and better than U. S. average progress in industrialization is no reason for complacency. There is a continuing need for the application of innovation, imagination, and determination to this process. There is also increasing need to concentrate problem-solving efforts on the secondary consequences of industrialization -- migration from rural to urban areas, educational level deficiencies, training of the unskilled, and amelioration of slum conditions.

As with all IDD publications, the reader's comments and suggestions are welcomed.

Ross W. Hammond, Chief
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GEORGIA INSTITUTE OF TECHNOLOGY

Preface

This is the third edition of the Georgia Manufacturing Atlas to be issued by the Industrial Development Division. (The two previous editions were published in June 1962 and April 1965.) Some modifications have been introduced, but the format and purpose of this volume are essentially the same as the earlier editions.

Section I gives a brief review of Georgia's manufacturing compared with that of the nation and the Southeast. It also presents a generalized picture of manufacturing within the state.

Section II is a series of 53 maps which present the location of Georgia's industry in graphic form. These maps show, by county, the number of plants and total employment of each major group or subgroup of manufacturing industries. Accompanying each map is a brief analysis which includes a listing of major firms.

The Atlas is intended primarily for businessmen who are concerned with the location or expansion of manufacturing operations and for local development groups who need to examine the industrial potential in their area against the background of existing development in the surrounding counties. It can be useful as a preliminary guide to indicate manufacturing and service possibilities which may warrant more detailed investigation.

An index following the map section of the Atlas gives page and map references by type of product manufactured.

Section I
MANUFACTURING IN GEORGIA: A GENERAL REVIEW

MANUFACTURING IN GEORGIA

A General Review

Recent figures from the Bureau of Labor Statistics show that between 1963 and 1966 Georgia's employment in manufacturing increased by 17.6%, from 362,900 to 426,800 workers. The national increase during the same period was 12.9%. Current data indicate that Georgia's average employment for 1967 will be some 429,100 workers -- a slowdown in manufacturing growth that echoes a similar slowdown for the U. S.

In the Annual Survey of Manufactures, 1965, the value added by manufacture in Georgia is estimated at \$4,061 million, a 24.8% increase over the 1963 figure of \$3,254 million compared with a national gain of 17.3%.

Since, however, the base figures for the state in the calculation of these percentages are so much smaller than those of the U. S., more detailed analysis is necessary to evaluate the comparative industrial development of Georgia.

Table 1 shows the top 25 states ranked by number of manufacturing employees in 1966. Georgia is 15th on this list, as it was in 1963. In the gain in number of employees between 1963 and 1966, however, Georgia was 12th, ranking above Massachusetts, Wisconsin, Connecticut, and Missouri (states with a larger manufacturing base). By comparison, Tennessee, which ranked 16th in total manufacturing employment, was 10th in employment gain.

The final two columns of the table show the proportion that each state had of all manufacturing in the U. S. in 1963 and 1966. Georgia increased its standing from 2.1% to 2.2% -- with Tennessee close on its heels in 1966. The employment increase of four of the 14 states ranking above Georgia was not sufficient for them to maintain their 1963 proportion of the nation. New York, California, New Jersey, and Massachusetts all dropped back. Rounded to the first decimal point, five others maintained their percentage and five made gains.

As shown in Table 2, the same states are in the top 25 in value added by manufacture in 1965, although the order is changed. Georgia is 16th in this table, as it was in 1963. In the 1963-1965 increase in value added, Georgia ranks 13th, its growth changing its proportion of the total value added for the U. S. from 1.7% to 1.8%.

Table 1
MANUFACTURING EMPLOYEES

<u>Top 25 States Ranked by 1966 Size</u>	<u>1966</u>	<u>Change 1963-66</u>		<u>Percent of U. S.</u>	
	<u>Number (000)</u>	<u>Number (000)</u>	<u>Percent</u>	<u>1963</u>	<u>1966</u>
1. New York	1,902.5	98.4	5.5	10.6	10.0
2. Pennsylvania	1,555.8	158.7	11.4	8.2	8.2
3. California	1,520.7	126.4	9.1	8.2	8.0
4. Ohio	1,398.7	165.3	13.4	7.3	7.3
5. Illinois	1,390.7	186.9	15.5	7.1	7.3
6. Michigan	1,139.5	158.8	16.2	5.8	6.0
7. New Jersey	874.8	65.7	8.1	4.8	4.6
8. Indiana	716.3	101.8	16.6	3.6	3.8
9. Massachusetts	694.2	30.7	4.6	3.9	3.6
10. North Carolina	635.8	93.8	17.3	3.2	3.3
11. Texas	620.4	102.0	19.7	3.1	3.3
12. Wisconsin	507.5	46.1	10.0	2.7	2.7
13. Connecticut	472.4	51.6	12.3	2.5	2.5
14. Missouri	442.7	48.9	12.4	2.3	2.3
15. GEORGIA	426.8	63.9	17.6	2.1	2.2
16. Tennessee	426.3	81.0	23.5	2.0	2.2
17. Virginia	338.7	41.2	13.8	1.8	1.8
18. South Carolina	313.9	44.1	16.3	1.6	1.6
19. Alabama	292.5	45.1	18.2	1.5	1.5
20. Minnesota	283.2	40.5	16.7	1.4	1.5
21. Maryland	278.9	19.2	7.4	1.5	1.5
22. Florida	276.2	47.7	20.9	1.3	1.4
23. Washington	265.3	41.3	18.4	1.3	1.4
24. Kentucky	220.3	37.4	20.4	1.1	1.2
25. Iowa	211.9	33.4	18.7	1.1	1.1

Source: U. S. Department of Labor, Bureau of Labor Statistics.

Table 2
VALUE ADDED BY MANUFACTURE

Top 25 States Ranked by 1965 Size	1965	Change 1963-65		Percent of U. S.	
	Million Dollars	Million Dollars	Percent	1963	1965
1. New York	22,730	3,171	16.2	10.2	10.1
2. California	18,876	1,714	10.0	8.9	8.4
3. Ohio	18,352	2,846	18.4	8.1	8.1
4. Illinois	17,587	2,947	20.1	7.6	7.8
5. Pennsylvania	17,003	2,960	21.1	7.3	7.5
6. Michigan	16,719	3,629	27.7	6.8	7.4
7. New Jersey	11,232	1,274	12.8	5.2	5.0
8. Indiana	9,249	1,522	19.7	4.0	4.1
9. Texas	8,612	1,525	21.5	3.7	3.8
10. Massachusetts	7,327	924	14.4	3.3	3.3
11. Wisconsin	6,158	795	14.8	2.8	2.7
12. North Carolina	5,509	943	20.6	2.4	2.4
13. Connecticut	5,296	800	17.8	2.3	2.4
14. Missouri	5,122	826	19.2	2.2	2.3
15. Tennessee	4,096	794	24.0	1.7	1.8
16. GEORGIA	4,061	807	24.8	1.7	1.8
17. Virginia	3,576	530	17.5	1.6	1.6
18. Minnesota	3,360	554	19.7	1.5	1.5
19. Maryland	3,343	341	11.4	1.6	1.5
20. Washington	3,179	151	5.0	1.6	1.4
21. Alabama	3,139	624	24.8	1.3	1.4
22. Kentucky	3,135	587	23.0	1.3	1.4
23. South Carolina	2,737	627	29.7	1.1	1.2
24. Florida	2,671	319	13.6	1.2	1.2
25. Iowa	2,633	346	15.1	1.2	1.2

Sources: Annual Survey of Manufactures, 1965.

U. S. Census of Manufactures, 1963 (final figures -- preliminary figures were used in the previous edition of the Georgia Manufacturing Atlas).

In the value added by manufacture per employee (Table 3), Georgia climbed up one place among the 50 states and the District of Columbia from 44th in 1963 to 43rd in 1965. In addition, the Georgia figure of \$10,324 in 1965 was 82.4% of the U. S. average, compared with 81.2% in 1963.

Georgia's low ranking in value added by manufacture is due to the high proportion of manufacturing employees in textiles, apparel, and lumber and wood. These are, in general, low-wage industries, with a low value added per employee. (The growing floor covering industry in the textile group is an exception.) In 1966 over 47% of Georgia's manufacturing employment was in these three industries, compared with less than 16% for the U. S.

This point is illustrated further in Table 4, which lists 25 states with manufacturing accounting for a major part of their nonfarm employment and compares the income received from manufacturing as a proportion of nonfarm production income. The U. S. average shows manufacturing employment producing a higher proportion of income. In Georgia this is reversed. With 32.3% of its nonfarm employees in manufacturing, the state received only 30.7% of its nonfarm income from manufacturing.

Examination of the data for Indiana, Michigan, Ohio, Wisconsin, and Delaware (states with a higher proportion of income) shows their manufacturing employment is heaviest in transportation equipment, machinery, and chemicals. A selection of states with the proportion of manufacturing employment higher than the proportion of income -- North Carolina, New Hampshire, Mississippi, Arkansas -- shows they are strong in the low-wage manufacturing categories of textiles, apparel, leather, and lumber and wood. Other factors can modify these generalizations, but the comparative proportions of income and employment in Table 4 are a good indication of the predominant types of industry in each state.

In Table 5 data from the earlier tables are summarized for the seven-state Southeast. Ranking below Georgia in value added by manufacture per employee, Mississippi, North Carolina, and South Carolina have a high proportion of their manufacturing in either textiles or apparel. The dominance of these two industries also is reflected in the combined figures for the Southeast.

Table 6 gives the distribution of the major types of manufacturing in Georgia in 1966, together with the proportion each represents of the national employment in that industry. Textiles and apparel account for 41% of the

Table 3
VALUE ADDED BY MANUFACTURE PER EMPLOYEE, 1965

United States	\$12,530	26. Maryland	\$12,329
1. Alaska	18,013	27. Connecticut	11,993
2. West Virginia	16,480	28. Missouri	11,914
3. Kentucky	15,424	29. Oregon	11,912
4. Michigan	15,311	30. New York	11,810
5. Texas	15,192	31. Arizona	11,569
6. Nevada	15,186	32. Alabama	11,551
7. Louisiana	15,141	33. Florida	11,526
8. Wyoming	14,841	34. Hawaii	11,507
9. North Dakota	14,654	35. Pennsylvania	11,426
10. Utah	14,304	36. Vermont	11,315
11. Washington	14,231	37. Virginia	11,169
12. Kansas	14,073	38. South Dakota	11,121
13. Indiana	13,921	39. Tennessee	10,878
14. Ohio	13,758	40. Massachusetts	10,845
15. Iowa	13,738	41. Oklahoma	10,579
16. Montana	13,450	42. District of Columbia	10,362
17. California	13,423	43. GEORGIA	10,324
18. Illinois	13,371	44. Rhode Island	10,033
19. Idaho	13,335	45. South Carolina	9,684
20. New Jersey	13,315	46. North Carolina	9,606
21. Nebraska	13,172	47. Arkansas	9,413
22. Minnesota	12,989	48. New Mexico	8,782
23. Delaware	12,947	49. New Hampshire	8,702
24. Colorado	12,686	50. Maine	8,478
25. Wisconsin	12,473	51. Mississippi	8,185

Sources: Annual Survey of Manufactures, 1965.

U. S. Census of Manufactures, 1963 (final figures -- preliminary figures were used in the previous edition of the Georgia Manufacturing Atlas).

Table 4
MANUFACTURING EMPLOYMENT AND INCOME, 1966

<u>Top 25 States Ranked by Percent of Manufacturing Employment</u>	<u>Manufacturing Employment as Percent of Total Nonfarm Employment^{1/}</u>	<u>Manufacturing Income as Percent of Total Nonfarm Production Income^{2/}</u>
United States	29.9	32.2
1. Connecticut	43.2	45.3
2. South Carolina	42.7	41.3
3. North Carolina	42.3	39.0
4. New Hampshire	41.6	39.8
5. Indiana	41.4	45.4
6. Michigan	40.7	46.9
7. Ohio	39.6	44.5
8. Rhode Island	38.6	38.8
9. Pennsylvania	38.2	40.7
10. Maine	37.3	36.7
11. New Jersey	37.2	38.8
12. Delaware	36.6	44.4
13. Wisconsin	36.4	40.8
14. Tennessee	35.9	35.0
15. Illinois	34.2	36.6
16. Vermont	33.7	34.3
17. Massachusetts	33.1	34.7
18. GEORGIA	32.3	30.7
19. Mississippi	31.9	30.5
20. Alabama	31.5	32.0
21. Arkansas	30.5	28.6
22. Missouri	28.7	30.8
23. New York	28.3	28.6
24. Washington	26.9	30.2
25. West Virginia	26.9	30.8

^{1/} Derived from Bureau of Labor Statistics data.

^{2/} Derived from U. S. Department of Commerce, Survey of Current Business, August 1967, Table 70: "Industrial Sources of Civilian Income Received by Persons for Participation in Current Production."

Table 5

MANUFACTURING IN SEVEN SOUTHEASTERN STATES

	<u>Manufacturing Employees, 1966</u>		<u>Value Added by Manufacture, 1965</u>		<u>Value Added Per Employee, 1965</u>		<u>Ratio of Total Manufacturing Employment to Total Nonfarm Employment, 1966</u>	<u>Ratio of Manufacturing Income to Total Nonfarm Production Income, 1966</u>
	<u>Thousands</u>	<u>Rank</u>	<u>Millions</u>	<u>Rank</u>	<u>Amount</u>	<u>Rank</u>	<u>Percent</u>	<u>Percent</u>
Alabama	292.5	5	\$ 3,139	4	\$11,551	1	31.5	32.0
Florida	276.2	6	2,671	6	11,526	2	16.1	17.2
GEORGIA	426.8	2	4,061	3	10,324	4	32.3	30.7
Mississippi	165.8	7	1,199	7	8,185	7	31.9	30.5
North Carolina	635.8	1	5,509	1	9,606	6	42.3	39.0
South Carolina	313.9	4	2,737	5	9,684	5	42.7	41.3
Tennessee	426.3	3	4,096	2	10,878	3	35.9	35.0
Seven States	2,537.3		\$ 23,412		\$10,286		32.1	30.8
United States	19,081.0		\$225,366		\$12,530		29.9	32.2
Seven States as Percent of U. S.	13.3%		10.4%		82.1%			

Sources: See sources for Tables 1-4.

state's manufacturing employment, and lumber and wood for a further 6.3%. Georgia's textile employment is 11.4% of the total for the nation; its apparel employment is 4.8% and that for lumber and wood is 4.3% of the U. S. total for the respective industries. These figures compare with Georgia's overall average for manufacturing employment of 2.2% of the national figure.

Table 6
MANUFACTURING EMPLOYMENT IN GEORGIA BY MAJOR INDUSTRY GROUPS, 1966

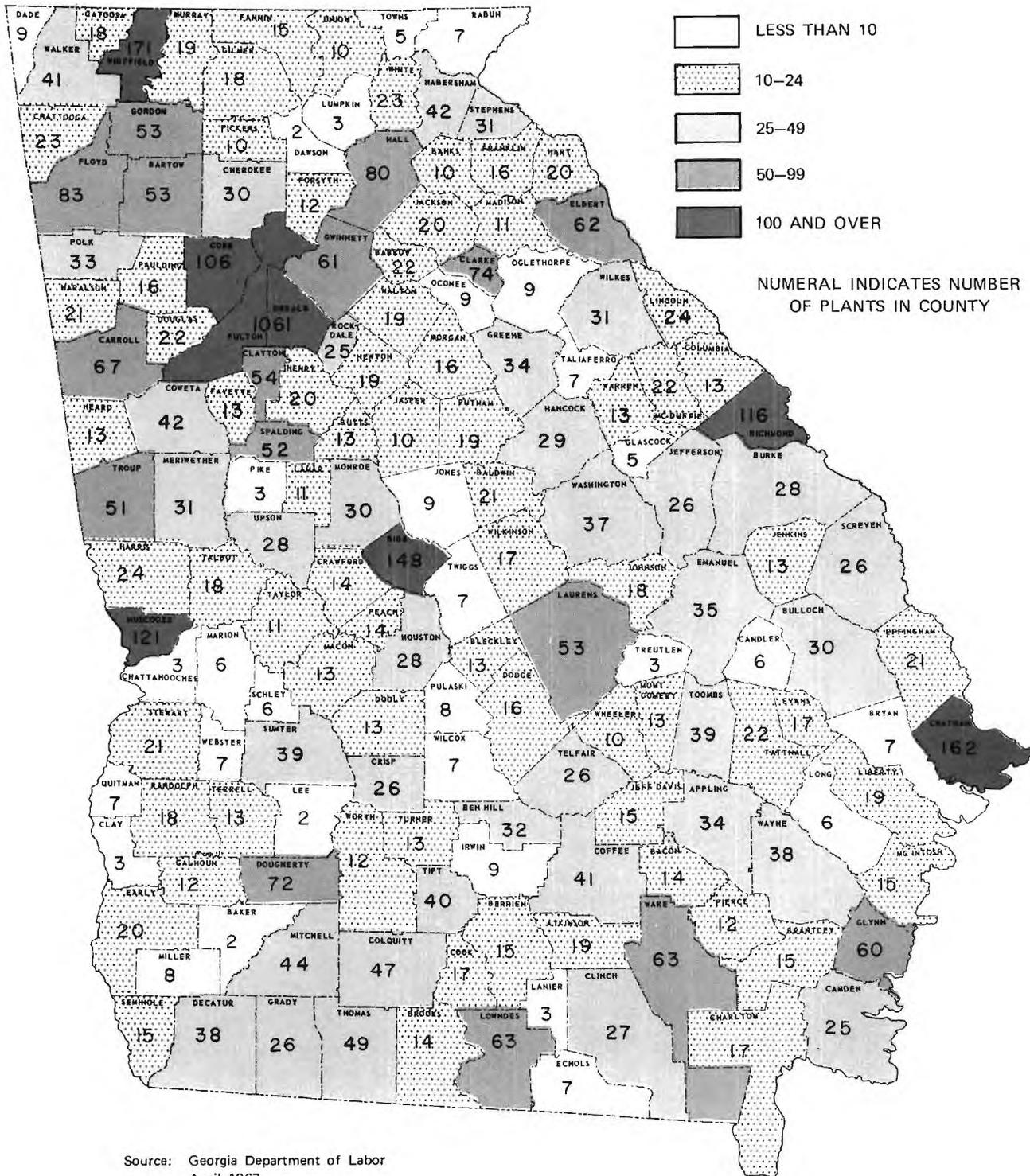
<u>Manufacturing Industry</u>	<u>Annual Average (000)</u>	<u>Percent Distribution</u>	<u>Percent of U. S. Employment</u>
Total manufacturing	426.8	100.0	2.24
Textile mill products	108.6	25.4	11.42
Apparel and related products	66.4	15.6	4.76
Food and kindred products	48.0	11.2	2.73
Transportation equipment	45.1	10.6	2.37
Lumber and wood products	27.0	6.3	4.34
Paper and allied products	22.4	5.2	3.34
Fabricated metal products	14.2	3.3	1.05
Stone, clay, and glass products	14.1	3.3	2.20
Chemicals and allied products	12.8	3.0	1.34
Printing, publishing, and allied industries	12.3	2.9	1.20
Machinery, except electrical	12.3	2.9	.66
Furniture and fixtures	9.5	2.2	2.08
Electrical machinery	8.4	2.0	.44
Primary metal industries	6.6	1.5	.50
Leather and leather products	4.7	1.1	1.32

Source: U. S. Department of Labor, Bureau of Labor Statistics.

Manufacturing within Georgia

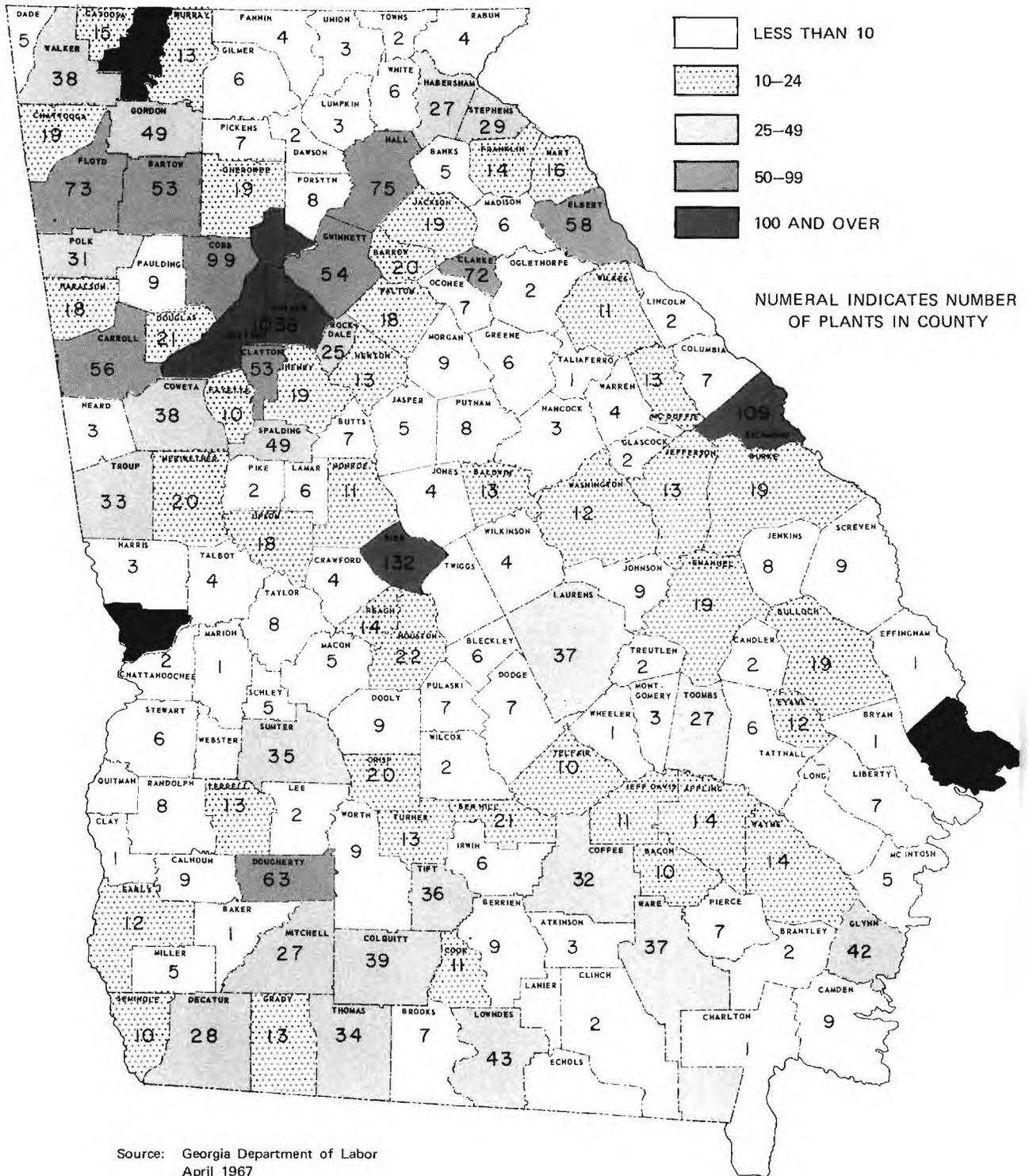
Map 1 is based on data compiled by the Georgia Department of Labor and includes only those firms covered by the Georgia Employment Security Law -- which, in general, means only those firms with four or more employees.

MAP 1 MANUFACTURING FIRMS WITH FOUR OR MORE EMPLOYEES



Source: Georgia Department of Labor
April 1967

MAP 2 MANUFACTURING FIRMS WITH FOUR OR MORE EMPLOYEES, EXCLUDING LOGGING OPERATIONS, SAWMILLS, AND PLANING MILLS



The greatest concentration of plants is in the Fulton-DeKalb area. Nearly 20% of the state's manufacturing companies are located in these two counties. Six other counties have more than 100 plants each, with Whitfield County the only one not in a metropolitan area. The combined total of these six counties (Whitfield, Chatham, Bibb, Muscogee, Richmond, and Cobb) is 824 plants -- considerably below the Fulton-DeKalb figure of 1,061 plants.

At the other end of the scale, 30 counties have less than 10 manufacturing companies, and a further 69 counties have between 10 and 24 plants each.

In some of the more rural counties, many of the manufacturing operations are concerned with logging, sawmills, and planing mills. There were 1,310 such plants throughout the state in April 1967, with an average employment of 12 workers per plant. In some counties this logging, sawmill, and planing mill work is the full extent of their manufacturing operations, and in others it constitutes the major part. The result of excluding these plants from the overall picture of industry in Georgia is shown on Map 2, and a summary of the modification is given in Table 7.

When this category of lumber and wood plants is excluded, over 50% of Georgia's counties have less than 10 manufacturing firms. Over 76% have less than 25 firms.

Table 7
DISTRIBUTION OF MANUFACTURING PLANTS IN GEORGIA

<u>Number of Plants</u> ^{1/}	<u>All Plants</u>		<u>Excluding Logging, Sawmills, and Planing Mills</u>	
	<u>Number of Counties</u>	<u>Percent of Counties</u>	<u>Number of Counties</u>	<u>Percent of Counties</u>
Less than 10	30	18.9	80	50.3
10-24	69	43.4	41	25.8
25-49	36	22.6	21	13.2
50-99	16	10.1	10	6.3
100 and over	<u>8</u>	<u>5.0</u>	<u>7</u>	<u>4.4</u>
Total	159	100.0	159	100.0

^{1/} With four or more employees.

One further map (Map 3) emphasizes the concentration of manufacturing employment in the Fulton-DeKalb area and a limited number of urban counties around the state. Nearly 19% of Georgia's manufacturing employment is in Fulton and DeKalb counties -- the central counties for the Atlanta Metropolitan Area. Cobb County, in the same Metropolitan Area, is next in size with 6.9% of the state's total.

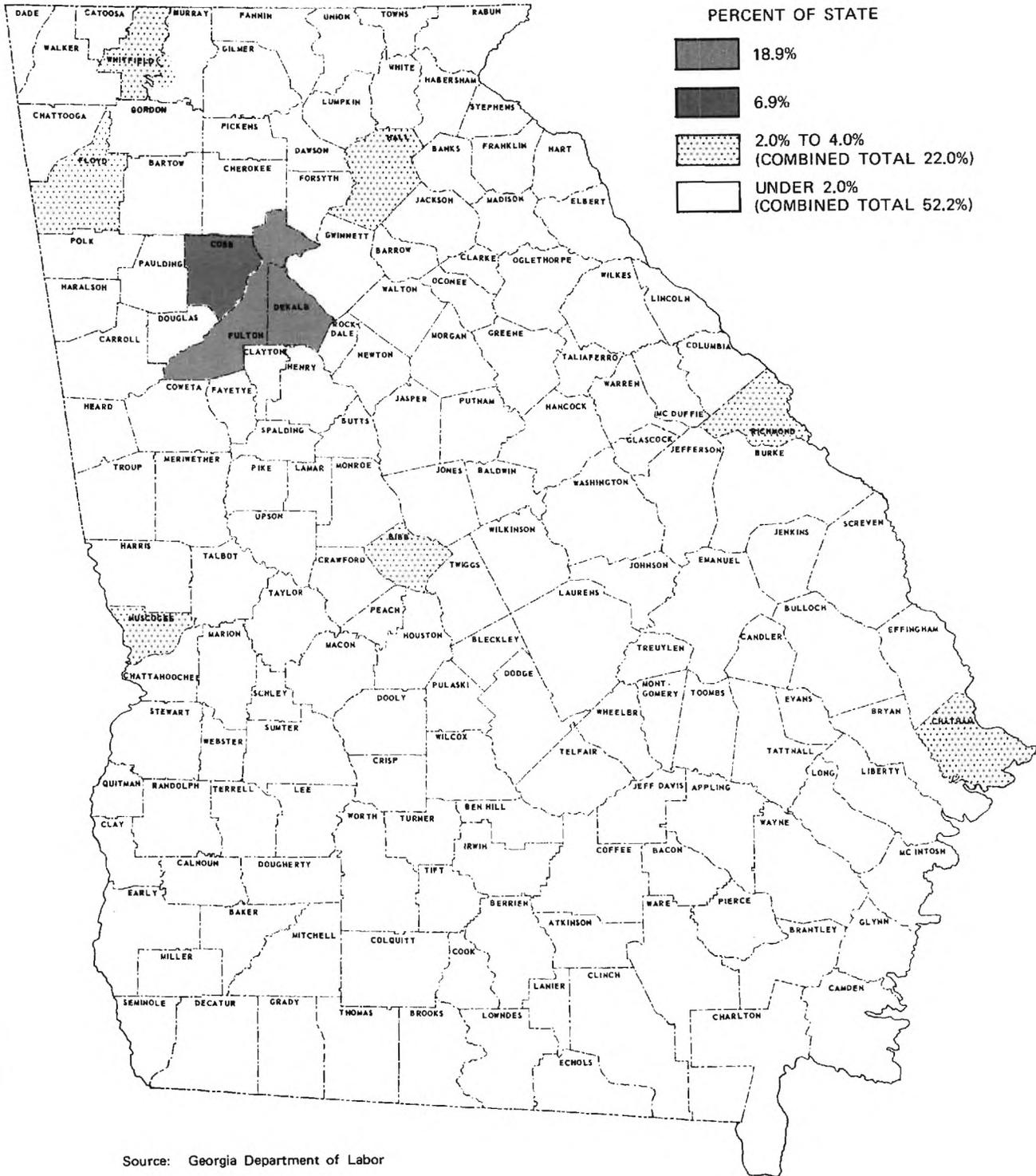
Seven counties have between 2.0% and 4.0% of Georgia's manufacturing workers each, with a combined total of 22.0% (compared with the Fulton-DeKalb-Cobb total of 25.8%).

Thirteen counties have less than 2.0% but more than 1%; in descending order of magnitude, these are Troup, Clarke, Carroll, Walker, Spalding, Dougherty, Glynn, Coweta, Chattooga, Upson, Stephens, Bartow, and Lowndes counties. Manufacturing employment in this group accounts for 17.9% of the state total.

This leaves 136 of Georgia's counties each with less than 1% of the state's manufacturing workers -- varying all the way down to .004% -- and with a combined total of 34.3% of the total manufacturing employment in Georgia.

Section II of this report provides details of this employment by major industries and gives a picture of the manufacturing base of each county.

MAP 3 CONCENTRATION OF MANUFACTURING EMPLOYMENT



Source: Georgia Department of Labor

Section II
MANUFACTURING IN GEORGIA: AN ATLAS BY INDUSTRY GROUP

MANUFACTURING IN GEORGIA

An Atlas by Industry Group

The series of maps which follow are based on data taken from the 1966 Georgia Manufacturing Directory and from information made available under special arrangement with the Employment Security Agency, Georgia Department of Labor.

Readers familiar with the Directory will be aware that companies are listed with up to four industry classifications, using the four-digit Standard Industrial Classification code (SIC).^{1/} In preparing this Atlas, the total employment for each company was divided among the different classifications so that the maps would indicate the production of an item in a county, even though such production was a subsidiary operation of the company concerned. Due weight was given to the fact that the products in the Directory are listed in order of importance. If information was available as to the proportion of employees engaged by a company on a specific product, such information was used; otherwise the employment allocation was made as follows:

	<u>Employment Allocation for Product Listed</u>			
	<u>1st</u>	<u>2nd</u>	<u>3rd</u>	<u>4th</u>
One SIC Listing	All	-	-	-
Two SIC Listings	2/3	1/3	-	-
Three SIC Listings	3/6	2/6	1/6	-
Four SIC Listings	4/10	3/10	2/10	1/10

As a result, the same plant may be recorded on more than one map, but there is no duplication of employment.

It should be pointed out that, with the exception of the lumber and wood industry (see below), the data on these maps cannot be compared directly with those from the Georgia Department of Labor. In general, the Labor Department allocates the total employment of any one company on the basis of its major activity. It also lists only those companies covered by the Georgia Employment

^{1/} Standard Industrial Classification Manual, Executive Office of the President, Bureau of the Budget, 1957 (revised). This was the edition used by the compilers of the Directory. A 1967 edition has now been issued.

Security Law, with four or more employees, whereas the Directory has endeavored to include all manufacturers, regardless of size.

In the case of the lumber and wood industry, it was recognized that the Directory information on logging operations and sawmills was incomplete, and the maps were prepared from data made available by the Employment Security Agency, Georgia Department of Labor.

Throughout the Atlas, the data for Fulton and DeKalb counties have been combined. The basic records of the Directory were assembled by cities, and a county breakdown in the immediate Atlanta area was not considered to be of sufficient value to the user to warrant the investment of time that would be involved in separating companies with an Atlanta address into Fulton or DeKalb locations.

The Directory data have been modified where new information of any significance has become available.

The maps have been prepared on the basis of one map for the industry group as a whole (two-digit SIC) and subsidiary maps for those parts of the industry of major importance to Georgia.

Three industry groups -- ordnance and accessories, tobacco manufactures, and miscellaneous manufacturing industries -- are not presented in map form. There are only two tobacco manufacturers (one making cigars in Ware County and the other processing cigar tobacco in Grady County) and one ordnance plant in Georgia (in Bibb County).

The miscellaneous manufacturing industries category covers a great variety of products, none of which was thought to be of sufficient importance for a separate map. The following table, however, gives a breakdown of employees and firms by the type of product manufactured.

The Fulton-DeKalb area has a number of companies in each of the categories listed, and in total accounts for half the employees and 68 of the plants. The remaining 100 plants are scattered over 42 counties, with the greatest concentration in the metropolitan areas.

Most of the companies are small, many of them just one-man operations, but some large companies are included, such as Scripto, Inc. (Atlanta, Fulton County) -- pens, pencils, cigarette lighters; MacGregor-Brunswick (Albany, Dougherty County, and Covington, Newton County) -- golf clubs, golf balls;

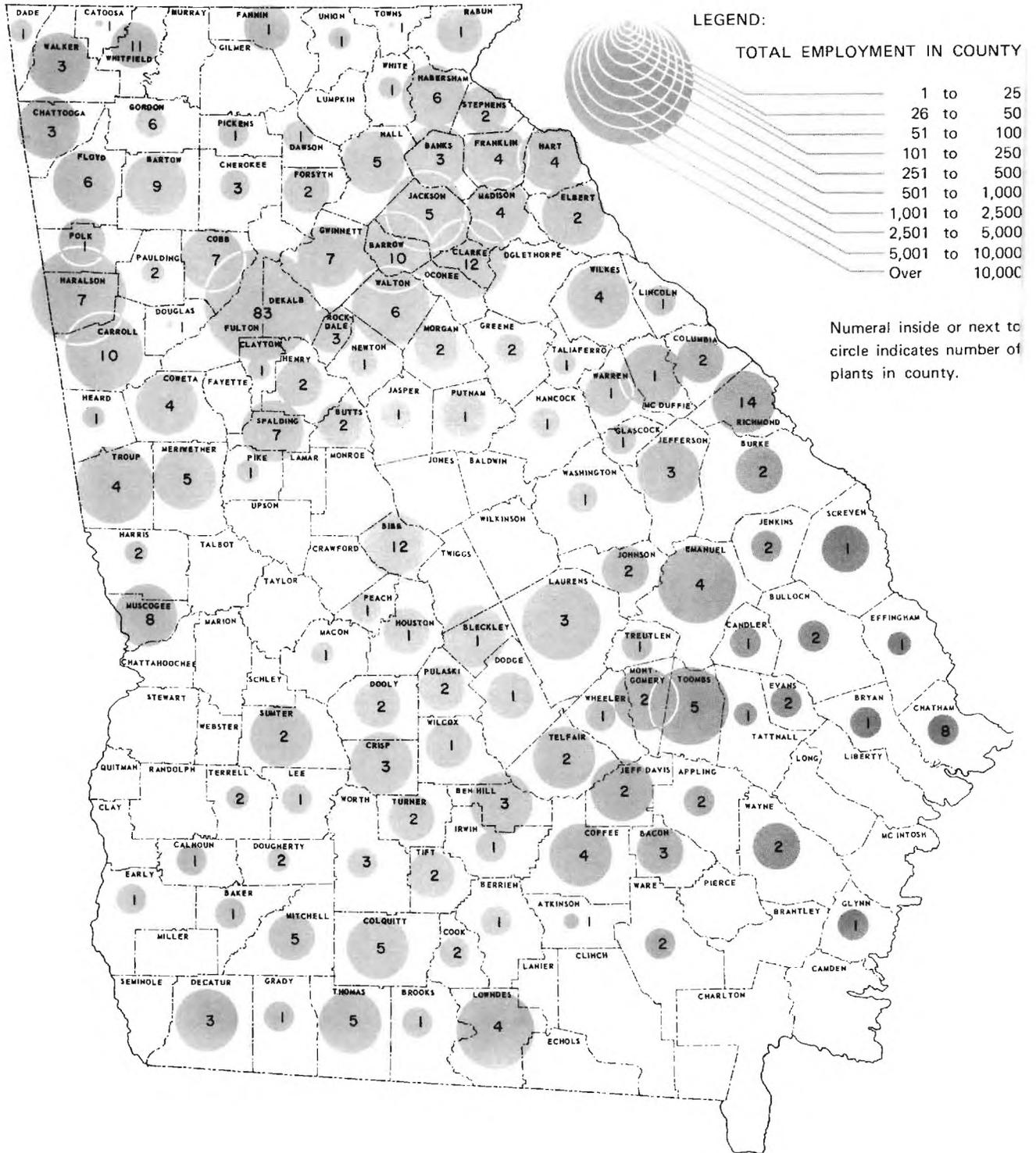
Table 8
MISCELLANEOUS MANUFACTURING INDUSTRIES

<u>Type of Product</u>	<u>Number of Plants</u>	<u>Number of Employees</u>
Pens, pencils, and other office and artists' materials	28	1,450
Jewelry, zippers, buttons, novel- ties	16	1,450
Toys, amusement, sporting, and athletic goods	20	1,400
Morticians' goods	17	800
Signs and advertising displays	62	550
Brooms and brushes	16	300
All other miscellaneous manufac- turing	<u>13</u>	<u>650</u>
Total	168*	6,600

* Adjusted for duplicate plant listings.

Scovill Manufacturing Company (Clarkesville, Habersham County) -- zippers, buttons, snap fasteners; The Rushton Company (Atlanta, Fulton County) -- soft stuffed toys; Talon, Inc. (Cleveland, White County) -- zippers; and Toccoa Casket Company (Toccoa, Stephens County) -- metal and wood caskets. In addition, Coats and Clark, Inc., make zippers as a subsidiary product in their plants in Albany (Dougherty County) and Toccoa (Stephens County).

MAP 4 APPAREL AND RELATED PRODUCTS



APPAREL AND RELATED PRODUCTS
(SIC 23)

The apparel industry ranks second in manufacturing employment in Georgia. Over 67,200 persons now work in 441 plants located in 123 counties throughout the state -- a net increase of 10,000 workers between 1963 and 1966.

This industry is a major source of employment in all regions of Georgia, but the greatest concentration of workers is still in the northern half of the state. The number of plants in the Fulton-DeKalb area decreased from 89 to 83 between 1963 and 1966, but employment increased by nearly 800 workers to 8,500 in 1966. Haralson County is second in importance with some 3,400 workers in seven establishments -- up from 2,600 workers in five establishments in 1963. Ten counties have employment in the 1,000 to 2,500 range (compared with seven in 1963). In descending order of employment size, these are Carroll, Clarke, Barrow, Toombs, Walton, Jackson, Troup, Lowndes, Laurens, and Emanuel counties -- with a combined total of over 15,400 workers in the apparel industry.

Over 57% of the employment in this industry is in the manufacture of men's and boys' clothing, and a further 28% is in women's and children's apparel. Separate maps (Maps 4-A and 4-B) show the distribution of plants and employment in these two categories. The remaining 15% of employment is made up of a variety of operations and is analyzed below.

Miscellaneous Apparel and Related Products (SIC 235, 238, 239)

This group of 171 companies makes an assortment of house furnishings, robes, gloves, textile bags, canvas products, and other miscellaneous apparel and textile products. The plants employ over 10,000 workers and are scattered throughout 49 counties. The greatest concentration is in the northern part of the state, with the Fulton-DeKalb area accounting for one-third of the plants and over 26% of the workers.

House furnishings (SIC 2391 and 2392) are manufactured by 74 companies and include such items as draperies, curtains, bedspreads (not made in weaving mills), cushions, pillows, and dust mops. Several of the firms also make other items, in the apparel line as well as nonrelated products; consequently, there are some duplication in references to plants and some estimation of the breakdown of the total employment of these plants by product types. (See paragraph

2, page 19.) The estimated number of workers making house furnishings is 3,100, and the plants are located in 31 counties.

Millinery (SIC 2351) is made by five companies -- three in Fulton County, one in Clayton County, and one in Carroll County. The plant in Carroll County also makes men's and boys' hats and caps (SIC 2352), as do five other companies located in the Atlanta area (Fulton County). Roughly 350 workers are engaged in making various types of headgear in these 10 firms.

Three plants in Chattooga County make work gloves (SIC 2381), and two other glove manufacturers are in Bartow and Floyd counties. The combined employment is over 1,200 workers.

Seven companies employ 450 to 500 workers in the making of robes (SIC 2384) -- two each in Whitfield and Gordon counties and three others in Burke, Spalding, and Sumter counties.

Six companies now manufacture raincoats or some kind of waterproof outer garments (SIC 2385). Two plants in Wilkes County are owned by the same company; the other four are in Coffee, Early, Gwinnett, and Wayne counties. Other items are made by some of these firms, with employment in the production of rainwear being estimated at between 700 and 750 workers.

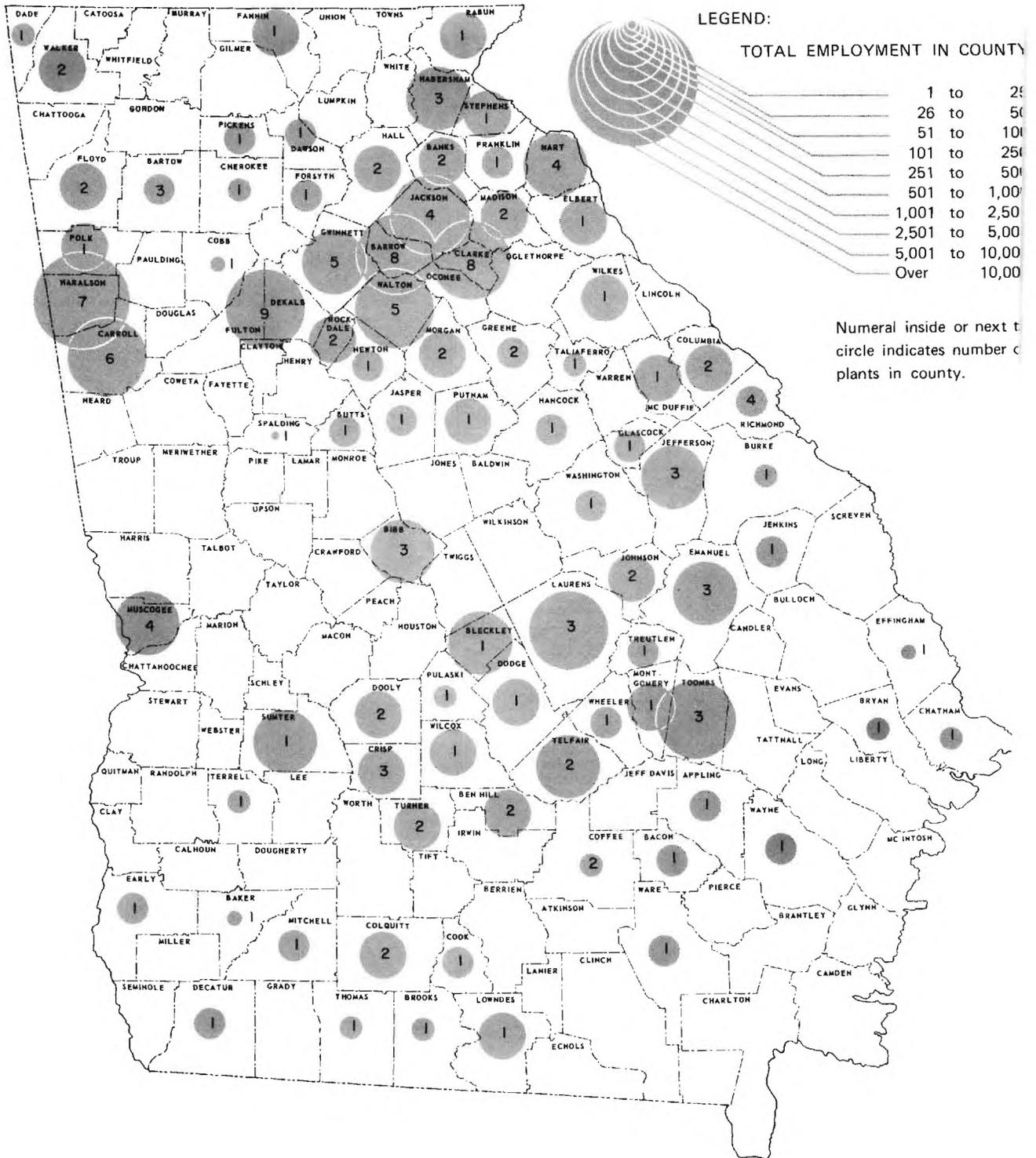
Apparel belts, handkerchiefs, suspenders, and miscellaneous apparel items such as waistbands, interlinings, and shoulder pads (SIC 2387, 2389, and 2396) are made by 18 companies. Eight of these are in the Fulton-DeKalb area, and the other 10 are in Barrow, Coweta, Floyd, Hall, Henry, Jeff Davis, Meriwether, Richmond, Spalding, and Towns counties.

Only one company is recorded as doing quilting work (SIC 2395) in Georgia -- a small plant located in Atlanta. One plant in Gwinnett County manufactures Schiffli embroideries (SIC 2397).

Other fabricated textile products in this miscellaneous group include textile bags, canvas goods, auto seat covers, flags, and drop cloths (SIC 2393, 2394, and 2399). Some 61 companies employ nearly 3,400 workers in the production of these items. The Fulton-DeKalb area accounts for 24 of the plants and 55% of the employment; the other companies are dispersed throughout the state, usually in the more urban counties.

As indicated earlier, many companies make miscellaneous apparel items in conjunction with other products -- often as a sideline. Some sizable establishments, however, specialize in these goods. Among the largest of these in Georgia are Callaway Mills Company, Kex Plant (LaGrange, Troup County) -- industrial wipers and cover products; Best Manufacturing Corporation, Division Tillotson Corporation (Menlo, Chattooga County) -- work gloves; Texon, Inc., Textile Products Division (Atlanta, Fulton County) -- synthetic fiber belt backing; Kellwood Company, Georgia Decor Division (Perry, Houston County) -- bedspreads and draperies; Almar Rainwear Corporation (Washington and Tignall, both in Wilkes County) -- plastic rainwear and all-weather fabric rainwear; and Homestead Draperies Division, United Merchants and Manufacturers (Augusta, Richmond County) -- draperies, bedspreads, pillowcases. Each of the companies listed employs over 400 workers.

MAP 4-A MEN'S AND BOYS' CLOTHING



APPAREL AND RELATED PRODUCTS

Men's and Boys' Clothing (SIC 231 and 232)

Over 38,400 workers are now employed in the manufacture of men's and boys' clothing in Georgia, compared with some 32,300 in 1963. The number of plants has increased from 155 to 169; they are located in 84 counties, compared with 78 in the earlier year.

Haralson County gained about 800 employees between 1963 and 1966, and with nearly 3,400 workers in seven plants, now leads in employment size. The Fulton-DeKalb area is second with some 2,400 employees in nine plants. Other counties with over 1,000 workers each are Carroll, Barrow, Clarke, Walton, Toombs, Jackson, and Laurens -- in descending order of employment size.

Except for Atlanta, the metropolitan counties are not outstanding as employment centers. Plants of all sizes have located in rural or semi-rural areas, in many cases to take advantage of the supply of workers displaced from agricultural jobs as the farms became mechanized. Since many of the jobs in apparel factories are unskilled or semiskilled, many former farm workers are readily trained for such work.

Many of the factories make more than one type of garment, but the manufacture of shirts employs roughly one-third of the workers in this industry group. The largest shirt-making plant is in Fulton County, but there are many other sizable establishments in other areas. Individual plants with over 500 employees engaged in shirt-making are located in Schley, Sumter, and Toombs counties.

Nearly 30% of the workers making men's and boys' clothing produce separate trousers. The largest individual company is in Haralson County, which also has the greatest total of employees making separate trousers. Three plants so engaged give employment to over 1,000 workers. Barrow and Clarke counties also have high employment figures -- each with nearly 1,000 workers in this section of the industry.

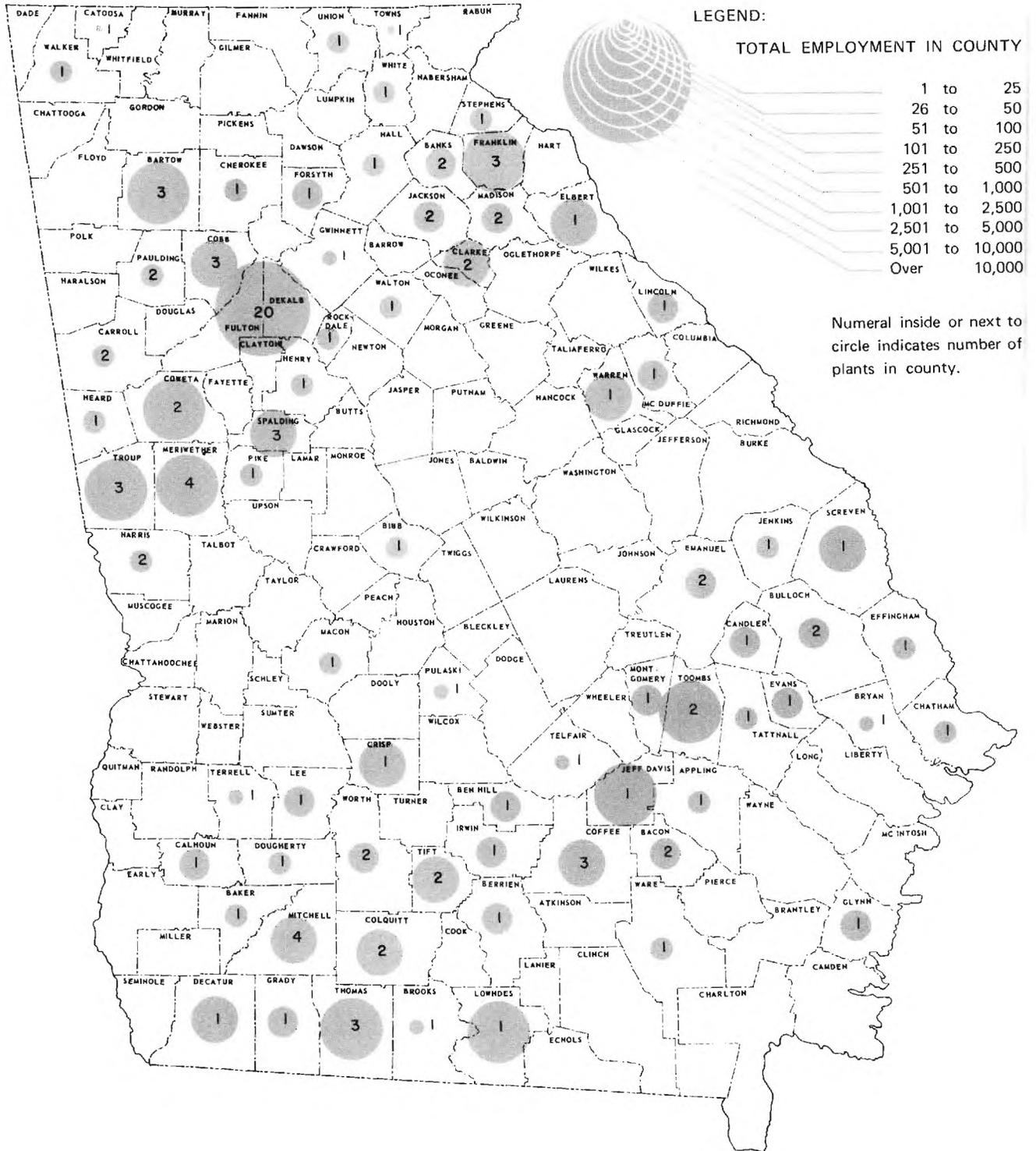
Suits and overcoats are next in employment size with more than 6,700 workers (over 17% of this industry group). The two largest plants are in Haralson and Carroll counties; the six plants turning out suits and overcoats in these

two counties account for over one-half the state's work force in this type of garment making.

Work clothing manufacture accounts for nearly 14% of the workers in the men's and boys' clothing classification. Although many of the plants also manufacture other types of apparel, several sizable factories concentrate on work clothes. Jackson, Banks, Colquitt, and Hart counties all have individual plants of 300 or more employees recorded as producing work clothes only.

Among the major companies manufacturing men's and boys' clothing in Georgia are The Arrow Company, Division of Cluett, Peabody and Company, Inc. (Atlanta, Fulton County; Bremen and Buchanan, both in Haralson County; and Cedartown, Polk County) -- shirts; Carwood Manufacturing Company, Division of Chadbourn-Gotham, Inc. (Winder, Barrow County; Baldwin, Banks County; Lavonia, Franklin County; two plants in Monroe, Walton County; and two plants in Cornelia, Habersham County) -- work clothing, trousers, shirts, jackets, etc.; Sewell Manufacturing Company (Bremen, Haralson County, and Temple, Carroll County) -- suits, sports coats, pants, vests; The Manhattan Shirt Company (Americus, Sumter County; Jesup, Wayne County; and Ashburn, Turner County) -- shirts and pajamas; Bremen-Bowdon Investment Company (Bowdon, Carroll County) -- men's suits, coats, and vests; and Thomson Company (Thomson, McDuffie County; Millen, Jenkins County; and Harlem and Martinez, both in Columbia County) -- trousers and men's and ladies' slacks.

MAP 4-B WOMEN'S AND CHILDREN'S CLOTHING



APPAREL AND RELATED PRODUCTS

Women's and Children's Clothing (SIC 233, 234, 236)

The number of workers making women's and children's clothing increased from 16,600 in 1963 to over 18,400 in 1966. The number of plants decreased by two, to 128; they are located in 75 counties, compared with 73 counties in the earlier year.

The Fulton-DeKalb area continues to lead in employment. There are now 20 plants in the two counties, providing jobs for over 3,300 workers. Nine other counties have over 500 employees each -- Bartow, Coweta, Franklin, Jeff Davis, Lowndes, Meriwether, Thomas, Toombs, and Troup -- with a combined total of over 5,200 workers. Except for Atlanta, the metropolitan counties are not outstanding as employment centers, and, as with the men's and boys' clothing, plants of all sizes have located in rural or semirural areas.

Over 40% of the workers in women's and children's clothing are engaged in the manufacture of underwear, nightwear, and foundation garments. The Fulton-DeKalb area leads in this category with nearly 1,500 workers in four plants, most of the employment being in one plant. Five other counties have over 500 workers each -- Bartow, Coweta, Jeff Davis, Thomas, and Toombs -- and a combined employment of nearly 2,800 workers in nine plants.

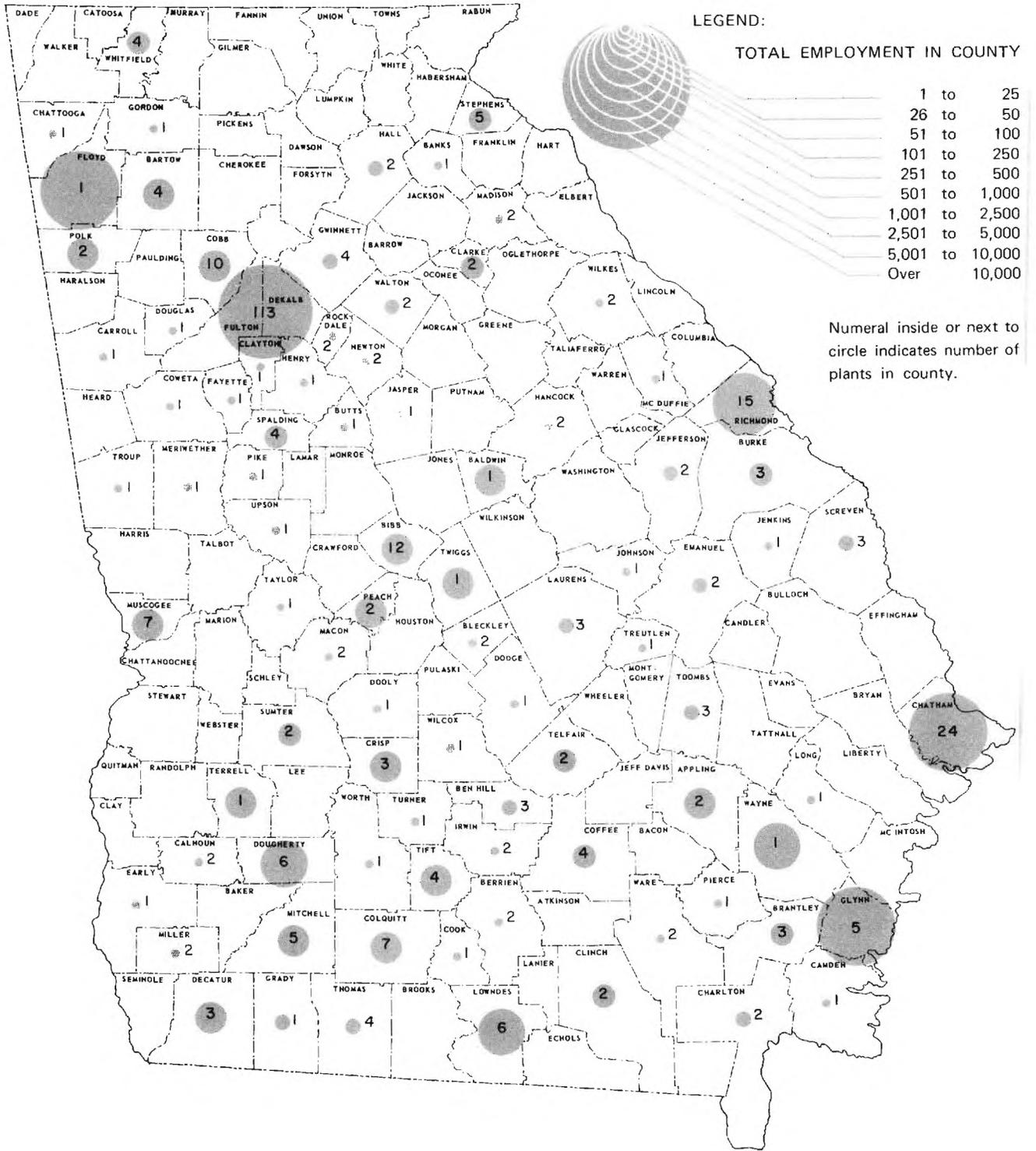
Suits, skirts, coats, and other outerwear, such as sports clothes, account for a further 38% of employment in women's and children's apparel. An estimated 900 employees produce these garments in 10 plants in the Fulton-DeKalb area (many of the companies also make other types of apparel). Some 62 other plants are widely scattered throughout the state in 49 counties. In general, there are fewer workers per establishment than in the underwear and foundation plants, but the size varies considerably, from operations run by less than 10 persons to plants employing several hundred workers.

Dresses, blouses, and shirts are manufactured by 31 plants in 21 counties. Many of the companies also make other types of apparel, but employment on this group of garments is estimated at nearly 2,800 workers. Franklin and Elbert counties and the Fulton-DeKalb area account for nearly half of this employment.

Major companies in the women's and children's clothing industry in Georgia are The Lovable Company (Atlanta, Fulton County) -- brassieres, girdles,

panties, and garter belts; International Latex Corporation (Newnan, Coweta County; LaGrange, Troup County; and Manchester, Meriwether County) -- foundation garments, shower caps; Hazlehurst Manufacturing Company (Hazlehurst, Jeff Davis County, and Vidalia, Toombs County) -- lingerie; Warner Brothers Company (Thomasville, Thomas County, and Moultrie, Colquitt County) -- foundation garments; Fawn Togs, Inc. (Atlanta, Fulton County) -- children's wear; and Garland Knitting Mills of Georgia, Inc. (Warrenton, Warren County) -- ladies' pants and skirts.

MAP 5 CHEMICALS AND ALLIED PRODUCTS



CHEMICALS AND ALLIED PRODUCTS
(SIC 28)

Employment in the chemical industry as recorded by the manufacturing directories increased from 13,500 workers in 1963 to 15,200 workers in 1966. There are now 351 plants located in 88 counties of the state.

Map 5 on the facing page shows the distribution of the total industry. The locations of plants in three subsidiary groups of chemical products -- industrial inorganic and organic chemicals, cleaning and toilet goods, and fertilizers -- are given in Maps 5-A, 5-B, and 5-C, respectively.

The greatest concentration of employment and plants in the chemical industry is in the Fulton-DeKalb area, where 113 companies employ 4,400 workers. Chatham, Floyd, and Glynn counties are next in employment size (in that order), with a combined employment of over 4,800 workers. These five counties together represent 61% of the industry's employment and 41% of the plants.

The Atlanta area (Fulton-DeKalb) manufactures a wide range of chemical products, with a strong emphasis on soap, detergents, and cleaning preparations, and on paints, varnishes, and related products. Industrial inorganic chemicals are important in Chatham County, as is the production of fertilizers. Floyd County is dominated by the state's largest chemical plant, manufacturing cellulosic man-made fibers. In Glynn County, the major source of employment is in the production of gum and wood chemicals and insecticides.

The three subsidiary groups shown on separate maps account for 58% of the total employment in Georgia's chemical industry. Next in importance to these three is the production of gum and wood chemicals, with an estimated 1,600 employees in 27 plants located in 19 counties. This industry is concentrated in the southeastern part of the state, with roughly three-quarters of the workers in Glynn, Chatham, Lowndes, Wayne, and Appling counties.

Although only eight companies produce plastics materials and man-made fibers, this industry group is important from an employment point of view since it includes the largest chemical plant in the state -- the Celanese Fibers Company -- in Floyd County. There are four other small companies in the Fulton-DeKalb area, and one each in Chatham, Cobb, and Lowndes counties. The total number employed is nearly 1,600, with the major company accounting for over 90% of the workers.

Paints, varnishes, and allied products are manufactured by 39 companies in 10 counties; they have a total of 1,200 workers. Over 73% of the workers are employed by the 23 plants located in the Fulton-DeKalb area. Glynn County, with two plants, and Stephens County, with three, have about 100 employees each. Other counties with more than one plant are Chatham, three; Bibb, Cobb, and Gwinnett, two each. Muscogee and Rockdale counties have one plant each.

Drugs, including various pharmaceutical products, are prepared by 20 companies with a total of nearly 700 employees. Half of the plants and 40% of the workers are in the Fulton-DeKalb area, but the largest individual companies are in Baldwin and Dougherty counties. Bibb, Chatham, and Hall counties have two small manufacturers each, and Irwin and Worth counties have one firm each.

Agricultural pesticides are produced in 23 companies widely scattered in 20 counties throughout the state. Most of the plants also manufacture other chemicals; consequently, the number of workers actually making agricultural pest control products was estimated -- at 400.

Sixteen companies make printing ink, with all but five located in the Fulton-DeKalb area. Camden, Chatham, Cobb, Gwinnett, and Twiggs counties have one plant each. All the companies are small, with the exception of the one in Twiggs County, and here the manufacturing of ink is of secondary importance to the refining of kaolin clay.

Ten companies make glue, gelatin, and adhesives. These are all small operations with the exception of one of the six firms in the Fulton-DeKalb area, which employs over 100 workers. Clayton, Cobb, Rockdale, and Lowndes counties have one plant each.

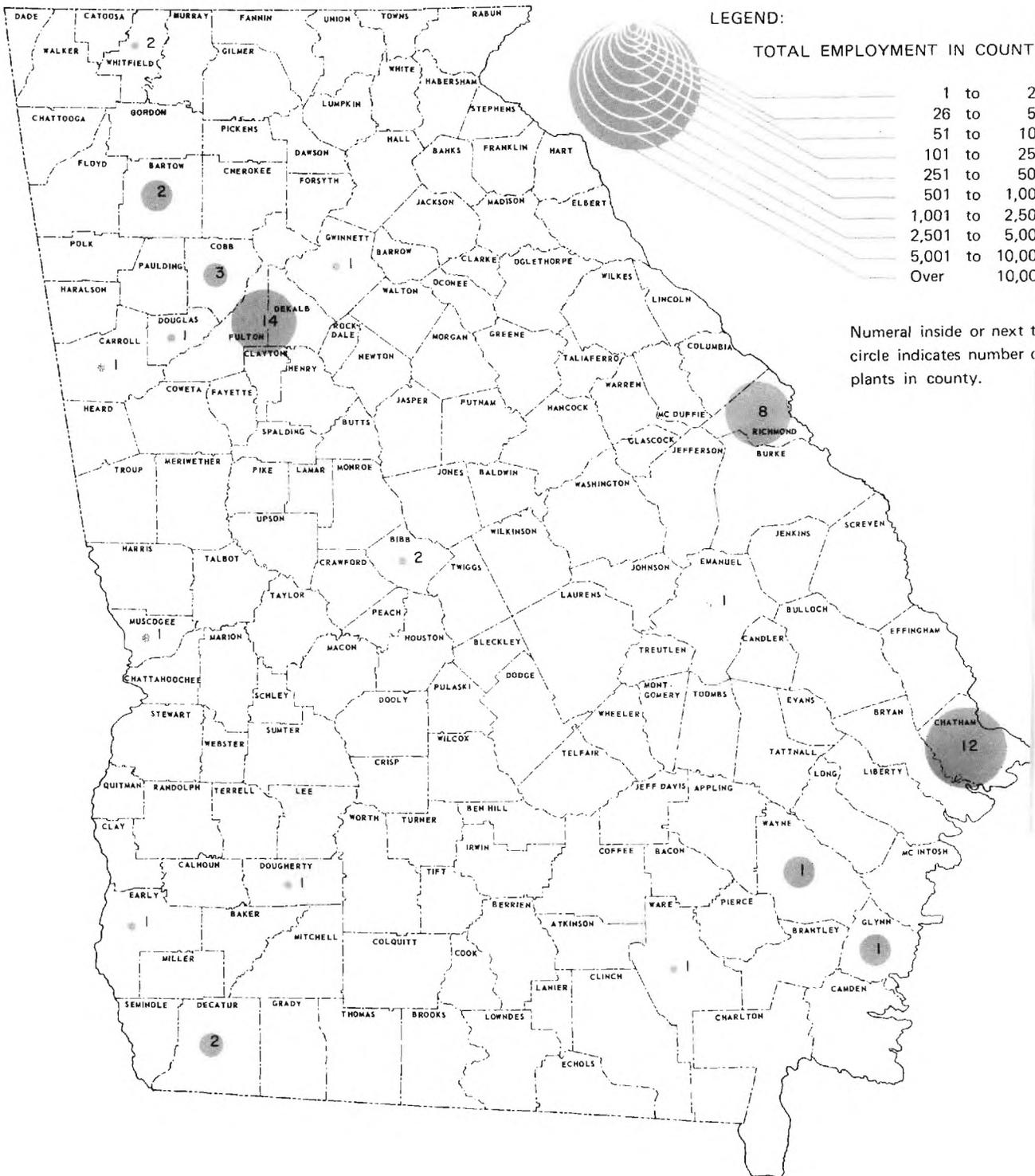
The remaining chemical companies are all small and manufacture miscellaneous products, such as water-treating compounds and bleaching agents.

Georgia's largest chemical plant has already been mentioned -- Celanese Fibers Company, Division of Celanese Corporation (Rome, Floyd County) -- rayon and acetate yarns. Other major employers are Hercules Powder Company, Inc. (Brunswick, Glynn County, and Savannah, Chatham County) -- pine and paper chemicals and insecticides; and Kaiser Agricultural Chemicals Division of Kaiser Aluminum and Chemical Corporation^{1/} (Savannah, Chatham County, and Bainbridge,

^{1/} Formerly Southern Nitrogen Company.

Decatur County) -- fertilizer, urea, nitrogen solutions, ammonia, and nitric acid.

MAP 5-A INDUSTRIAL INORGANIC AND ORGANIC CHEMICALS



CHEMICALS AND ALLIED PRODUCTS

Industrial Inorganic and Organic Chemicals (SIC 281)

Over 22% of the employees in Georgia's chemical industry are engaged in the production of industrial inorganic and organic chemicals. The state contains 55 plants, which give employment to nearly 3,400 people in 19 counties. Most of the employment, however, is concentrated in four counties; Chatham, Richmond, and the Fulton-DeKalb area account for 78% of the workers in a total of 34 plants.

Many of the companies produce more than one form of chemical, so the numbers of workers manufacturing the different products are necessarily rough estimates. Eleven plants prepare industrial gases -- four in the Fulton-DeKalb area, two each in Chatham and Richmond counties, and one each in Decatur, Dougherty, and Ware counties -- with a combined employment of some 400 workers. Four companies make inorganic pigments -- two in Chatham County, one in Fulton County, and one in Bartow County; these plants have a combined employment of between 200 and 300 workers.

Only three firms, with a total of some 250 workers, make alkalies and chlorine -- two in Richmond County and one in Glynn County. Another three companies -- in Bartow, Richmond, and Whitfield counties -- produce dyes and organic pigments, the number engaged on these products being estimated at less than 100 workers.

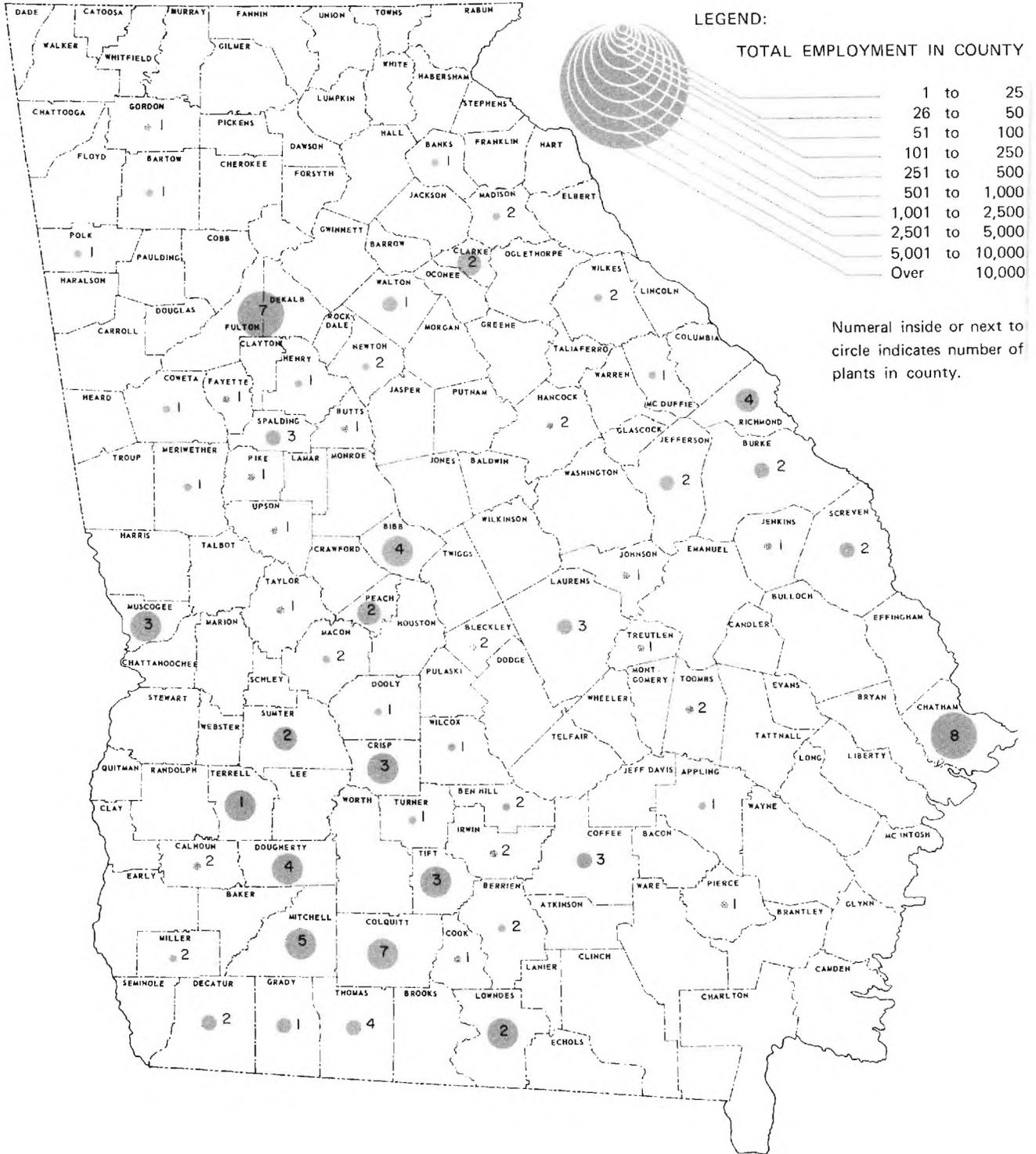
The greatest number of companies is in the miscellaneous classification of industrial inorganic chemicals. Nine plants in the Fulton-DeKalb area, eight in Chatham County, and four in Richmond County are listed among the 33 companies producing various types of inorganic chemicals, with some emphasis on the production of sulfuric acid.

Eleven firms come under the category of "industrial organic chemicals not elsewhere classified." Chatham and Richmond counties have two plants each; Carroll, Cobb, DeKalb, Douglas, Emanuel, Gwinnett, and Wayne counties have one each.

Among the major companies producing industrial inorganic and organic chemicals (excluding plants where the production of chemicals is subsidiary to the major operation, such as the big pulp and paper companies) are Kaiser

Agricultural Chemicals Division of Kaiser Aluminum and Chemical Corporation (Savannah, Chatham County, and Bainbridge, Decatur County) -- fertilizer, urea, nitrogen solutions, ammonia, and nitric acid; Columbia Nitrogen Corporation (Augusta, Richmond County) -- nitrogen solutions, industrial inorganic chemicals; and Columbia Nipro Corporation (Augusta, Richmond County) -- caprolactam chemicals, ammonium sulfate.

MAP 5-B AGRICULTURAL CHEMICALS



CHEMICALS AND ALLIED PRODUCTS

Agricultural Chemicals (SIC 287)

Nearly 20% of the employees in the state's chemical industry are engaged in the production of agricultural chemicals. A total of 126 plants provide jobs for nearly 3,000 people in 60 counties.

Between 1,100 and 1,200 workers manufacture basic fertilizer materials in 21 plants, six of them located in Chatham County. Bibb, Colquitt, and Crisp counties have two plants each, and the other nine are in Bartow, Clarke, Decatur, Fulton, Lowndes, Mitchell, Muscogee, Richmond, and Sumter counties.

The majority of companies in this industry group, however, mix the fertilizer from purchased materials. Most of these mixing plants are comparatively small operations, and many of them, particularly the larger ones, prepare other products, such as feed, peanut oil, and pesticides. An estimated 1,200 workers are employed in the fertilizer mixing operations of 89 plants scattered throughout the state.

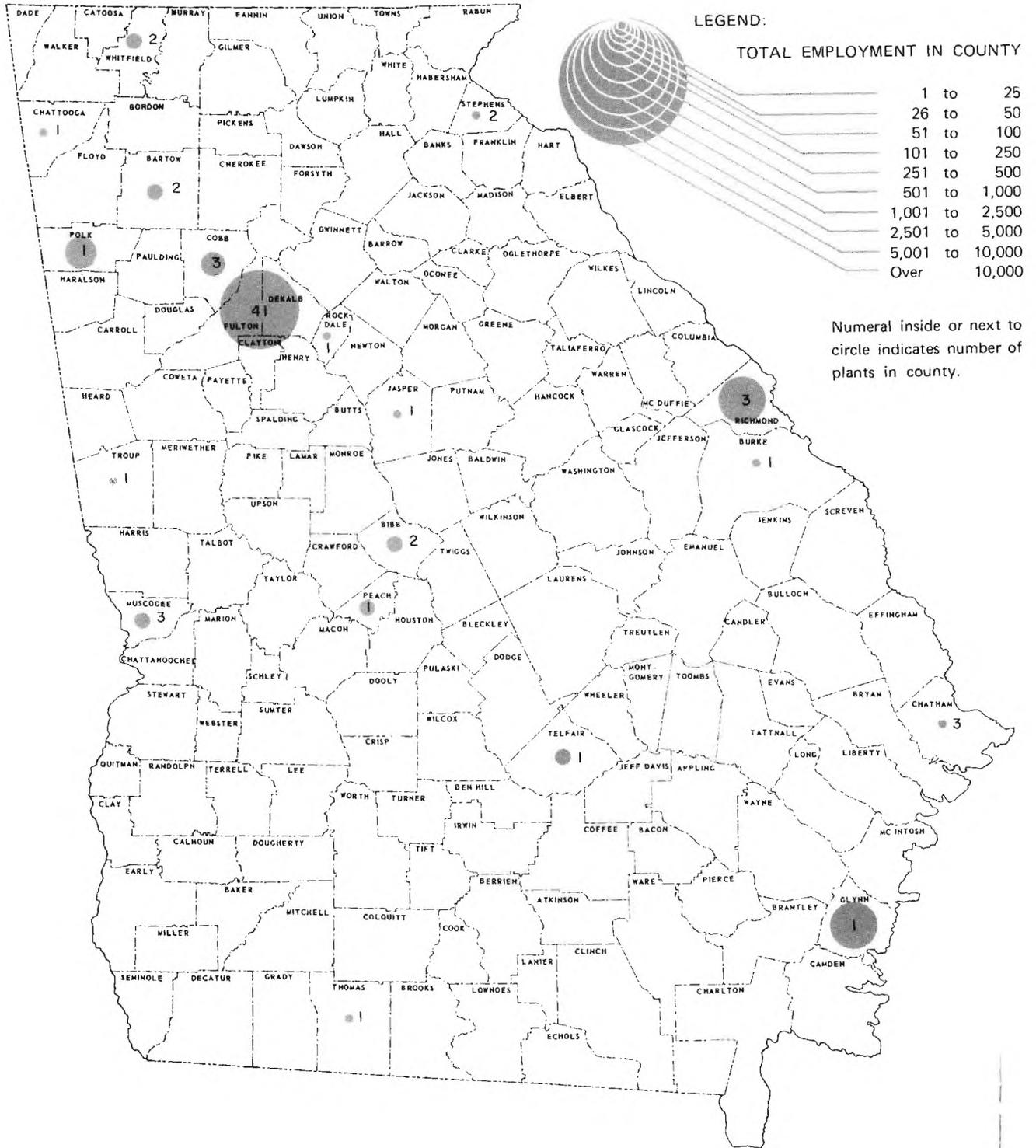
Agricultural pesticides are produced by 23 companies in 20 counties in Georgia, usually in conjunction with some other chemical or food product. Employment in the pesticide sections of these plants is estimated at over 400 workers.

Five companies producing such items as plant food and soil conditioners complete this agricultural chemicals group, with a combined employment of some 200 workers.

Major companies whose prime interest is in the production of agricultural chemicals include Kaiser Agricultural Chemicals Division of Kaiser Aluminum and Chemical Corporation (Savannah, Chatham County, and Bainbridge, Decatur County) -- fertilizer, urea, nitrogen solutions, ammonia, and nitric acid; C. O. Smith Guano Company (Moultrie, Colquitt County, and Douglas, Coffee County) -- fertilizer mixing and feeds; International Minerals and Chemical Corporation (Americus, Sumter County; East Point, Fulton County; Augusta, Richmond County; and Tifton, Tift County) -- fertilizer, superphosphate; and The Tennessee Corporation (East Point, Fulton County) -- plant food, agricultural chemicals.

MAP 5-C

SOAP, DETERGENTS, AND CLEANING PREPARATIONS, PERFUMES, COSMETICS, AND OTHER TOILET PREPARATIONS



CHEMICALS AND ALLIED PRODUCTS

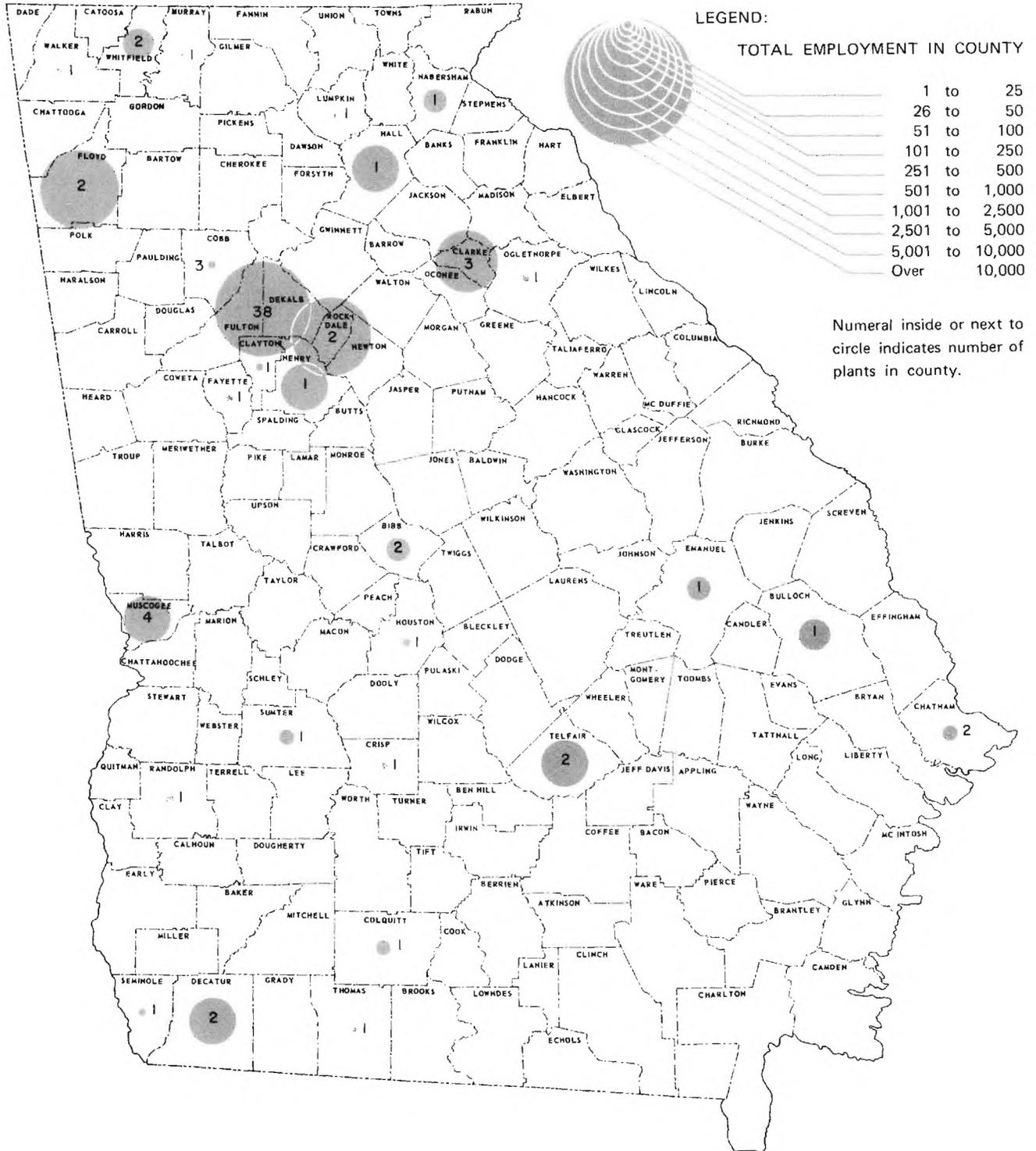
Soap, Detergents, and Cleaning Preparations, Perfumes, Cosmetics, and Other Toilet Preparations (SIC 284)

The group of manufacturers producing cleaning and toilet goods accounts for 19% of the employment in Georgia's chemical industry. Nearly 2,900 workers are employed by 71 plants in 20 counties. The Fulton-DeKalb area is still the most important location, with 41 plants and some 1,800 employees; however, production of these goods has expanded throughout the state, and although employment in the Atlanta area has increased since 1963, its proportion of workers has dropped from 80% to 62% of the total.

Some factories produce a range of varied cleaning and toilet goods, but 52 of the plants have at least part of their output in industrial cleaning preparations and household insecticides. Only five plants are listed as making cosmetics and other toilet items -- four in the Fulton-DeKalb area and one in Chatham County.

Companies with the major part of their operations concentrated in this industry group include Hill Manufacturing Company (Atlanta, Fulton County) -- cleaning compounds, insecticides; Procter and Gamble Manufacturing Company (Augusta, Richmond County) -- synthetic detergents; Puritan Chemical Company (Atlanta, Fulton County) -- specialty cleaners; Zep Manufacturing Company, Division of National Service Industries (Atlanta, Fulton County) -- industrial cleaning and sanitation chemicals; and Boyle-Midway, Division American Home Products Corporation (Chamblee, DeKalb County) -- waxes, insecticides, and cleaners.

MAP 6 ELECTRICAL MACHINERY, EQUIPMENT, AND SUPPLIES



ELECTRICAL MACHINERY, EQUIPMENT, AND SUPPLIES
(SIC 36)

Employment in the electrical machinery industry has increased substantially in recent years. The 1963 figures quoted in the last Manufacturing Atlas gave a total employment of 5,800 workers, in 61 companies located in 22 counties. The map on the facing page distributes a total of 8,800 employees who work in 80 plants, located in 30 Georgia counties.

The Fulton-DeKalb area still holds the greatest concentration of plants and employees, but the area's proportion of the industry has decreased. In 1963 some 40% of the workers held jobs in these two counties. This figure has now dropped to 30% even though in actual numbers there has been an increase from 2,300 to 2,600 workers. Floyd, Rockdale, and Clarke counties are next in employment size; together, these three counties, with a total of seven plants, employ almost 44% of the industry's workers.

Nearly 47% of the workers in this industry manufacture electrical transmission and distribution equipment. There are 15 plants in this category -- 10 of them in the Fulton-DeKalb area and the other five in Clarke, Emanuel, Floyd, Henry, and Muscogee counties.

Over 1,300 workers make electric lighting and wiring equipment in 12 plants. Seven of the companies are in the Fulton-DeKalb area, but the bulk of the employment is in Rockdale County. The other four plants are in Crisp, Muscogee, Sumter, and Telfair counties.

Five of the eight companies making storage batteries are in Fulton County, and Chatham, Muscogee, and Rockdale counties have one plant each. The workers for the eight plants total nearly 600, of whom 69% are in Fulton County.

Nine companies produce electrical equipment for internal combustion engines; four of the plants are in the Fulton-DeKalb area and the other five in Clarke, Decatur, Habersham, Lumpkin, and Oglethorpe counties. Estimated employment in this category (three of the firms also produce other items) is 700 workers.

Electrical industrial apparatus (motors and generators, industrial controls, welding apparatus, etc.) is manufactured by 11 companies in seven counties with an estimated work force of between 700 and 800. Six of these plants

are in the Fulton-DeKalb area, and Chatham, Colquitt, Fayette, Hall, and Randolph counties have one each.

Household appliances are made by seven companies. These are mostly small operations, with the exception of one plant in Telfair County and one in Muscogee; the latter, however, produces appliances as its second line of products. Between 300 and 400 workers are estimated to hold jobs manufacturing household appliances.

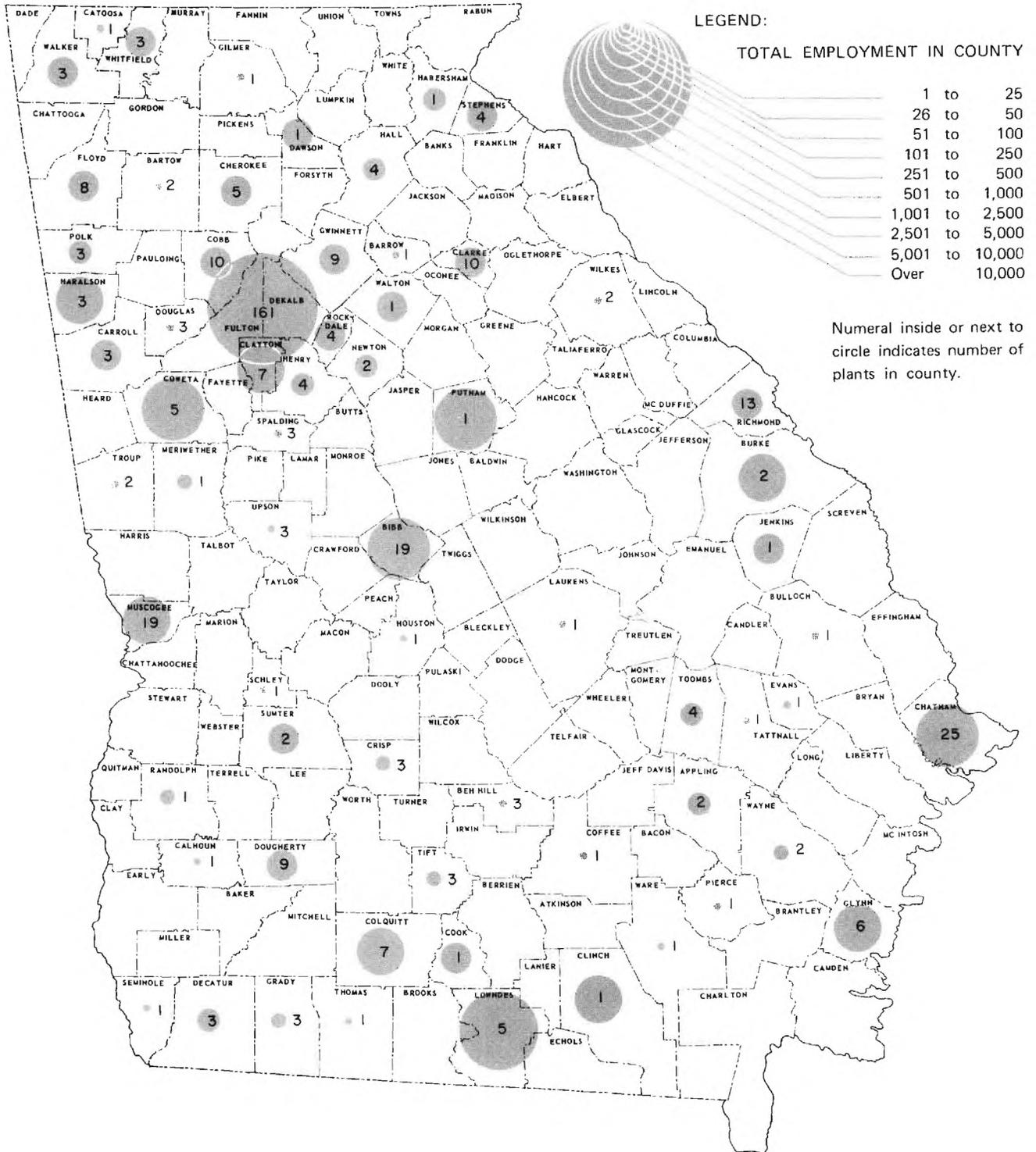
Six companies make radio and television transmitting, signaling, and detection equipment -- two in the Fulton-DeKalb area and one each in Bibb, Clayton, Floyd, and Murray counties, with a combined employment of between 400 and 500 workers. Two companies, in Fulton and Whitfield counties, make telephone and telegraph apparatus, providing jobs for over 150 people.

One firm in DeKalb makes phonograph records and tapes, and another in Fulton manufactures lecterns with public address systems. Two companies, one in DeKalb and one in Thomas County, make or rebuild cathode ray picture tubes. Total employment for these four companies is less than 100 workers.

In addition to the foregoing, a miscellaneous variety of electronic components and electric equipment is produced in eight other companies throughout the state. Three are located in Cobb County and one each in Bibb, Bulloch, Chatham, Fulton, and Houston counties. Most of these operations also produce other electronic and nonelectronic items.

Plant size in this industry group varies from a one-man operation to factories employing several hundred workers. Major companies include General Electric Company, Medium Transformer Department (Rome, Floyd County) -- medium power transformers; Lithonia Lighting, Inc. (Conyers, Rockdale County) -- fluorescent and incandescent light fixtures; Westinghouse Electric Corporation, Transformer Division (Athens, Clarke County) -- transformers; and Walker Division, I-T-E Circuit Breaker Company (Atlanta, Fulton County) -- electric service equipment.

MAP 7 FABRICATED METAL PRODUCTS



FABRICATED METAL PRODUCTS
(SIC 34)

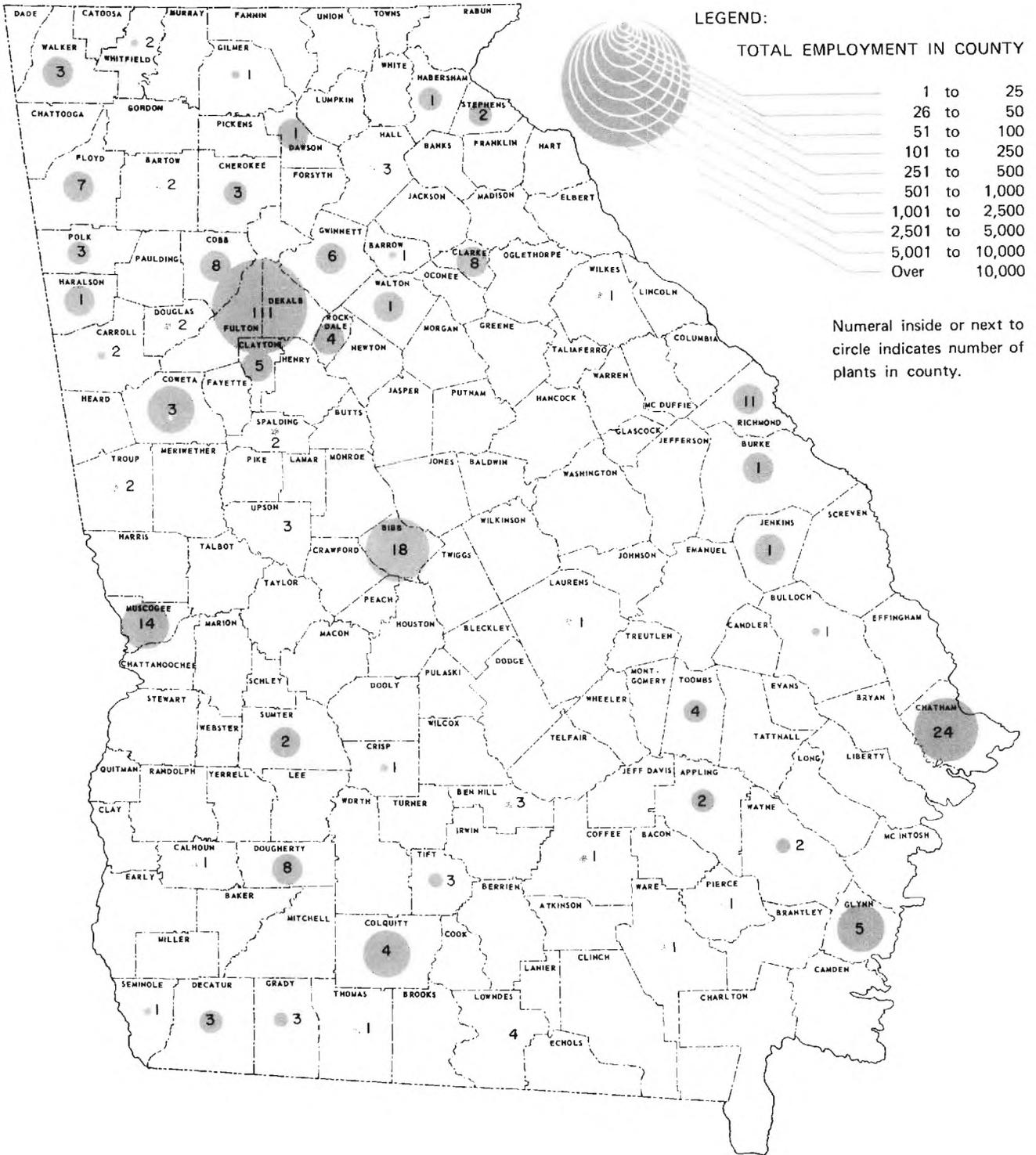
The fabricated metal industry in Georgia has continued to show steady growth, and now provides employment for some 15,300 workers in 417 plants located in 67 counties throughout the state.

As Map 7 on the facing page clearly shows, the Fulton-DeKalb area has by far the greatest concentration of both companies and employment. These two counties have 39% of the total number of plants and one-third of all the workers in this industry. The next five counties in order of employment size are Lowndes, Chatham, Bibb, Coweta, and Putnam counties, with a combined total of 55 plants and just over 23% of the total number of workers.

This industry in Georgia is strongly oriented to the fabrication of structural metal products. This category accounts for 74% of all the plants and nearly 60% of the employment; its distribution throughout the state is given on Map 7-A. Map 7-B summarizes all the other types of fabricated metal products.

Since the subsidiary maps in this case cover all parts of the industry, major companies are listed at the end of the appropriate section.

MAP 7-A FABRICATED STRUCTURAL METAL PRODUCTS



FABRICATED METAL PRODUCTS

Fabricated Structural Metal Products (SIC 344)

Fabricated structural metal products include fabricated structural steel; metal doors, sash, frames, molding, and trim; fabricated plate work (boilers, tanks, etc. -- including nuclear reactors); sheet metal work; and architectural and miscellaneous metal work. Over 9,000 workers are employed by 309 companies located in 55 counties throughout the state. The major concentration is in the Fulton-DeKalb area, where 111 plants employ nearly 3,200 workers. Chatham and Bibb counties are next in rank of both employment size and number of plants, with a combined total of 42 plants and nearly 1,300 workers.

Sheet metalworking is done by over 2,200 workers in 141 out of the 309 plants manufacturing structural metal products. Most of these plants are small operations employing under 25 workers. Four companies have over 100 workers each, but all of them have additional lines of production.

Makers of metal doors, sash, frames, molding, and trim also tend to be small operations, with the larger companies having a wider range of products. The biggest company, however (in Atlanta), specializes in this type of metal work and employs over 30% of the 2,100 workers of this industry group.

Sixty-six companies are engaged in manufacturing fabricated iron and steel or other metal for structural purposes -- for buildings, bridges, and ships. The plants vary in size from a two-man operation to factories employing several hundred men. Most of the companies, regardless of size, also produce other types of metal work, and the combined employment of those engaged in producing fabricated structural steel can be roughly estimated only -- at some 2,000 workers.

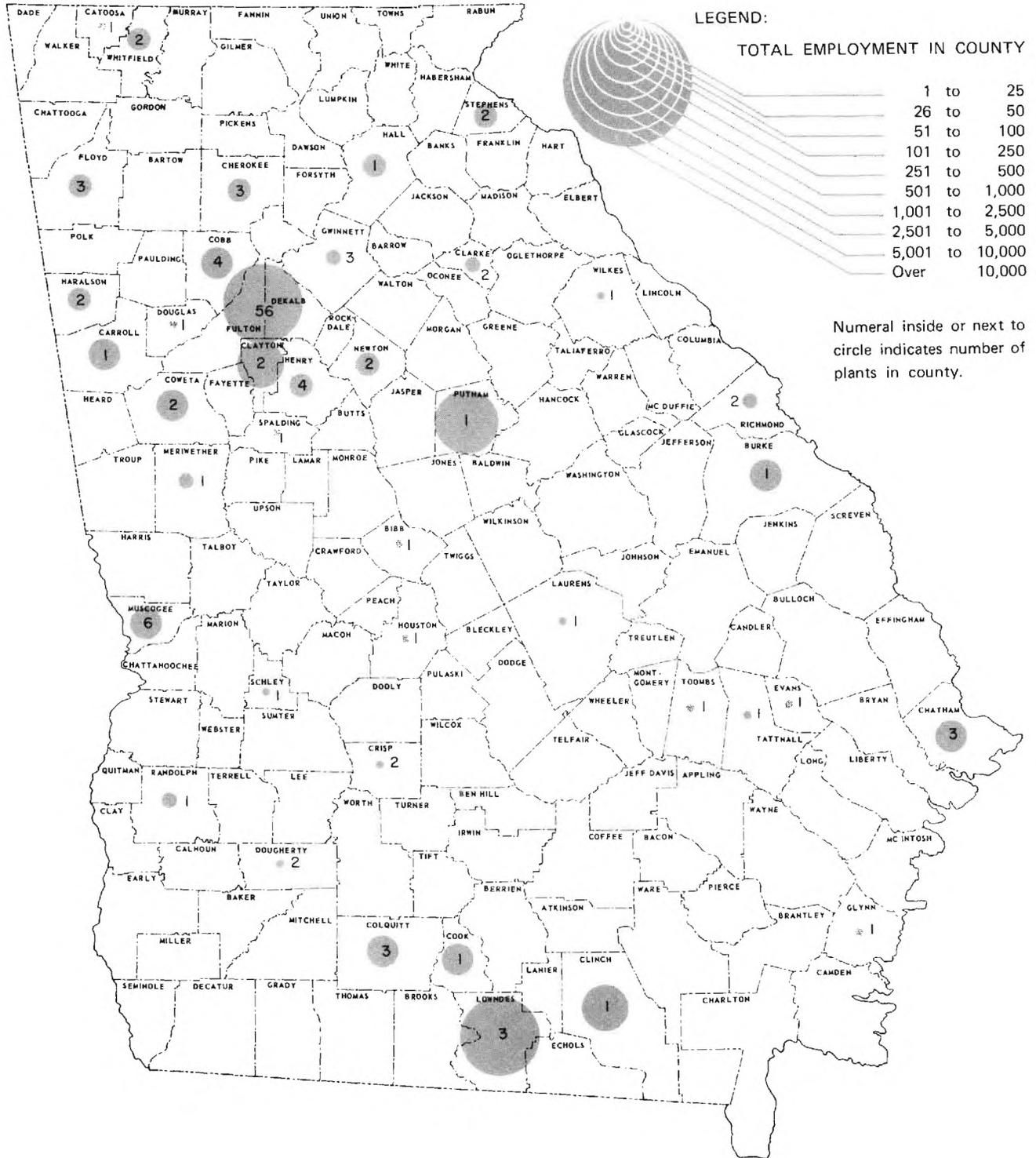
Various kinds of plate work are done by 26 boiler shops. Although half of these plants make other items too, the emphasis is on the production of boilers, tanks, and similar products. Total employment in this work is estimated at 1,600.

The last classification of structural metal products comprises architectural and miscellaneous metal work, such as staircases, gratings, and ornamental ironwork. Sixty-five companies throughout the state manufacture these products, often in conjunction with other types of metal work. Only three

firms have more than 100 employees -- the main operation of one is in corrugated metal pipe and structural steel rather than architectural metal work, but the other two (the largest companies in this architectural and miscellaneous metal work group) make pre-engineered steel buildings in Muscogee and Haralson counties.

Among the larger firms in the state primarily engaged in manufacturing fabricated structural metal products are Amarlite Division, Anaconda Aluminum Company (Atlanta, Fulton County) -- store fronts, doors, curtain walls; Savannah Machine and Foundry Company (Savannah, Chatham County) -- brass-aluminum structural steel items, ductile and grey iron, ship building and repairing; The Babcock and Wilcox Company (Brunswick, Glynn County) -- fabricated steel boilers and parts; Tucker Aluminum Products, Inc. (Moultrie, Colquitt County) -- aluminum window products, sliding glass doors and components; R. D. Cole Manufacturing Company (Newnan, Coweta County) -- elevated, pressure tanks; Dixisteel Buildings, subsidiary Atlantic Steel Company (Tallapoosa, Haralson County) -- steel buildings, building parts, materials; and Brock and Blevins Company, Inc. (Rossville, Walker County) -- tanks, pressure vessels, steel fabrication, piping.

MAP 7-B FABRICATED NONSTRUCTURAL METAL PRODUCTS



FABRICATED METAL PRODUCTS

Fabricated Nonstructural Metal Products (SIC 341, 342, 343, 345, 346, 347, 348, 349)

This industrial grouping includes the manufacturers of metal cans; cutlery, hand tools, and general hardware; heating and plumbing fixtures; screw machine products; metal stampings; coating and engraving; miscellaneous fabricated wire products; and other miscellaneous fabricated metal products.

Over 6,300 workers are employed in 128 plants located in 41 counties of the state. Nearly 2,000 workers are employed in 56 plants in the Fulton-DeKalb area. Lowndes County is next in number of employees, with over 1,100 workers in three companies, followed by Putnam County, whose one plant employs over 500 workers. These four counties account for 47% of the firms and 56% of the total number of employees in this group of industries.

Metal stampings are produced by 33 companies, but 26 of them combine this work with other manufacturing. The seven companies that concentrate their operations on metal stampings, however, include four plants with a combined employment of more than 2,000 -- representing over 80% of the workers engaged in producing metal stampings. The largest of these four companies is Metal Products, Inc., Division of Thompson Industries, Inc., which is located in Valdosta (Lowndes County) and produces trim mouldings. The Enterprise Aluminum Company of Eatonton (Putnam County) is next in size; it produces aluminum cookware. The two other companies are located in Coweta and DeKalb counties and manufacture chrome automobile trim and meter and transformer boxes.

Metal cans are produced in six companies in Clinch, Fulton, Clayton, Haralson, Valdosta, and Columbus counties (in descending order of employment size). Three of the firms also produce other items. The number of employees engaged in metal can production is estimated at just under 900 workers.

Twenty-eight companies perform coating, engraving, and allied services, the greatest emphasis being on metal plating. Although 20 of the companies are in the Fulton-DeKalb area, they represent only 43% of the total employment (between 600 and 700 workers for the 28 firms). The two largest companies, primarily engaged in anodizing and plating auto trim, are located in Carroll and Cook counties. Other firms are in Colquitt, Floyd, Gwinnett, Henry, Muscogee, and Richmond counties.

Heating and plumbing fixtures are made by 10 companies. Five of the firms and roughly half of the employment are in the Fulton-DeKalb area; the other five firms are in Burke, Colquitt, Floyd, Henry, and Muscogee counties. Some 600 workers produce heating and plumbing fixtures throughout the state.

Seven companies make hand tools, saws, cutlery, and miscellaneous hardware items -- two in the Fulton-DeKalb area and one each in Cobb, Colquitt, Crisp, Hall, and Tattnall counties. Total employment exceeds 200, with over half the workers being in one company in Atlanta.

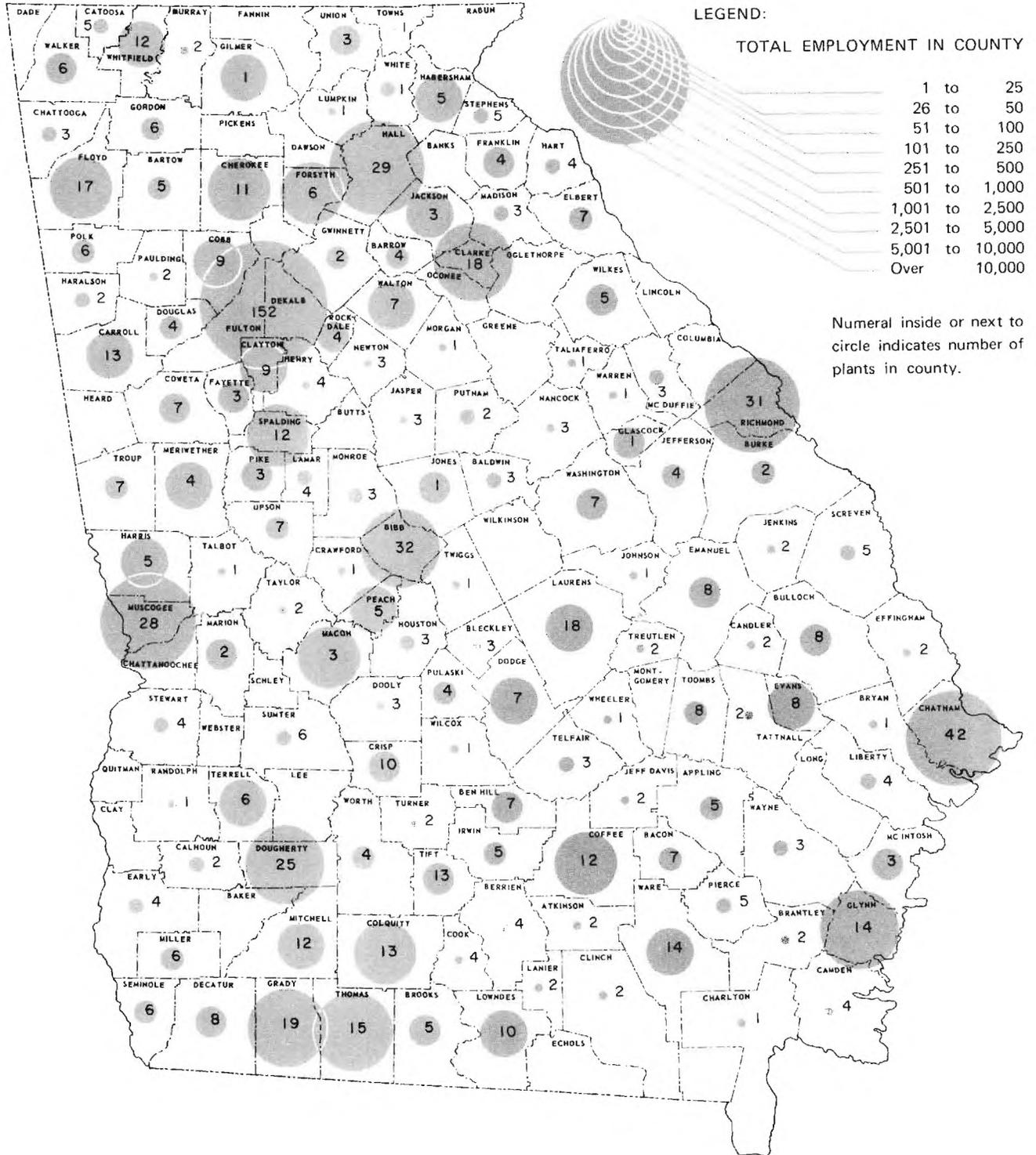
Two plants in Atlanta make screws and screw machine products. Three others in Whitfield, Cobb, and Douglas counties also make screw machine products, and one firm in Richmond County makes nuts, bolts, and screws. Combined employment for the six companies is just over 150 workers, roughly half of them in the Whitfield plant.

Miscellaneous fabricated wire products are made by 17 companies in Georgia with a combined employment of about 400 workers. Four companies in the Fulton-DeKalb area account for 44% of these employees. Chatham and Newton counties, each with two plants, together account for a further 44% of the workers.

The list is completed by a miscellaneous assortment of metal products, including fabricated pipe, valve and pipe fittings, drums, springs, and other small metal items. Employment attributable to these miscellaneous items is between 700 and 800 workers. Many of the 32 companies in this group also manufacture other products, one important exception being Larkin Coils, Inc., in Fulton County, which employs 200 workers in the manufacture of heat transfer equipment.

In addition to the companies already mentioned, major manufacturers of fabricated nonstructural metal products include Standard Container Company (Homerville, Clinch County) -- metal containers and oil filters; Crown Cork and Seal Company (Atlanta, Fulton County) -- tin cans, bottle tops; Douglas and Lomason Company (Newnan, Coweta County) -- chrome automobile trim; and B and C Metal Stamping Company (Tucker, DeKalb County) -- meter, transformer boxes.

MAP 8 FOOD AND KINDRED PRODUCTS



FOOD AND KINDRED PRODUCTS (SIC 20)

The food industry is the third most important type of manufacturing in Georgia in terms of total employment. Over 51,500 persons work in 984 plants located in 135 counties throughout the state.

The heaviest concentrations are in the urban centers, with the Fulton-DeKalb area accounting for over 23% of the workers in this industry. Muscogee County and Hall County each employs between 3,400 and 3,500 persons, followed by Chatham County with over 2,800 and Richmond with over 2,500. These six counties together provide work for over 47% of the food manufacturing employees. The addition of a further six counties -- Bibb, Glynn, Grady, Clarke, Thomas, and Dougherty, in descending order of employment size -- brings the employment total for 12 counties to two-thirds of this industry's work force in Georgia.

Separate maps show the distribution of plants and employment for six subsidiary food categories: Map 8-A -- meat, poultry, and seafood; Map 8-B -- bread, bakery and confectionery products; Map 8-C -- beverages; Map 8-D -- canned and preserved fruits and vegetables; Map 8-E -- dairy products; Map 8-F -- grain mills. The remaining food manufacturing plants, covering 10.9% of the total employment in this industry, are analyzed below.

Miscellaneous Food Products

Included in this miscellaneous food products group are manufacturers producing animal and vegetable oils, refining sugar, manufacturing ice, and turning out other miscellaneous food products. Some 5,600 workers are employed by 146 plants located in 68 counties, with some 43% of the employees being concentrated in the Fulton-DeKalb area.

Manufacturing and refining of animal and vegetable fats and oils are done by 34 companies, employing some 1,600 workers. Three of the plants of Swift and Company come into this category -- a cottonseed oil refinery in Atlanta (also making shortening and margarine) and oil mills in Richmond and Dougherty counties. Hunt-Wesson Foods, Inc., subsidiary of Hunt Foods and Industries, Inc., in Savannah (Chatham County) produces vegetable oil and shortening and other soybean and cottonseed products, and Kraft Foods Division of National

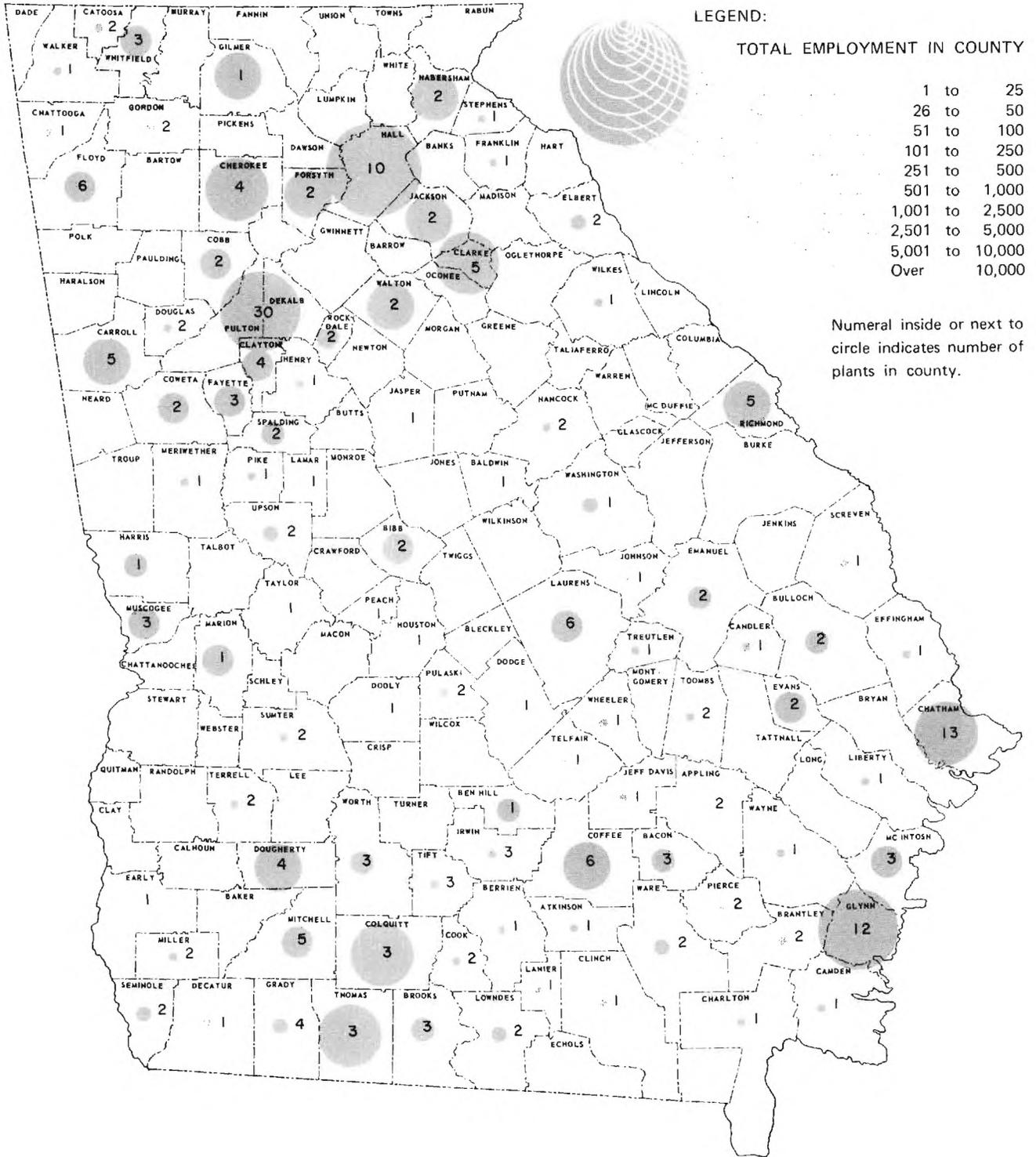
Dairy Products Corporation in Decatur (DeKalb County) produces margarine, as well as its main products of processed cheese and salad dressings.

Ice is manufactured by 67 plants throughout the state. The average employment in these plants is small, with a combined total of just over 600 workers.

Georgia has one sugar refinery, Savannah Sugar Refining Corporation in Chatham County, employing over 600 workers.

The remaining companies are those preparing a miscellaneous assortment of food items. There are 46 firms and nearly 2,800 workers producing such things as sandwiches, honey, peanut butter, vinegar, chocolate syrup, coffee, tea, potato chips, and snacks of all kinds. Over one-half the plants and more than three-quarters of the employees are in three of the metropolitan Atlanta counties -- Fulton, DeKalb, and Clayton. Largest companies include Gordon Foods Division of Sunshine Biscuits, Inc. (Atlanta, Fulton County) -- potato chips, snack foods; Frito-Lay, Inc. (Chamblee, DeKalb County) -- potato chips, snack foods, peanut processing; Stevens Industries, Inc. (Dawson, Terrell County) -- peanut butter, insecticides, vegetable oils, shelled peanuts; and Filler Products, Inc. (Forest Park, Clayton County) -- food snacks.

MAP 8-A MEAT, POULTRY, AND SEAFOOD



FOOD AND KINDRED PRODUCTS

Meat, Poultry, and Seafood (SIC 201, 2031, 2036)

Nearly one-third of Georgia's food industry workers are engaged in processing meat, poultry, and seafood. Some 16,900 persons are employed by 251 plants located in 96 counties. Hall County, Glynn County, and the Fulton-DeKalb area (in that order) lead in total employment. These four counties together account for 21% of the plants and 39% of the workers in this industry group. Next in order of employment size are Clarke, Thomas, Cherokee, Chatham, and Colquitt counties, with a combined employment of over 3,600 workers.

Over half of the workers in the meat, poultry, and seafood industry are engaged in the processing of poultry. There are 52 plants throughout the state, nine of them combining some other operation, most often the preparation of feeds. Hall County is still the main center, employing between 2,800 and 2,900 persons in this work. Clarke County is next in size with some 900 employees, followed by Cherokee County and the Fulton-DeKalb area. These five counties together employ nearly 60% of the state's poultry processors.

Georgia has 89 meat-packing plants employing 3,800 workers. Over two-thirds of these plants are small operations (from 1 to 25 workers). Only six plants have more than 100 employees -- in Thomas, Colquitt, Dougherty, Muscogee, Coweta, and Richmond counties. Together these six plants employ between 1,800 and 1,900 workers -- roughly half of the meat-packing work force.

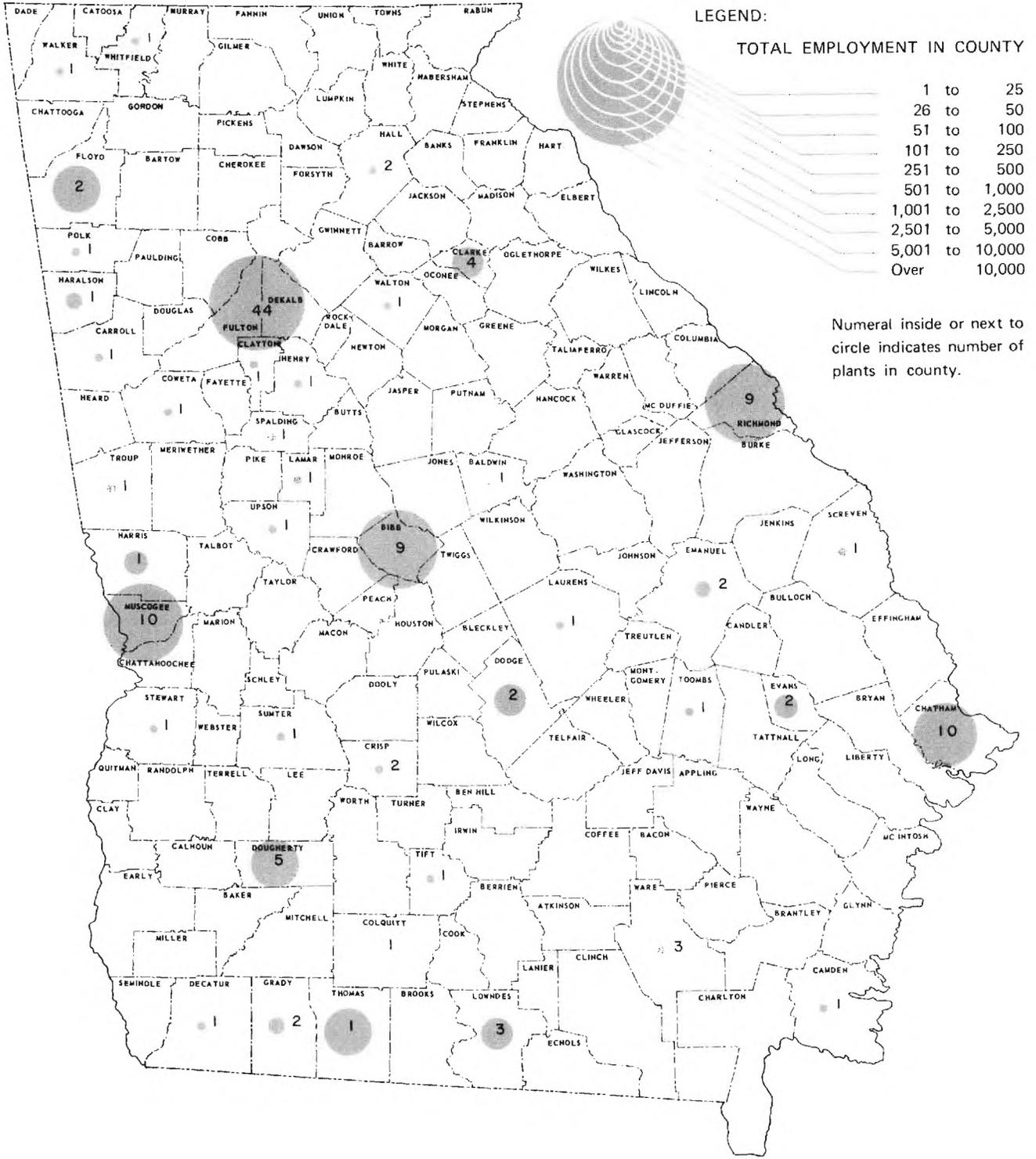
Only four of the plants manufacturing sausages and other prepared meat products have more than 100 employees -- two in Fulton County and one each in Fayette and Richmond counties. The combined employment for prepared meat products is approximately 1,800, in 85 plants widely scattered throughout the state.

Glynn County is the center of the seafood processing industry. Over 2,000 persons work in 11 plants in Brunswick preparing and packaging various types of frozen or fresh seafood. Chatham County provides work for a further 500 employees. These two coastal centers account for over 93% of the workers in Georgia's seafood processing industry.

The largest companies preparing meat, poultry, and seafood include Swift and Company, which has a poultry plant in Gainesville (Hall County), a poultry and egg processing operation in Douglas (Coffee County), and meat preparation

and packing establishments in Moultrie (Colquitt County), Atlanta (Fulton County), and Augusta (Richmond County). Other large plants are Sea Pak Corporation (St. Simons Island, Glynn County) -- frozen seafoods; J. D. Jewell, Inc. (Gainesville, Hall County) -- frozen poultry products; Sunnyland Packing Company (Thomasville, Thomas County) -- meat products; Gold Kist Poultry Growers (Canton, Cherokee County) -- poultry processing; and Colonial Poultry Company (Athens, Clarke County) -- chicken processing.

MAP 8-B BAKERY AND CONFECTIONERY PRODUCTS



FOOD AND KINDRED PRODUCTS

Bakery and Confectionery Products (SIC 205 and 207)

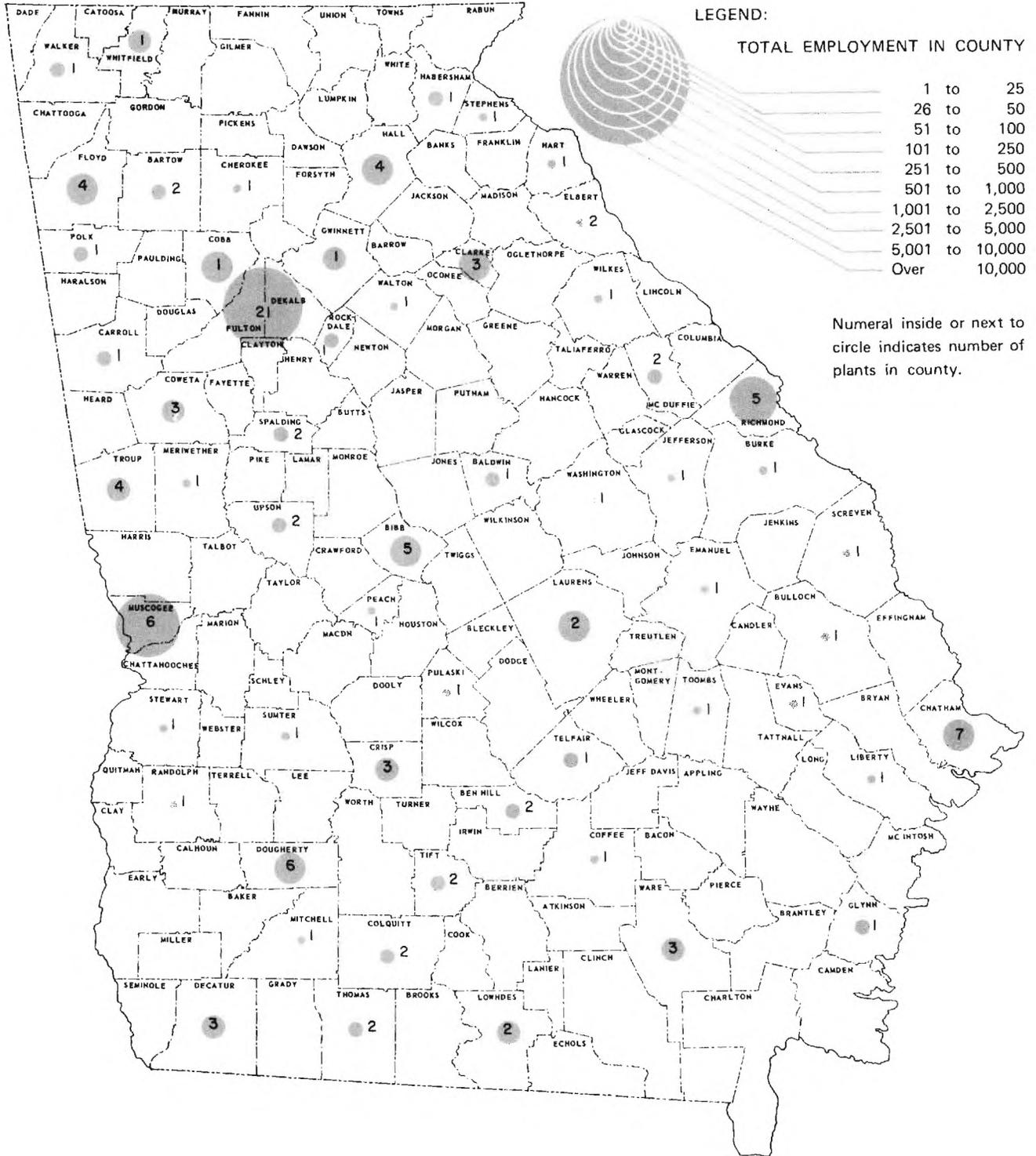
A total of 136 companies in Georgia, employing some 10,800 persons, make bread, cakes, candy, and other bakery or confectionery products. Most of the establishments are small, and 25 of the 42 counties where they are located have less than 25 employees. Only 12 counties have more than 100 employees in this industry.

The main concentration is in the Fulton-DeKalb area, where 44 firms provide jobs for some 4,000 persons. Three other metropolitan counties -- Muscogee, Richmond, and Bibb -- have more than 1,000 workers each and a combined total of over 4,200 employees. Chatham County has over 500 workers, and Thomas, Floyd, and Dougherty each has between 300 and 400. These nine counties account for over 91% of Georgia's employment in this food category.

Sixteen companies have work forces ranging from 200 to over 1,000 workers. Six of these are in the Fulton-DeKalb area, three in Richmond County, two in Muscogee, and one each in Bibb, Chatham, Dougherty, Floyd, and Thomas counties. Together these 16 plants employ over 7,100 persons -- nearly two-thirds of the workers in this industry.

Among these top employers are Tom Huston Peanut Company (Columbus, Muscogee County, and Macon, Bibb County) -- confections and candy; National Biscuit Company (Atlanta, Fulton County) -- crackers, biscuits, cookies; Murray Biscuit Company (Augusta, Richmond County) -- cookies; Sunshine Biscuit Company (Columbus, Muscogee County) -- crackers and cookies; Strietmann Supreme Bakery of Macon (Macon, Bibb County) -- biscuits and crackers; and American Bakeries Company (Atlanta, Fulton County, and Macon, Bibb County) -- bread, rolls, and cakes.

MAP 8-C BEVERAGE INDUSTRIES



FOOD AND KINDRED PRODUCTS

Beverage Industries
(SIC 208)

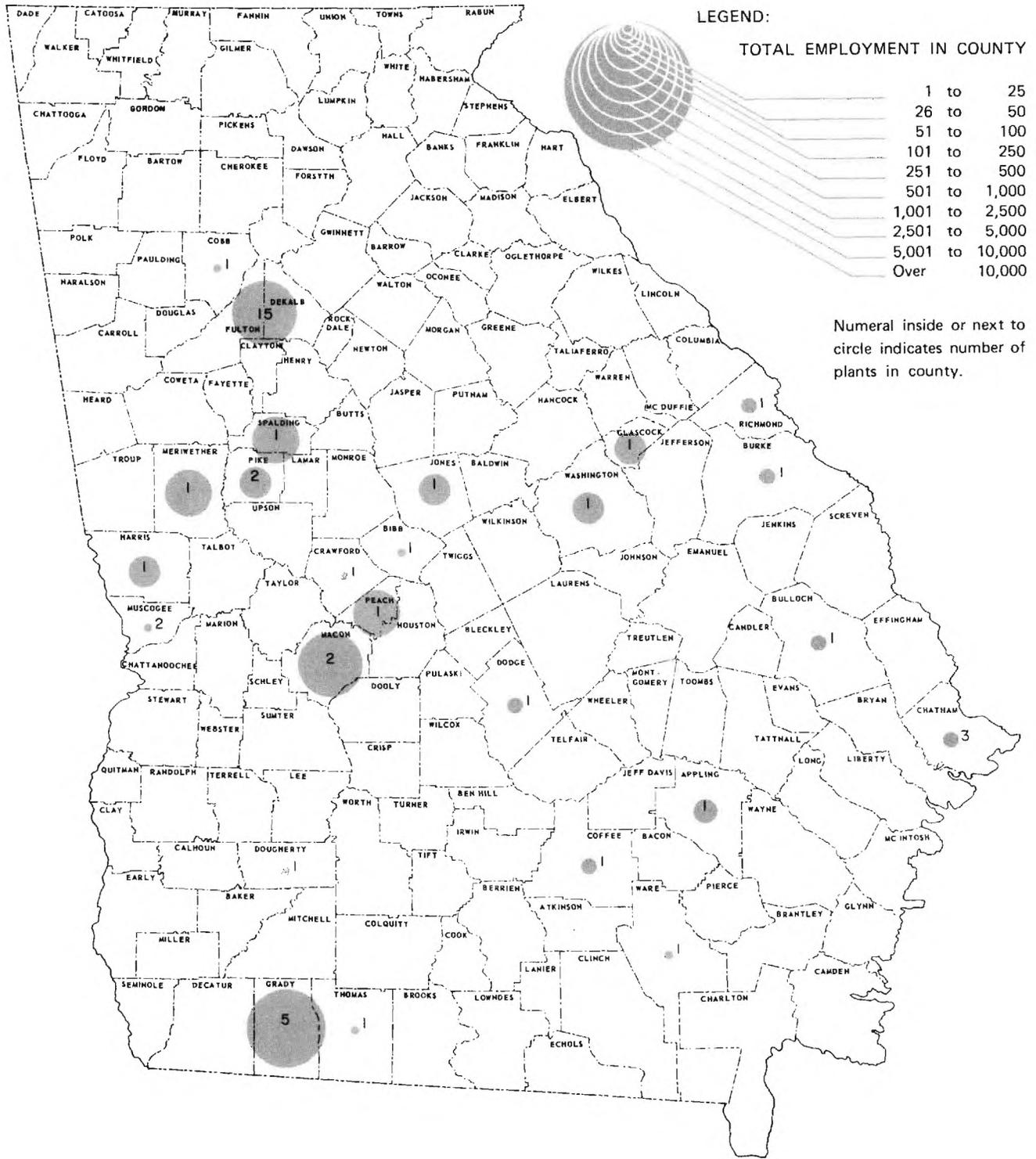
Nearly 5,600 persons work in Georgia's beverage industries, in 132 plants located in 59 counties. Over 45% of the employment is concentrated in three counties -- Fulton, DeKalb, and Muscogee.

Most of the companies are engaged in bottling or canning soft drinks. Two of them also make the syrups for fountain use, although in general, this operation is carried out by separate plants. Twelve of these makers of syrup and flavoring extracts are located in the Fulton-DeKalb area, two in Muscogee County, and one each in Cherokee and Toombs counties.

All but three of the beverage industry companies are concerned with the production of soft drinks, the exceptions being Carling Brewing Company (Atlanta, Fulton County) -- beer and ale; Monarch Wine Company of Georgia (Atlanta, Fulton County) -- wine; and The Viking Distillery, Inc., (Albany, Dougherty County) -- liquors.

Two major soft-drink companies have their headquarters in Georgia -- The Coca-Cola Company (Atlanta, Fulton County) and Royal Crown Cola Company (Columbus, Muscogee County).

MAP 8-D CANNED AND PRESERVED FRUITS AND VEGETABLES



FOOD AND KINDRED PRODUCTS

Canned and Preserved Fruits and Vegetables (SIC 2033, 2034, 2035, 2037)

The canning and preserving of fruits and vegetables gives employment to over 4,800 persons in Georgia. While some of this work is seasonal, it is an important source of income to many households throughout the state.

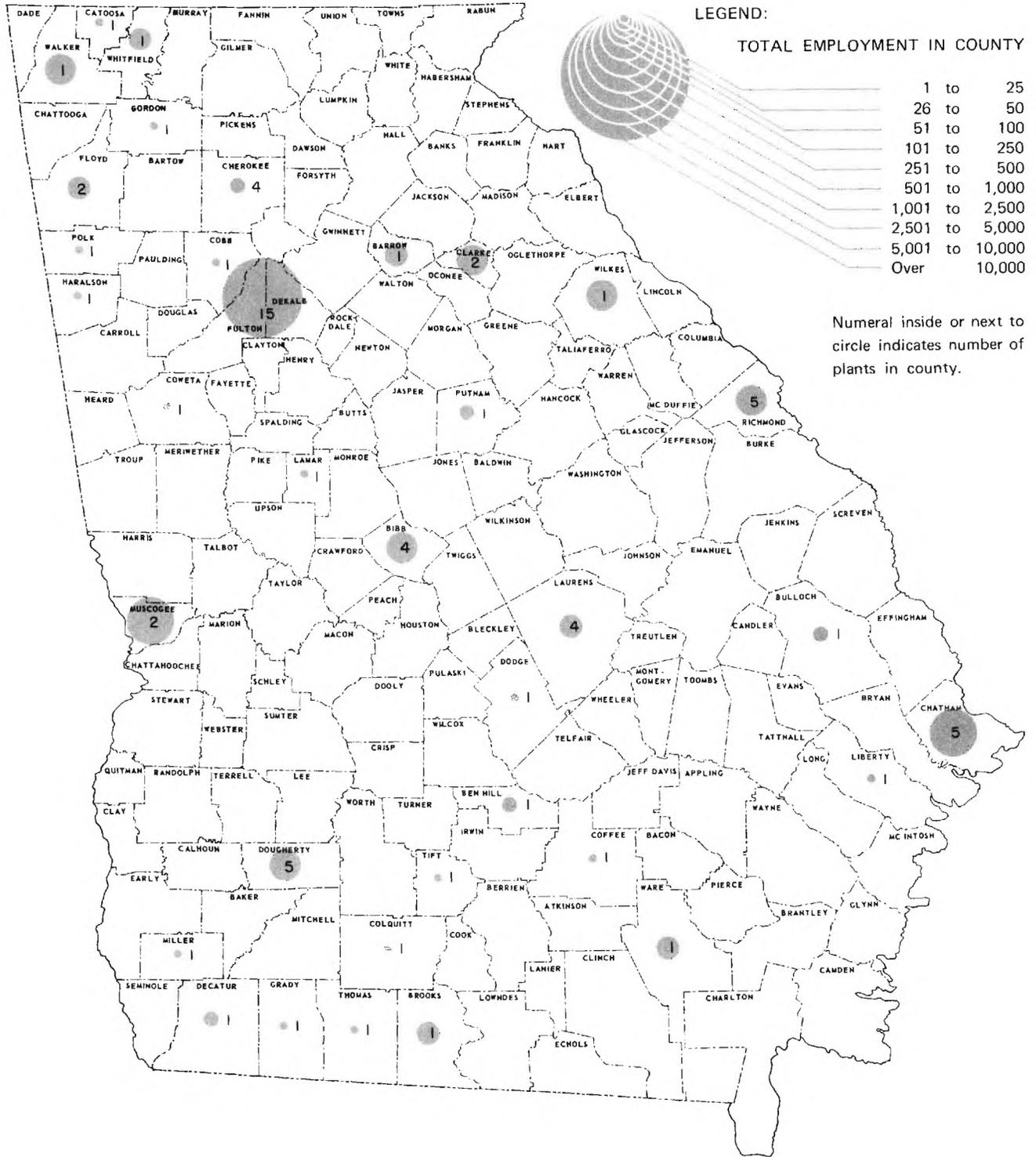
There are 48 companies engaged in various types of fruit and vegetable preservation -- canning, bottling, pickling, freezing, dehydrating, and the making of jams, jellies, and sauces. The plants are located in 26 counties, but 19 of these have only one plant each. Top employment is in Grady County, where there are some 1,300 workers in five plants; next in line are Macon County, with over 800 workers in two plants, and the Fulton-DeKalb area, where 15 plants employ over 500 workers.

Only three small companies handle dried vegetables and nuts -- two in Grady County and one in Crawford County.

Seven companies freeze fruits and vegetables, two of them as subsidiary operations to poultry canning and freezing (Coffee County) and seafood freezing (Chatham Company). This group of seven companies, however, includes the largest employer in Georgia's fruit and vegetable preserving industry -- Southern Frozen Foods, Inc., in Montezuma (Macon County).

Most of the companies in this food group can fresh fruits or vegetables, or turn them into jams, jellies, pickles, salad dressings, sauces, etc., with many of the firms carrying out more than one of these operations. Major employers include a division of Campbell Soup Company (Cairo, Grady County) -- vegetable processing; Cairo Pickle Company, Inc. (Cairo, Grady County)-- pickles, relishes; Pomona Products Company, Inc. (Griffin, Spalding County) -- canned fruits and vegetables; Southern State Canning Company (Fort Valley, Peach County) -- canned peaches; and National Biscuit Company, Special Products Division (Woodbury, Meriwether County) -- canned pimientos, dates, etc.

MAP 8-E DAIRY PRODUCTS



FOOD AND KINDRED PRODUCTS

Dairy Products (SIC 202)

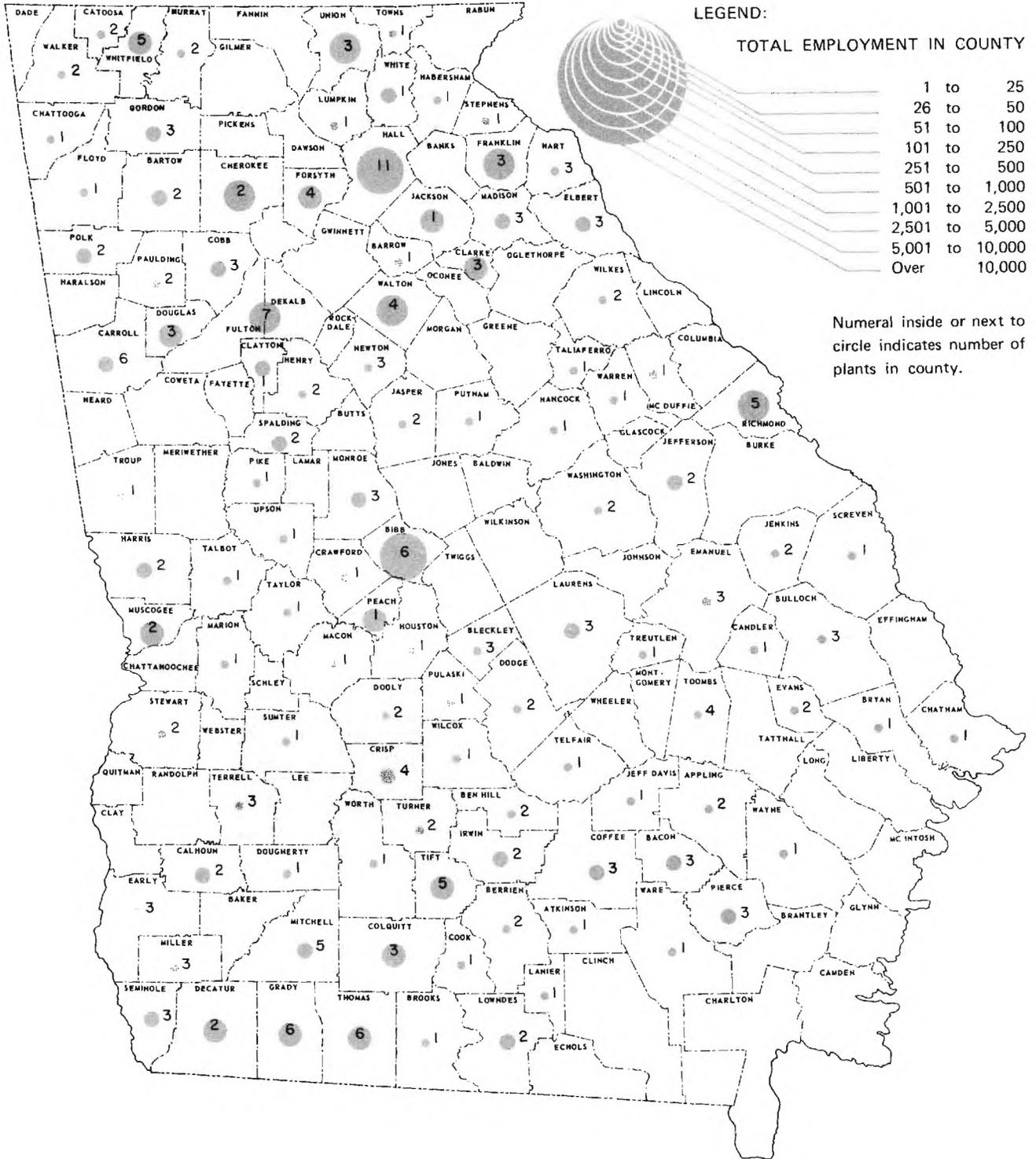
Employment in the manufacturing and processing of dairy foods totals just over 4,000 workers in 73 plants spread over 36 counties. The main concentration is in the Fulton-DeKalb area, where 15 companies provide employment for nearly 1,800 persons. Three other metropolitan counties are next in employment size -- Chatham, Muscogee, and Richmond. Together these five counties account for 63% of the dairy products workers.

All but four of the companies are engaged in the processing of fluid milk or the making of ice cream and other frozen desserts -- 12 of the 69 firms handle both categories. The companies vary in size from a one-man operation to firms employing 200 to 300 workers. Eleven plants -- five in the Fulton-DeKalb area and one each in Brooks, Clarke, Muscogee, Richmond, Walker, and Wilkes counties -- employ 100 or more persons each and 2,100 workers combined.

Other dairy products processed in Georgia include butter (two companies in Chatham and Bibb counties); natural cheese (Polk County); processed cheese (DeKalb County); and ice cream mix (DeKalb County). One of the butter-making companies makes ice cream as its major product, and both the processed cheese plant and the ice cream mix manufacturer handle other food items as well.

Major companies in Georgia's dairy products industry include National Dairy Products Corporation (Atlanta, Fulton County) -- milk, cottage cheese, sour cream, ice cream; with a major subsidiary plant, Kraft Foods (Decatur, DeKalb County) -- process cheese, salad dressings, margarine; and a small subsidiary, Sealtest Foods (Augusta, Richmond County) -- ice cream; Atlanta Dairies Cooperative (Atlanta, Fulton County) -- milk, cottage cheese, ice cream; Wells Dairy Cooperative (Columbus, Muscogee County) -- milk products; Pet Milk Company (Washington, Wilkes County; Waycross, Ware County; Winder, Barrow County; Augusta, Richmond County; Dublin, Laurens County; and Canton, Cherokee County) -- dairy products; The Borden Company (Augusta, Richmond County; Macon, Bibb County; Savannah, Chatham County; and Albany, Dougherty County) -- dairy products; Foremost Dairies, subsidiaries of Hometown Foods (Atlanta, Fulton County, and Savannah, Chatham County) -- dairy products; and Irvindale Dairies, Inc. (Atlanta, Fulton County, and Dublin, Laurens County) -- dairy products.

MAP 8-F GRAIN MILL PRODUCTS



FOOD AND KINDRED PRODUCTS

Grain Mill Products (SIC 204)

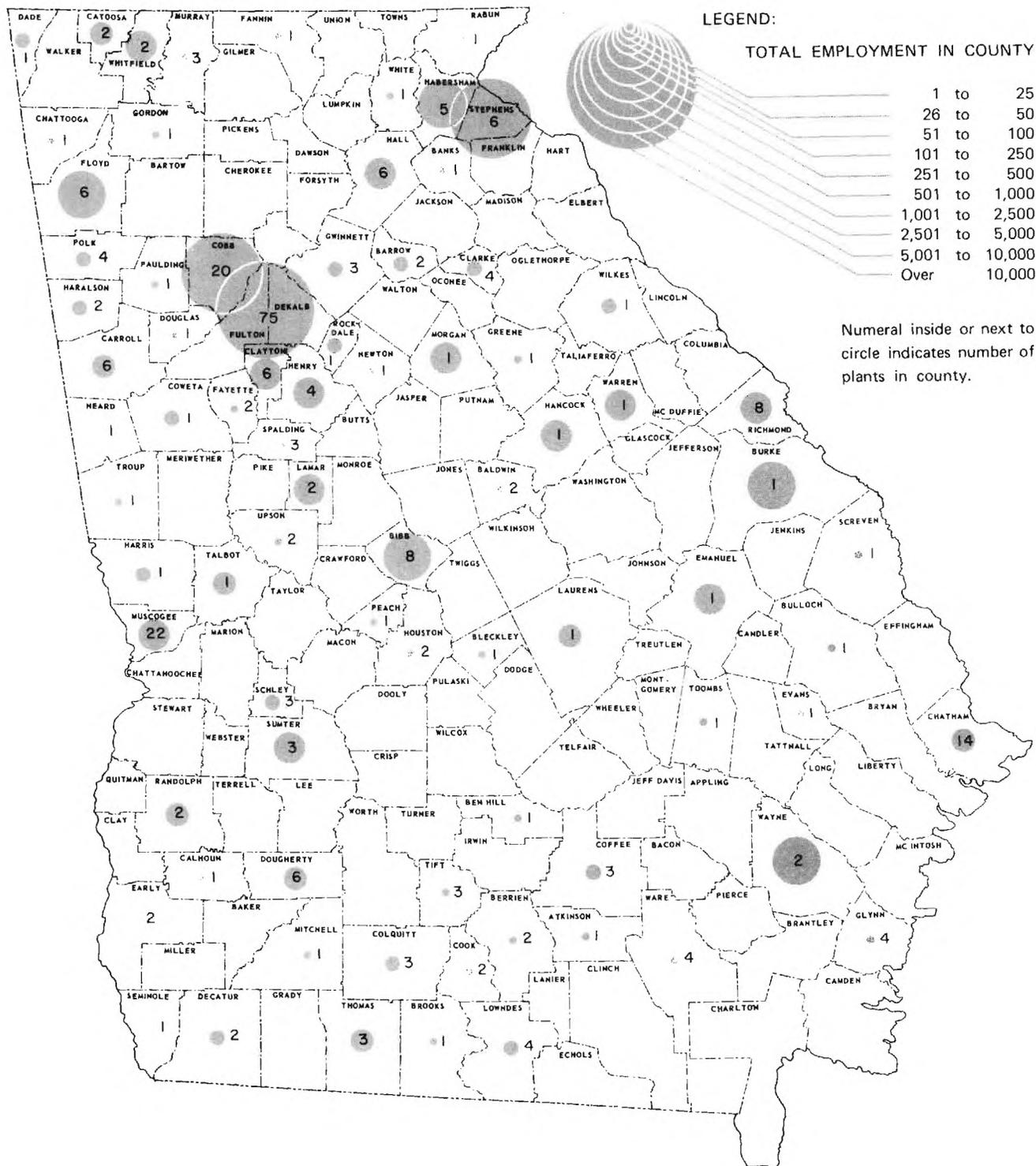
One or more grain mills are located in 109 of Georgia's counties. Average employment per establishment is small, with 246 mills providing jobs for just over 3,800 persons.

Three companies are engaged in wet-corn milling, two producing cornmeal and the third manufacturing starch -- all as subsidiary operations to their main production. One other mill blends doughnut mix. With the exception of these four companies, all of the Georgia mills manufacture flour or meal from grain or prepare feeds for animals and fowls.

Bibb County and Hall County each has more than 300 employees working in grain mills. Cherokee County has just over 200 workers, followed by Richmond, Walton, Fulton-DeKalb, Franklin, and Union counties, each with over 100 employees.

Major grain mill operators in the state include Central Soya of Canton, Inc. (Canton, Cherokee County) -- feeds, packed poultry; Birdsey Flour and Feed Mills (Macon, Bibb County) -- feeds, flour, cornmeal; Ralston Purina Company (Macon, Bibb County, and Gainesville, Hall County) -- feeds; and The Pillsbury Company (Gainesville, Hall County) -- feed. In addition, some of the major poultry companies and fertilizer manufacturers produce feed as a subsidiary operation.

MAP 9 FURNITURE AND FIXTURES



FURNITURE AND FIXTURES
(SIC 25)

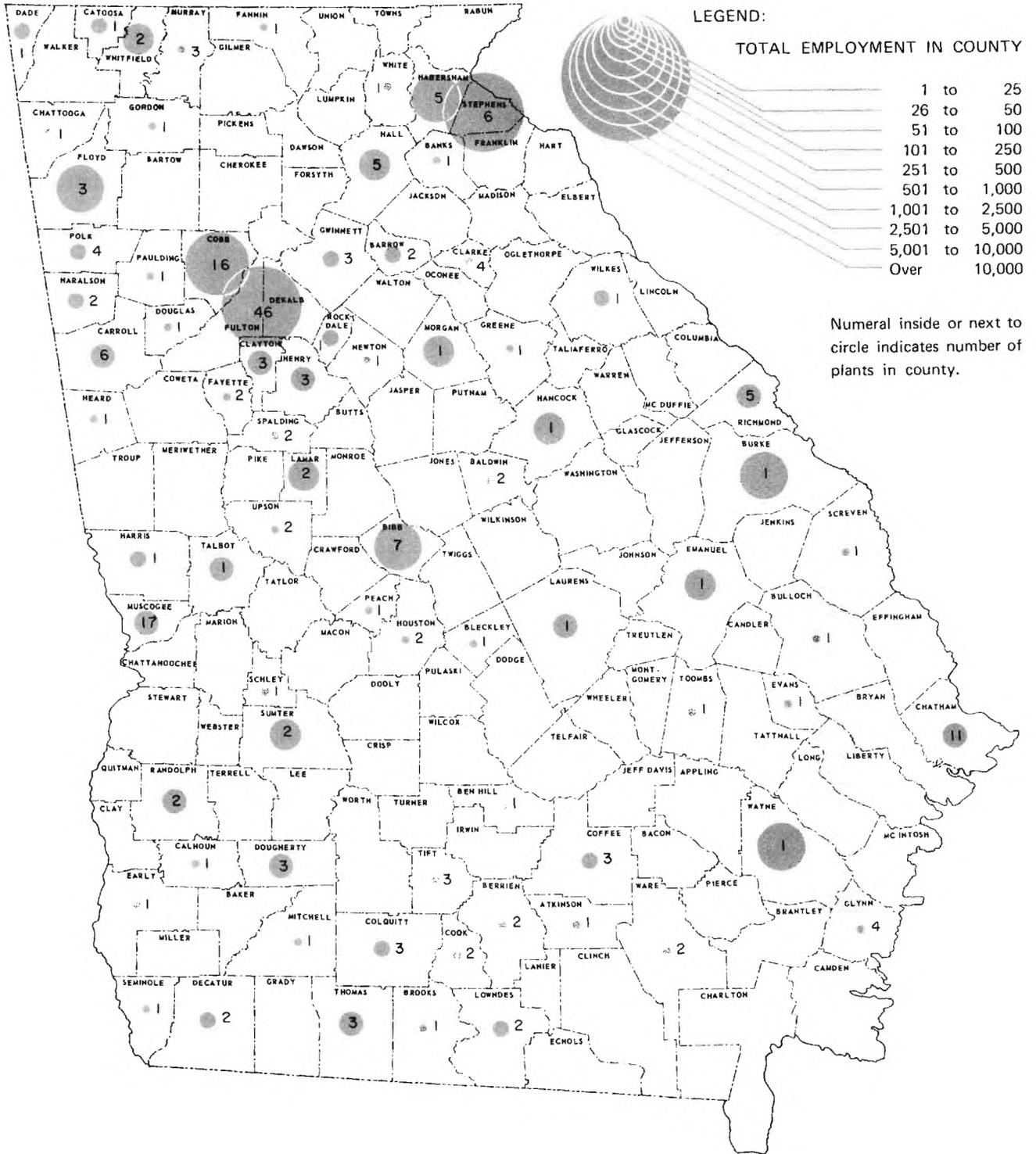
Georgia has over 10,600 workers engaged in the manufacture of furniture and fixtures in 305 plants located in 80 counties. The distribution of the total industry is given on Map 9. Household furniture, the most important segment of the industry, is shown on subsidiary Map 9-A.

Over 3,000 workers are employed in 75 plants in the Fulton-DeKalb area. The only other counties with employment of over 1,000 are Stephens, with nearly 1,400 workers in six plants, and Cobb, with over 1,100 workers in 20 plants. These four counties together account for over 52% of the employment in Georgia's furniture and fixtures industry.

Nonhousehold furniture is made by 96 companies with a combined employment of 1,600 workers, located in 36 counties. Products include furniture for offices, restaurants, and public buildings; wood and metal partitions, shelving, and other fixtures; and venetian blinds and shades. There are 57 firms making wood and metal partitions and other fixtures, but over three-quarters of these companies have other product lines, including items classified under other industries as well as other types of furniture. This tendency to diversify applies also to the other categories -- of the 24 companies making venetian blinds and shades, only eight limit their production to those specific lines, and 75% of the firms making furniture for offices and public buildings also make other items.

Over 800 persons are employed by 34 companies making nonhousehold furniture in the Fulton-DeKalb area. Another 200 work for seven companies in Cobb and Clayton counties. With over 1,000 workers, the Atlanta Metropolitan Area accounts for over 64% of the employment of this group. Several of these companies, however, produce nonhousehold furniture as their secondary line. The largest individual company with its main line of production in this category is Jebco, Inc. (Warrenton, Warren County) -- metal office equipment. Others include Abrams Fixture Corporation, Division A. R. Abrams, Inc. (Atlanta, Fulton County) -- display and store fixtures, institutional furniture; Blair Manufacturing Company (Marietta, Cobb County) -- office furniture, steel shelving; and Roswell Seating Company, Inc. (Roswell, Fulton County) -- wood church and school furniture.

MAP 9-A HOUSEHOLD FURNITURE



FURNITURE AND FIXTURES

Household Furniture (SIC 251)

Household furniture accounts for 85% of the furniture manufacturing employment in Georgia. Over 9,000 workers are employed by 234 companies in 76 counties of the state. Products include all types of wood and metal household furniture (upholstered and nonupholstered), as well as mattresses and bed-springs.

Over 2,200 persons are employed in the Fulton-DeKalb area. Stephens County is next in size with nearly 1,400 workers, followed by Cobb County with just under 1,000 workers. Together these four counties account for over one-half of the employees in the household furniture industry.

Wood furniture (excluding upholstered) is made by 161 firms throughout the state. Many of these are small operations employing one or two people in making cabinets, but eight companies employ over 100 workers each. Two of these are in Stephens County, and the others are in Bibb, Cobb, Fulton, Hancock, Lamar, and Whitfield counties. Together these eight companies employ over 2,400 persons -- nearly 27% of the workers in the household furniture industry.

Upholstered furniture is made by 29 companies. Seven plants with upholstered furniture as their main line of production employ more than 100 workers each; they are located in Floyd, Wayne, Habersham, Fulton, Emanuel, Sumter, and Morgan counties. Combined employment for these seven plants is over 1,700 persons.

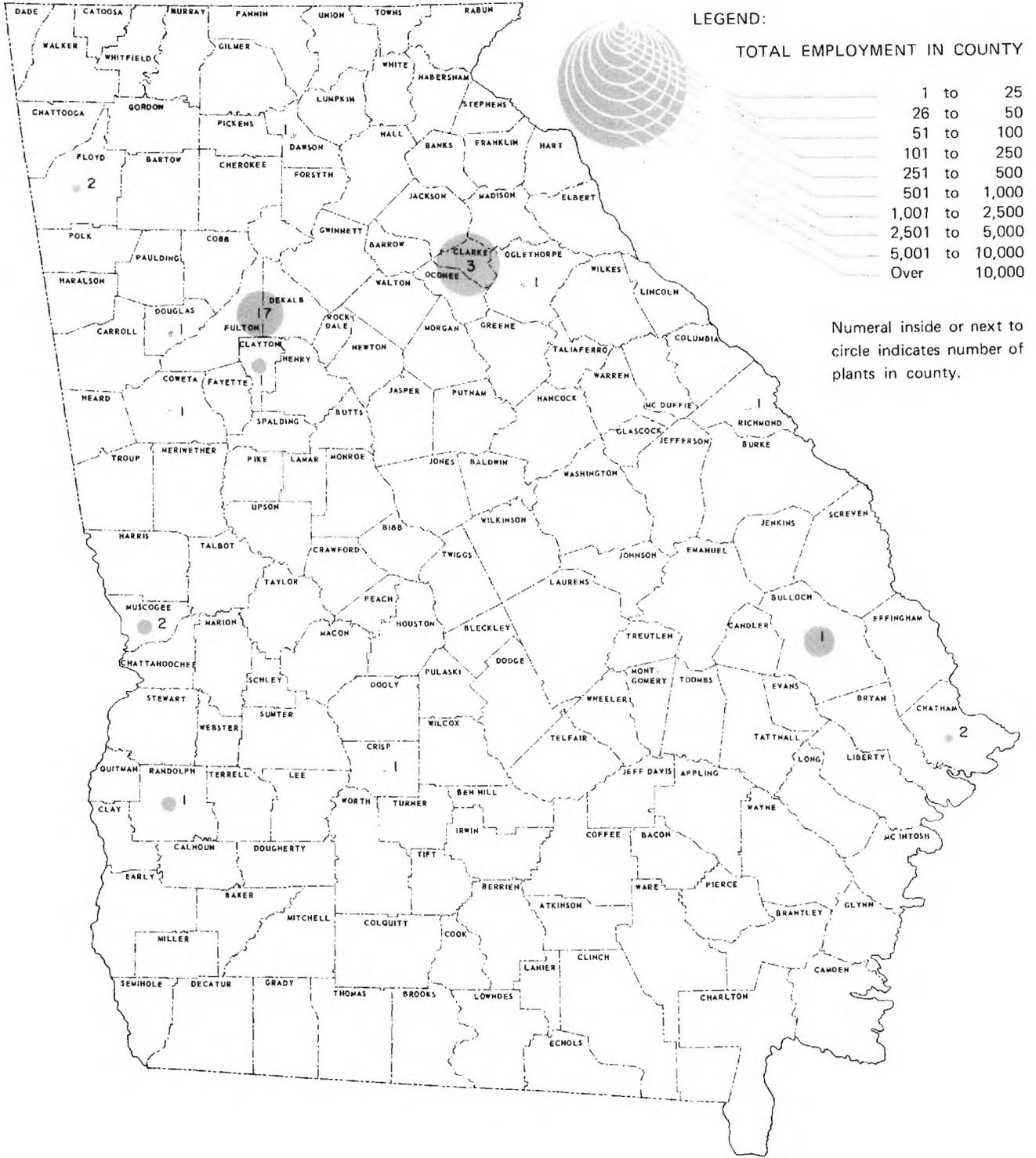
Twelve companies make metal household furniture. Two major firms in Cobb and Burke counties, with an aggregate employment of 1,000 workers, produce this type of furniture as their main line.

Mattresses and bedsprings (including dual-purpose sleep furniture) are made by 49 companies, with the size varying from a one-man operation to plants employing several hundred workers. The two largest companies in this group are located in Fulton County and together employ some 1,300 persons.

Major companies in the household furniture industry include Toccoa Manufacturing Company (with two plants in Toccoa, Stephens County) -- wooden household furniture, tables, occasional furniture; Simmons Company (Atlanta, Fulton County) -- mattresses, box springs, upholstered furniture; Southern Cross

Industries, Inc. (Atlanta, Fulton County) -- mattresses, springs, furniture,
batting for auto industry; Production Engineering Company (Austell, Cobb County)
-- outdoor aluminum chairs; Keller Aluminum Chairs, Eastern (Waynesboro, Burke
County) -- aluminum furniture, building props.

MAP 10 INSTRUMENTS AND RELATED PRODUCTS



INSTRUMENTS AND RELATED PRODUCTS
(SIC 38)

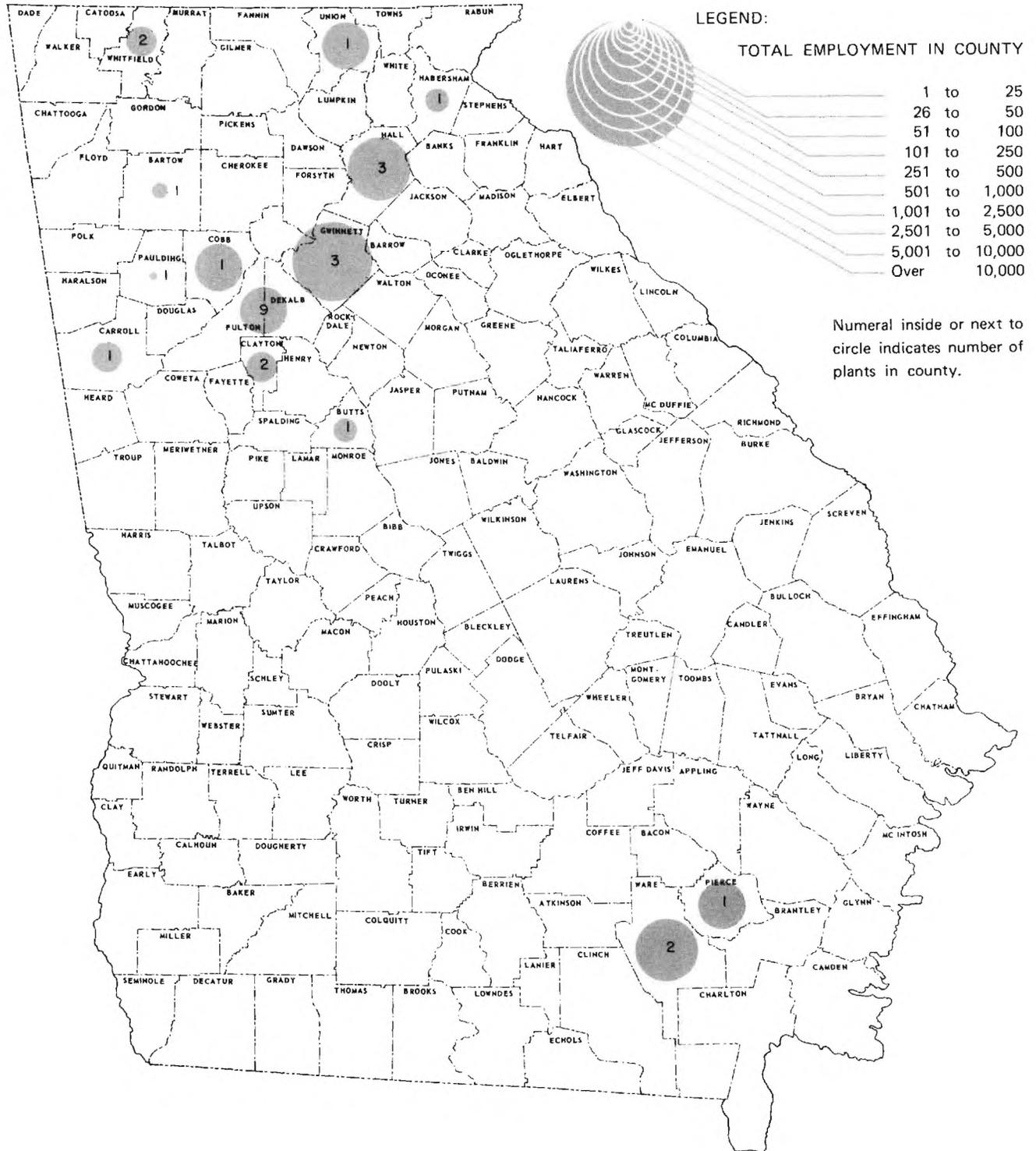
Employment in the manufacture of instruments has increased slightly in recent years, but the number of workers in this industry is a modest 0.4% of Georgia's total manufacturing. Between 1,700 and 1,800 workers are employed in 35 plants, located in 15 counties. Three plants in Clarke County employ nearly 56% of these workers. The Fulton-DeKalb area, with 17 plants, employs a further 19% of the total, followed by Bulloch County, with an estimated 12% in one plant.

Production in Clarke County is concentrated on clocks and clock parts. The Fulton-DeKalb area is more diversified, producing a variety of scientific, measuring, and controlling instruments; surgical equipment, apparatus, and appliances; and dental, ophthalmic, and photographic supplies and equipment. Meters and valves are the main line of production of the Statesboro Division of Rockwell Manufacturing Company in Bulloch County, a major company which also manufactures electronic accessories and hydraulic pumps and motors.

The other 14 companies in the state are comparatively small, but produce a wide variety of optical instruments and lenses, surgical and orthopedic equipment, clocks, meters, photographic equipment and nuclear instruments.

The company providing the most jobs in this industry is General Time Corporation, which has two large plants in Athens (Clarke County). Its Westclox Division manufactures electrical and battery-operated clocks, and Precision Products and Parts make electrical auto clocks and battery movements.

MAP 11 LEATHER AND LEATHER PRODUCTS



LEATHER AND LEATHER PRODUCTS
(SIC 31)

Twenty-nine plants employ some 4,500 persons in the manufacture of leather and leather goods in Georgia. These plants are located in 15 counties -- chiefly in the northern half of the state.

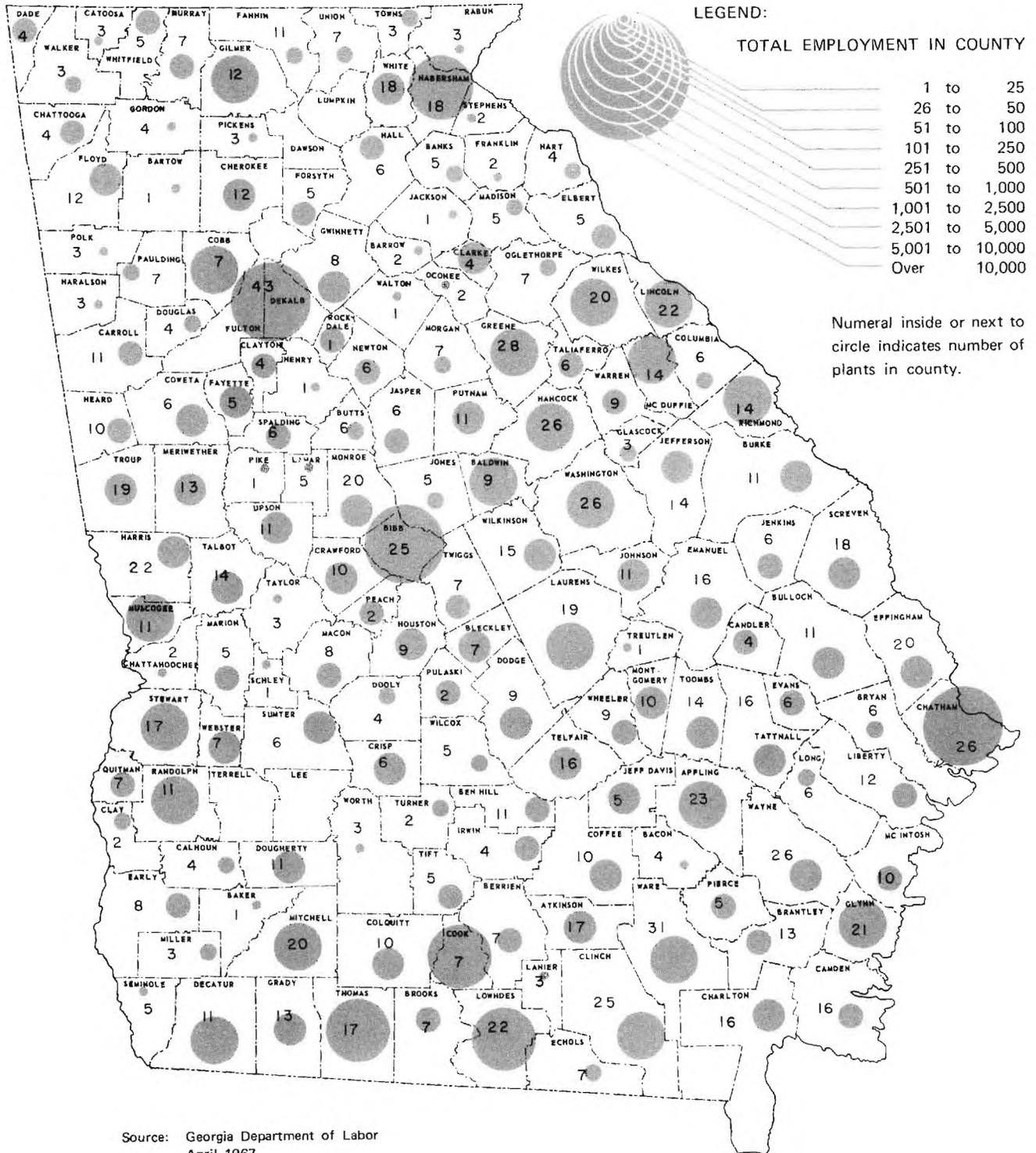
The three companies in Gwinnett County account for 25% of the total employment. Ware County, with two plants, has 14% and Hall County, with three plants, has over 11% of the workers in this industry. Next in size order are the Fulton-DeKalb area and Union, Cobb, and Pierce counties.

Eleven of the plants, with 74% of the industry's employees, manufacture shoes. Both companies in Ware County are shoemakers, as is the firm in the adjacent county of Pierce. Two plants are located in the Fulton-DeKalb area, and one each in Gwinnett, Hall, Union, Cobb, Carroll, and Paulding counties. With the exception of the firm in Paulding and one of the Atlanta plants, which are small operations, all of the shoe manufacturers employ well over 100 workers each.

Other leather goods made in Georgia include luggage, handbags, leather belting, house slippers, and work gloves. Only one company (in Gwinnett County) does leather tanning in addition to its production of other leather goods.

Major companies in this industry group include Genesco (Lawrenceville, Gwinnett County; Atlanta, DeKalb County; and Carrollton, Carroll County) -- shoes; Georgia Shoe Manufacturing Company, Inc. (Flowery Branch, Hall County, and Blairsville, Union County) -- industrial and sport footwear; Bona Allen, Inc. (Buford, Gwinnett County) -- leather goods, leather tanning; Rubin Brothers Footwear, Inc. (Waycross, Ware County) -- shoes; and McLaurin Corporation (Marietta, Cobb County) -- casual slippers.

MAP 12 LUMBER AND WOOD PRODUCTS



LUMBER AND WOOD PRODUCTS
(SIC 24)

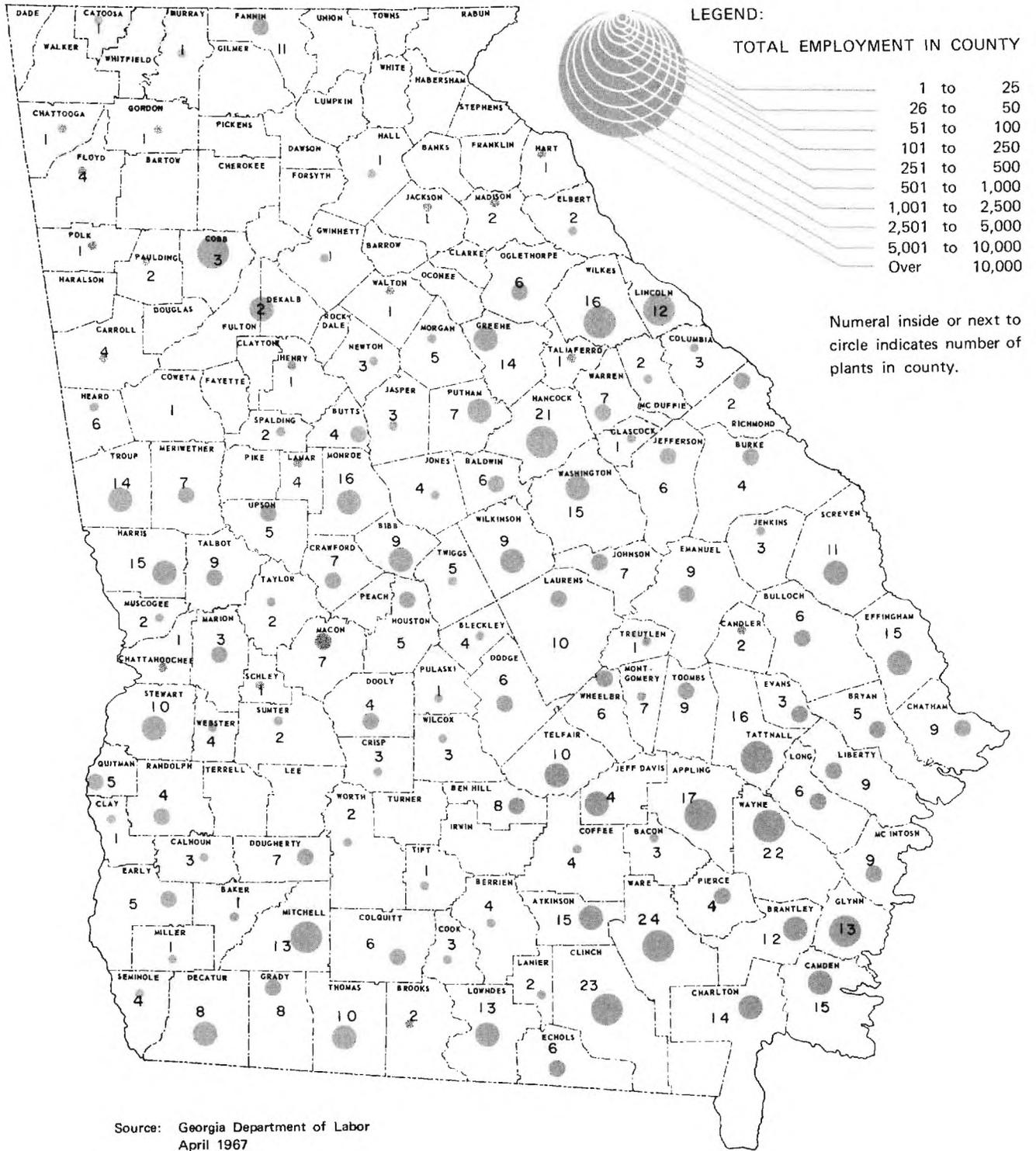
Employment estimates by the Georgia Department of Labor show the lumber and wood products industry as fifth in the major manufacturing groups of the state, with an average of 27,000 workers in 1966.

Details of employment by location are difficult to obtain, particularly for the logging and milling operations, where mobile units complete one job and then move on to another. In this industry, therefore, the distribution of companies throughout the state was obtained by using unpublished data from the Department of Labor. These data represent only those firms covered by the Georgia Employment Security Law, which generally includes only those firms with four or more employees. The number of workers listed on the returns represents a high proportion of the total workers in the industry, but since there are many one-, two-, and three-man operations, the number of plants is likely to be understated.

In April 1967 lumber and wood manufacturing was reported in 155 of Georgia's 159 counties. In the Fulton-DeKalb area, nearly 2,000 persons held jobs in 43 companies. Next in employment size was Chatham County, with 1,600 workers in 26 firms, followed by Bibb County, with 25 plants and nearly 1,100 employees. Lowndes, Cook, Thomas, and Habersham counties each had over 500 workers.

Three subsidiary maps are presented, dividing the industry into logging camps and logging contractors; sawmills and planing mills; and millwork, plywood, and other associated products. Since the Department of Labor classifies each firm by its principal product or activity and includes all employment in that one category, in this series of maps there is no duplication in the recording of plants that are engaged in several types of production. It should be borne in mind, however, that many of the companies have interests beyond their major classification.

MAP 12-A LOGGING CAMPS AND LOGGING CONTRACTORS



Source: Georgia Department of Labor
April 1967

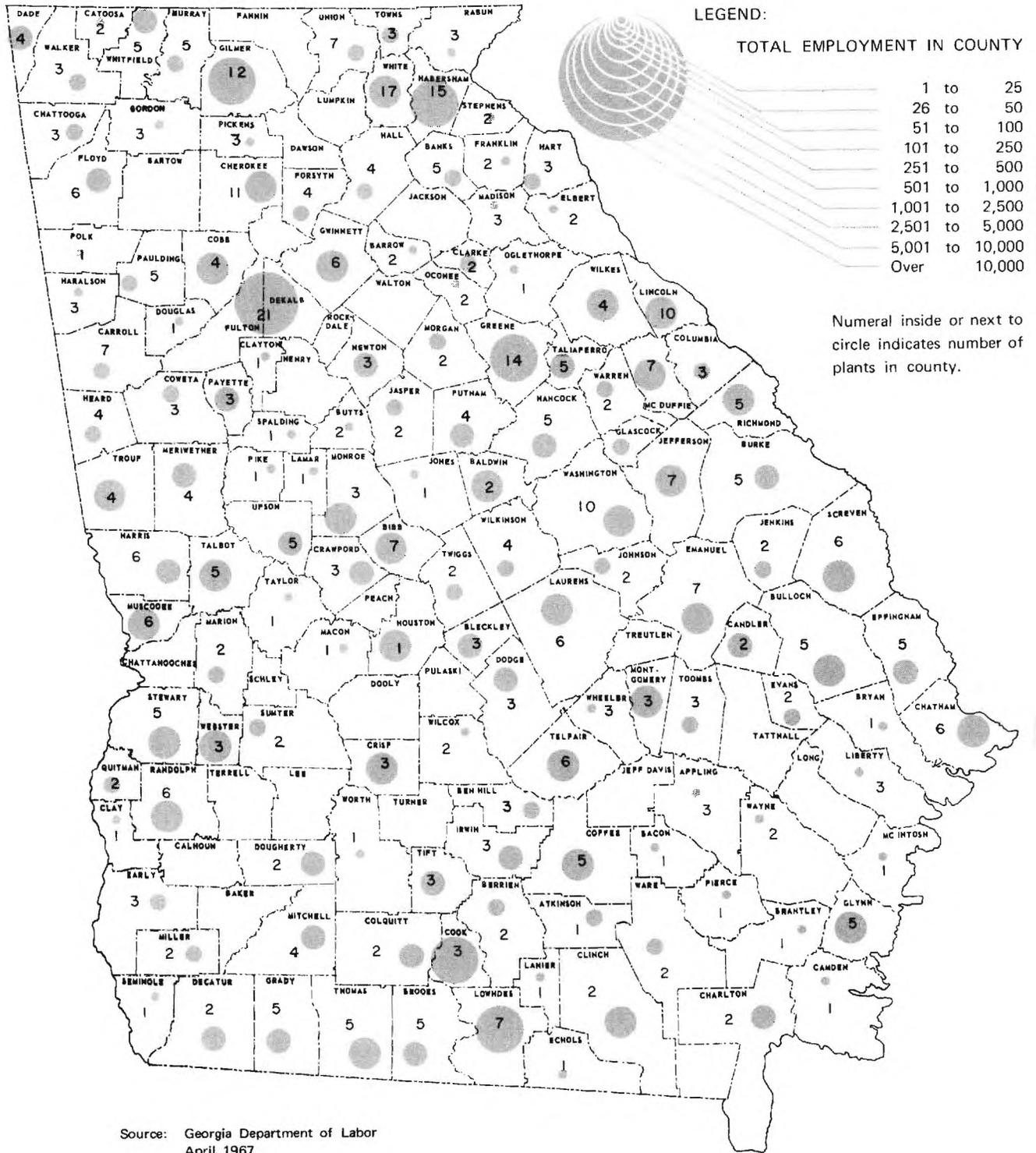
LUMBER AND WOOD PRODUCTS

Logging Camps and Logging Contractors
(SIC 241)

These companies are primarily engaged in cutting timber and in producing rough, round, hewn, or riven primary forest or wood raw materials. Listed on the map are 790 establishments employing nearly 5,300 workers in 127 counties.

Most of these are small operations -- as can be judged from the overall average of six to seven workers per establishment. The larger companies are likely to be combined sawmill-logging operations, which, when reported as one unit, are classified under sawmills and planing mills.

MAP 12-B SAWMILLS AND PLANING MILLS



LUMBER AND WOOD PRODUCTS

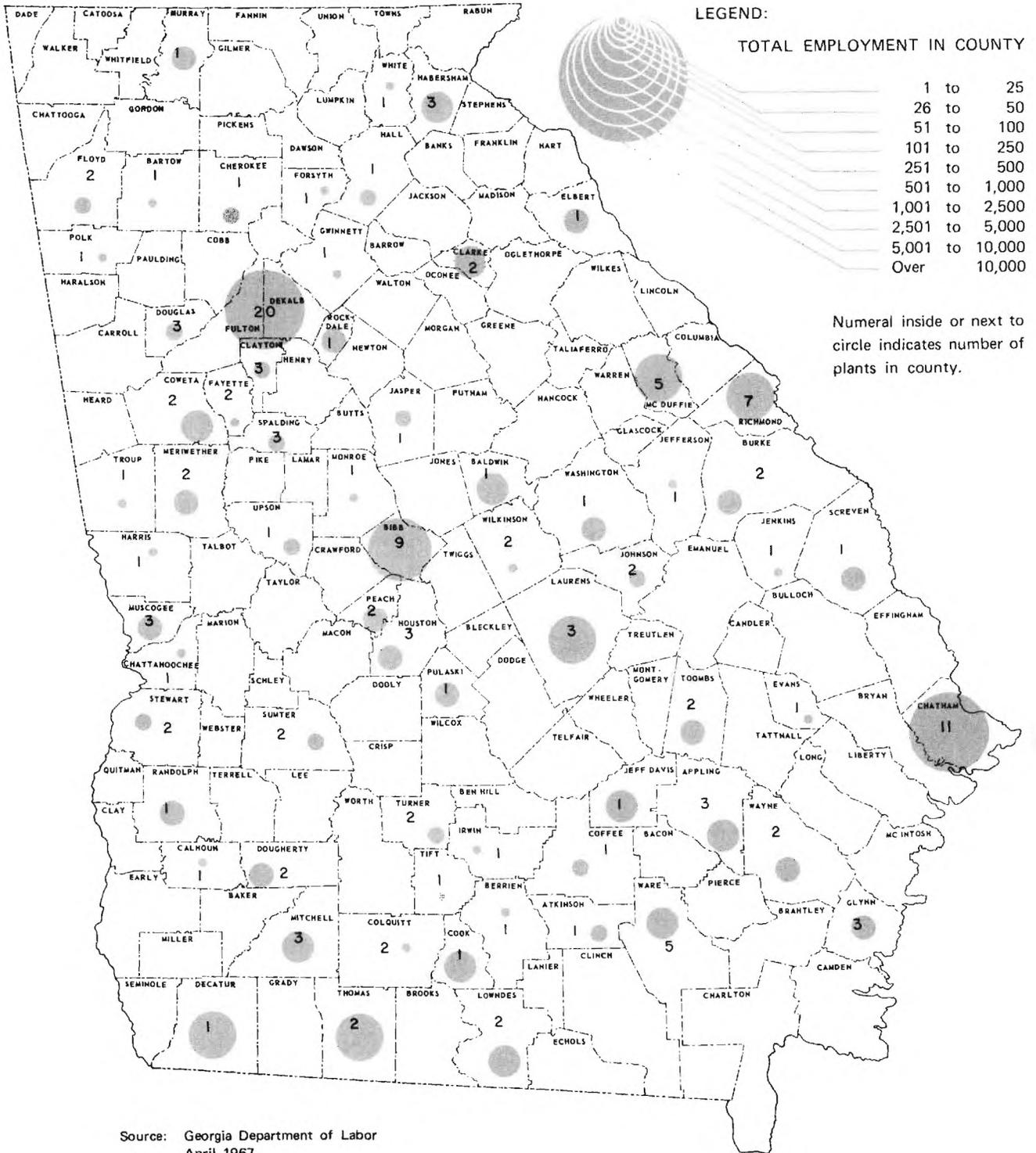
Sawmills and Planing Mills (SIC 242)

There are 520 sawmills and planing mills located in 137 of Georgia's 159 counties, employing some 10,600 persons. These companies saw the rough lumber and timber and manufacture hardwood dimension stock and hardwood flooring, excelsior, wood shingles, and cooperage stock. Some may operate logging camps in combination with their mills.

The Fulton-DeKalb area leads in both employment and number of companies, with over 600 workers in 21 mills. Lowndes, Cook, Habersham, Greene, and Gilmer counties employ over 250 workers each, with a combined employment of 1,700 in 51 mills.

Most of the firms are small, although they tend to be somewhat bigger than the logging camps. The larger companies include Del-Cook Lumber Company (Adel, Cook County); The Langdale Company (Valdosta, Lowndes County); Tolleson Lumber Company, Inc. (Perry, Houston County, and Fitzgerald, Ben Hill County); Williams Brothers Lumber Company (Atlanta, Fulton County); and Appalachian Oak Flooring and Hardwood (Ellijay, Gilmer County).

MAP 12-C MILLWORK, PLYWOOD, AND OTHER ASSOCIATED PRODUCTS



Source: Georgia Department of Labor
April 1967

LUMBER AND WOOD PRODUCTS

Millwork, Plywood, and Other Associated Products (SIC 243, 244, 249)

The remaining lumber and wood plants manufacture a variety of millwork, veneer, plywood, prefabricated wooden buildings, wooden containers, and so on. Total employment in this group is over 8,200 workers; they are found in 157 plants located in 68 counties of the state.

Chatham County leads in total employment with nearly 1,400 workers in 11 companies. The Fulton-DeKalb area is second with over 1,200 workers in 20 plants, followed by Bibb County with 900 employees in nine plants.

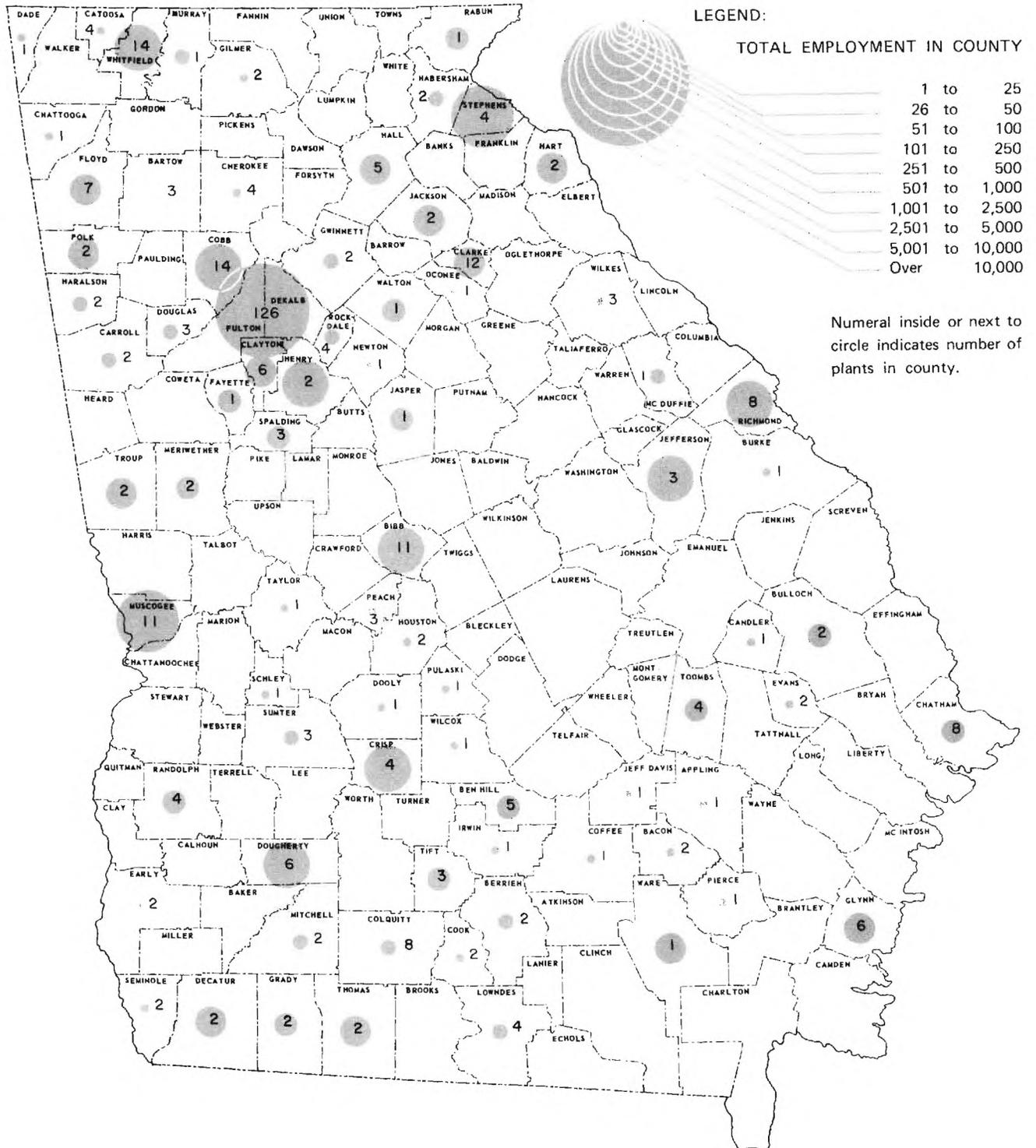
Over half of the companies and nearly half of the employees in this group are engaged in manufacturing fabricated millwork, veneer, plywood, or prefabricated wooden buildings. Chatham County has the highest number of employees, with 1,000 workers in six plants, followed by the Fulton-DeKalb area, with over 700 workers in 10 plants.

Over 2,400 workers make wooden containers, including nailed boxes, wire-bound boxes and crates, veneer and plywood produce baskets, and wooden barrels. Three plants in Bibb County employ over 700 persons. Thomas, Decatur, Chatham, Cook, and Baldwin counties together employ over 1,200 workers in six plants.

Wood preserving and the manufacture of miscellaneous wood products provide jobs for 1,800 workers in 31 counties. The greatest concentration is in the Fulton-DeKalb area, which has nine plants employing nearly 500 workers.

The size of plants manufacturing millwork, plywood, and other associated products varies from a two- or three-man operation to companies employing several hundred workers. Among the larger companies are Georgia Pacific Corporation (Savannah, Chatham County) -- plywood, hardwood, prefinished wall paneling; Southern Crate and Veneer Company (Macon, Bibb County) -- wirebound crates and boxes; Georgia Crate and Basket Company (Thomasville, Thomas County) -- wirebound boxes; Maxwell Wirebound Box Company (Macon, Bibb County) -- wirebound and cleated boxes and crates; Talley Veneer and Crate Company, Inc. (Adel, Cook County, and Waynesboro, Burke County) -- wirebound boxes, wirebound grade veneer; Elberta Crate and Box Company (Bainbridge, Decatur County) -- wirebound boxes, craveneer; and Southern Wood Preserving Company (East Point, Fulton County) -- creosoted wood products.

MAP 13 MACHINERY, EXCEPT ELECTRICAL



MACHINERY, EXCEPT ELECTRICAL
(SIC 35)

Georgia has 372 companies manufacturing machinery (excluding electrical machinery), employing 13,400 workers in 78 counties. These operations vary from machine work done by one man in his own shop to the manufacture of specialized industrial machinery. Map 13 gives a picture of the total industry, and six subsidiary maps show the location of plants manufacturing farm machinery, metalworking machinery, textile and other special industry machinery, as well as the miscellaneous jobbing and repair machine shops.

The major center of production is the Fulton-DeKalb area, whose 126 plants employ over one-third of the workers in this industry and cover a broad range of products. For some items, Atlanta is the only place of manufacture in the state, but the list is much shorter than it used to be. Gantry and bridge cranes, data processing equipment, dispensing pumps, laundry equipment, mechanical power transmission equipment, and industrial vacuum cleaners are produced only in the Fulton-DeKalb area, but a plant in Chatham County now manufactures elevators (in addition to the two plants in Atlanta), and one of the four industrial pattern makers is located in Clarke County.

Muscogee County ranks second to the Fulton-DeKalb area, with nearly 1,000 employees in 11 plants. Two diversified plants account for roughly 90% of this employment, with a high proportion of their workers engaged in the production of textile and cotton ginning machinery, hydraulic presses, and farm implements.

The only other county with over 500 workers is Stephens, where one large company manufacturing earth-moving machinery accounts for the majority of the employees.

Six different categories of machinery are discussed with the subsidiary maps of this industry, but other production lines of lesser importance in Georgia are included in this map of the total industry.

Three small companies make outboard motors (or parts thereof) in Crisp, DeKalb, and Douglas counties. Pumps and pumping equipment are made by 13 firms -- four in the Fulton-DeKalb area, two in Muscogee County, and one each in Ben Hill, Bulloch, Coffee, Crisp, Dooly, Jackson, and Walton counties. The size of the companies varies from a two-man operation to several hundred workers, but 10 of the 13 also carry other lines of production.

Three companies in the Fulton-DeKalb area make blowers, fans, and other ventilating equipment; two others are located in Chatham and Richmond counties. Four small firms make industrial patterns -- three in the Fulton-DeKalb area and one in Clarke County. All three makers of equipment for mechanical power transmission are in the Atlanta area. So is the one small company making data processing equipment. Two firms in Atlanta make office machines, and one small operation in Bacon County rebuilds office machines and equipment.

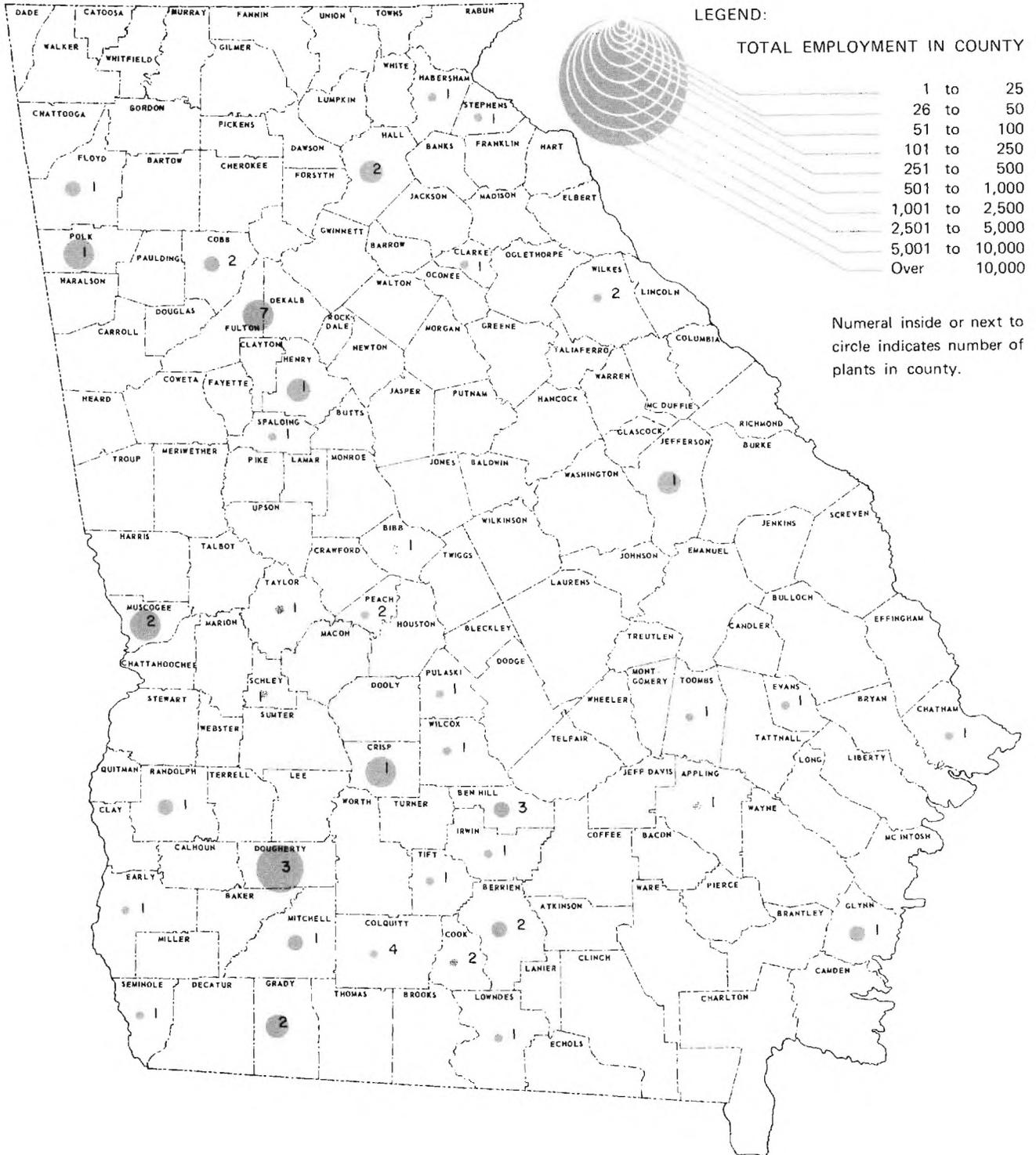
Six of the nine companies manufacturing refrigerators and air-conditioning equipment are in the Fulton-DeKalb area; their employment varies from two or three persons to several hundred. The other three plants are in Clarke, Crisp, and Jefferson counties. Two of these (in Clarke and Crisp counties) are comparatively small operations, with air-conditioning equipment as a secondary line of production, but the plant in Jefferson, making truck refrigerators and auto air conditioners, employs some 300 workers.

Other companies manufacturing service industry machines include one making laundry equipment, one producing vacuum cleaners, and two manufacturing dispensing gas pumps -- all four in the Fulton-DeKalb area. Two small firms in Catoosa and Cobb counties make vending machines.

Many other miscellaneous items of machinery and equipment are made throughout the state, usually in conjunction with other operations.

Among the larger companies manufacturing products not discussed with separate maps are The Warren Company, Inc. (Atlanta, Fulton County) -- commercial refrigeration, display shelving; Thermo-King Corporation, Air Conditioning Division (Louisville, Jefferson County) -- truck refrigerators, auto air conditioners; Roper Industries, Inc. (Commerce, Jackson County) -- rotary pumps, machine parts; Davis Industries (Thomasville, Thomas County) -- equipment for water and sewer industry; and Southern Press and Filter Media Company, Inc. (Augusta, Richmond County) -- filter cloth, presses.

MAP 13-A FARM MACHINERY



MACHINERY, EXCEPT ELECTRICAL

Farm Machinery (SIC 352)

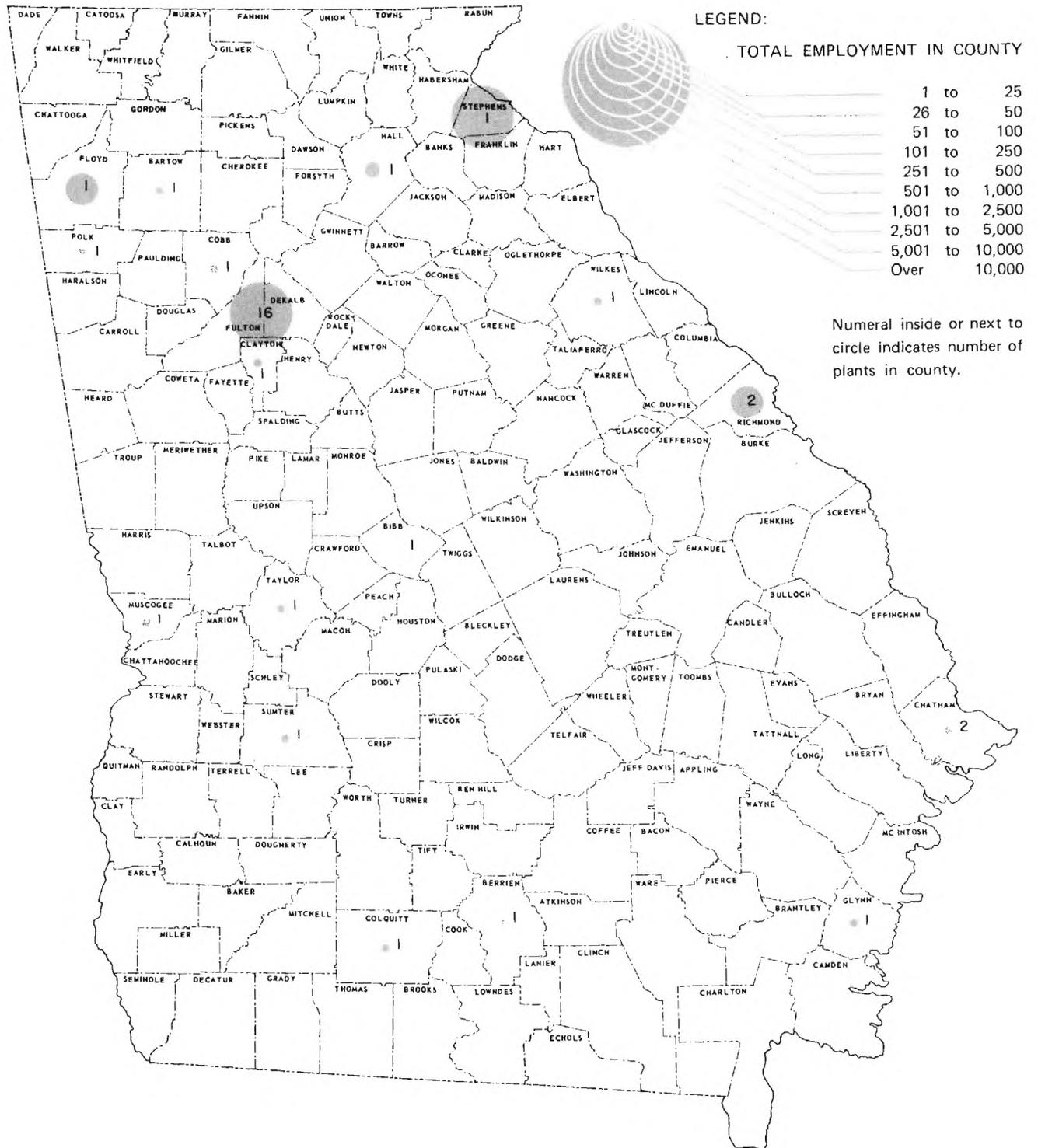
Over 1,900 persons are employed by 59 manufacturers of farm machinery, located in 39 counties throughout the state. The leading county of this group is Dougherty, where three plants employ more than 400 workers. Next in employment size is the Fulton-DeKalb area, with over 200 workers, followed by Polk County, also with over 200 workers.

A wide variety of farm machinery and implements is made, including tractors, plows, power mowers, trailers, wagons, tree planters, subsoilers, peanut shellers, feed mill machinery, fertilizer spreaders, poultry equipment, and logging and pulpwood handling equipment.

Many of the plants are small, often employing only two or three people, and well over half of them have other lines of production. However, 15 companies employ more than 50 workers each; nine of these also make other products. In four of these nine plants, farm implements are only a secondary line of production.

Among the larger companies whose main output is in farm machinery and equipment are Lilliston Implement Company (Albany, Dougherty County) -- farm implements; Rome Plow Company (Cedartown, Polk County) -- heavy-duty agricultural equipment; Columbus Iron Works Company and Southern Plow Company (Columbus, Muscogee County) -- farm implements, stoves and ranges, steel castings, iron castings; Southland Manufacturing Company (Cordele, Crisp County) -- farm equipment; King Plow Company (Atlanta, Fulton County) -- farm tools, disc harrows; McDonough Power Equipment, Inc. (McDonough, Henry County) -- power mowers, stamping, welding; and Gravely Tractors, Division Studebaker Corporation (Albany, Dougherty County) -- tractors and attachments.

MAP 13-B CONSTRUCTION, MINING, AND MATERIALS HANDLING MACHINERY AND EQUIPMENT



MACHINERY, EXCEPT ELECTRICAL

Construction, Mining, and Materials Handling Machinery and Equipment (SIC 353)

Over 2,000 workers are employed by these heavy machinery and equipment manufacturers. There are 35 companies in this group, located in 19 counties. The Fulton-DeKalb area is the main center for these plants, with 16 companies employing over 900 persons. Next in employment size is Stephens County, with one major plant employing some 600 workers, followed by Richmond and Floyd counties. These five counties together account for 92% of the total employment in this industry.

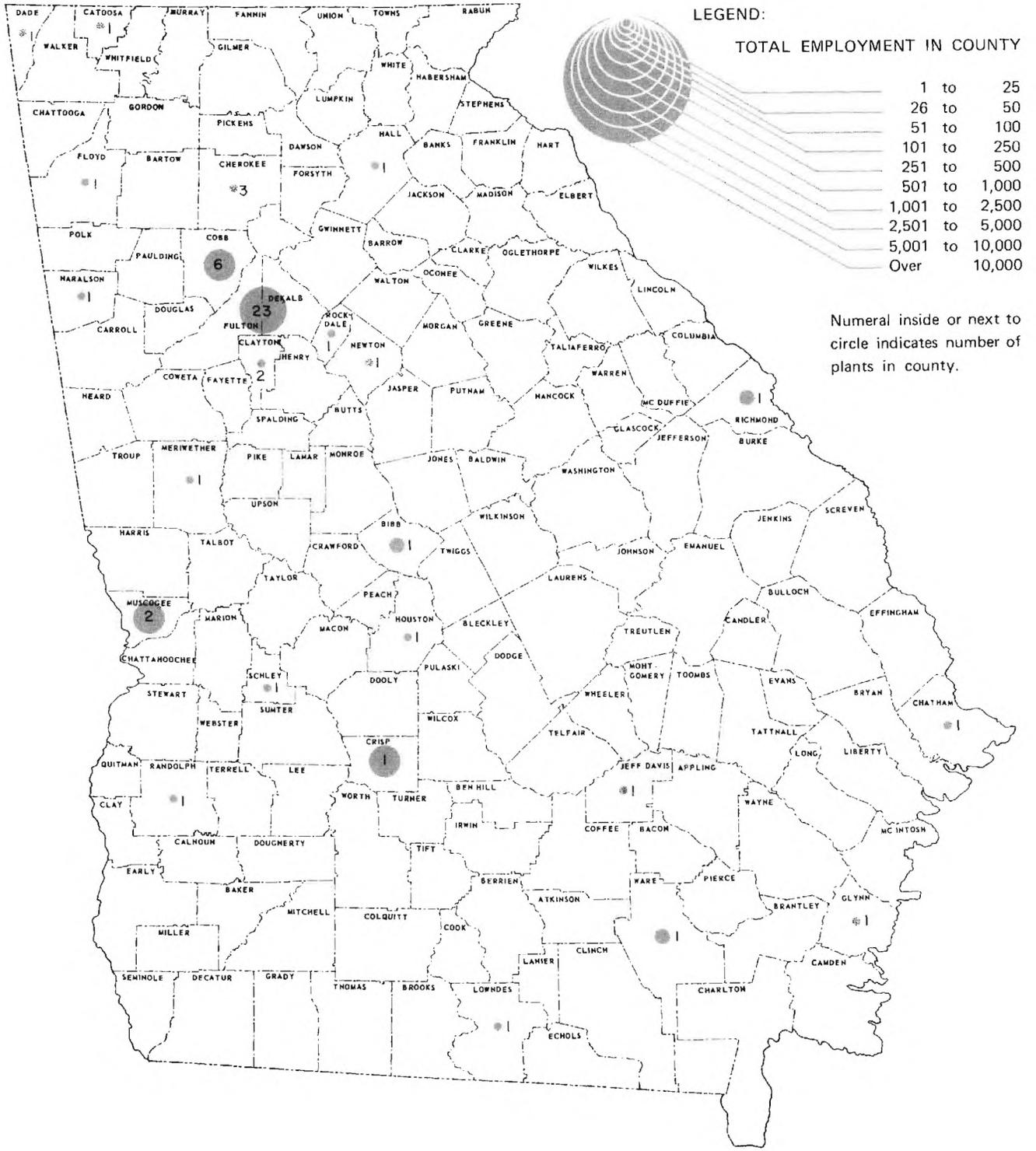
Eight companies make construction machinery and equipment, the major employers being in earth-moving machinery and hydraulic sand and dredge pumps. Three companies make mining equipment, but only as secondary lines of production. Elevators are manufactured by two companies in the Fulton-DeKalb area and one in Chatham County.

Twelve firms make conveyors or conveying equipment -- usually in conjunction with other items. Eight of these companies are in the Fulton-DeKalb area, and Bibb, Chatham, Hall, and Taylor counties have one each. Two of the Atlanta companies also make gantry and bridge cranes.

Industrial trucks, tractors, trailers, and stackers used for materials handling are made by 12 companies -- five of them in the Fulton-DeKalb area, the other seven scattered throughout the state in Bibb, Cobb, Colquitt, Floyd, Richmond, Sumter, and Wilkes counties.

Major companies in this machinery group include LeTourneau-Westinghouse Company (Toccoa, Stephens County) -- earth-moving machinery and trucks; Lockheed Industrial Products (Atlanta, Fulton County) -- materials handling equipment, aircraft-missile checkout equipment; Southeastern Elevator Company, subsidiary of Combined Engineered Products, Ltd. (Atlanta, Fulton County) -- passenger and freight elevators; Georgia Iron Works Company (Augusta, Richmond County) -- hydraulic sand and dredge pumps, mining equipment; The Fairbanks Company (Rome, Floyd County) -- hand trucks, wheels, carts, casters; and Link-Belt Company (Atlanta, Fulton County) -- materials handling equipment, power transmission equipment.

MAP 13-C METALWORKING MACHINERY AND EQUIPMENT



MACHINERY, EXCEPT ELECTRICAL

Metalworking Machinery and Equipment
(SIC 354)

Georgia has 55 plants making metalworking machinery or equipment, employing nearly 1,200 workers and located in 25 counties. The Fulton-DeKalb area is the main center for this type of work, with 23 companies employing over 300 persons. Next in employment size is Crisp County, followed by Muscogee and Cobb counties.

Machine tools for cutting or forming metal are made by seven companies. Two are in the Fulton-DeKalb area and one each in Cobb, Crisp, Muscogee, Randolph, and Rockdale counties. The two firms in Crisp and Muscogee counties are both large, but since the Muscogee company (Lummus Cotton Gin Company) produces industrial hydraulic presses as a subsidiary operation to its main output of cotton ginning and textile machinery, a comparatively small proportion of its employment has been allocated to this category. The production of the company in Crisp County (see final paragraph) is concentrated on machine tools; consequently, the full employment of this firm is listed in this section of the Atlas.

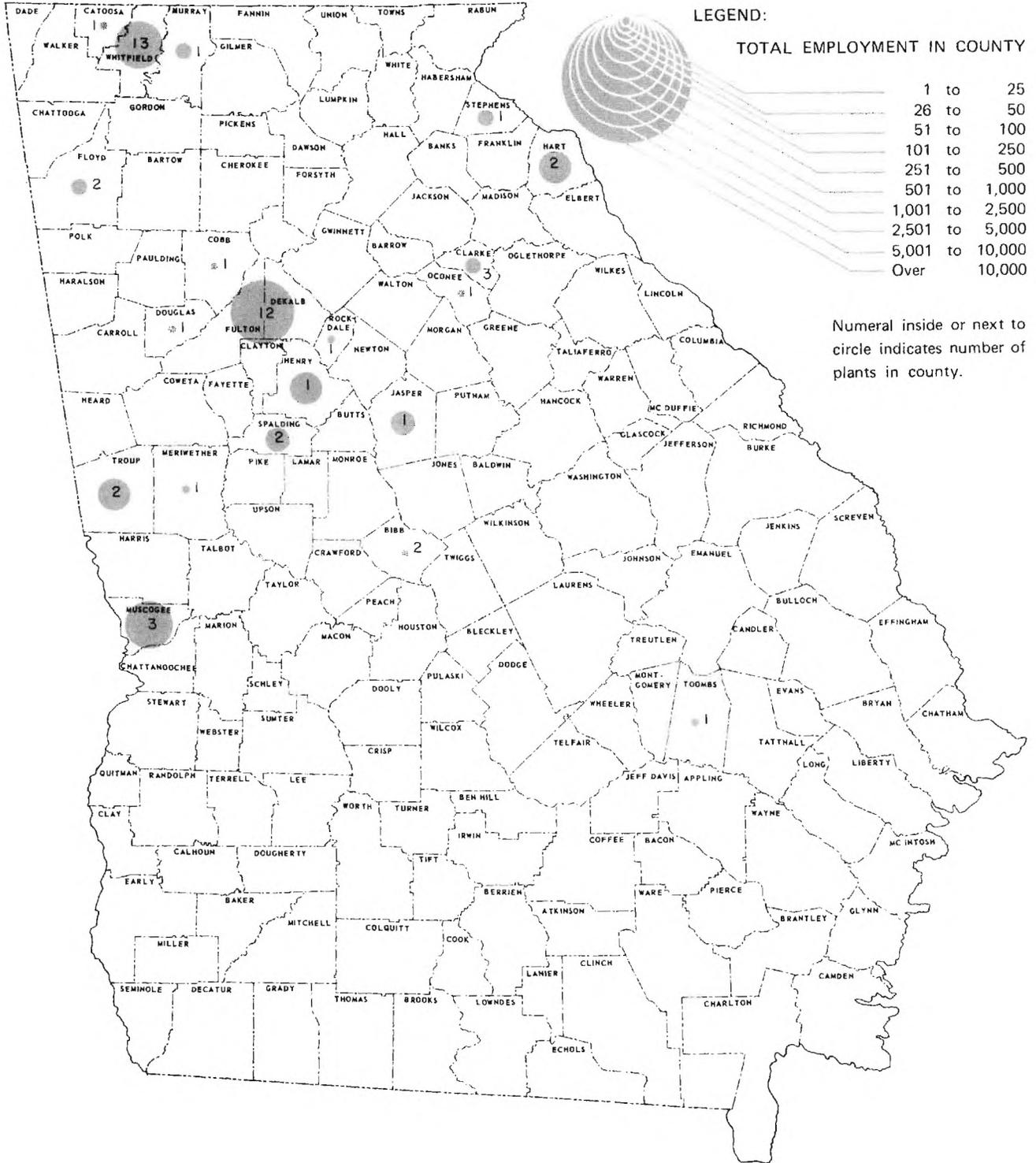
Special dies and tools, die sets, jigs, and fixtures are manufactured by 42 companies. Twenty of these are in the Fulton-DeKalb area, and a further nine are located in the adjacent counties of Cobb, Cherokee, and Clayton. Most of these manufacturers are small or form only part of a larger operation.

Three companies make machine tool accessories -- one company in Fulton County produces coil winders and reamers as its first line of production, and the other two, in Chatham and Cherokee counties, manufacture machine tool parts as secondary operations.

Seven companies manufacture metalworking machinery other than machine tools -- all of them with other lines of production.

Few large companies list the manufacture of metalworking machinery and equipment as their major product. Two exceptions are Harris Press and Shear Corporation (Cordele, Crisp County) -- hydraulic shears and baling presses; and Potter and Rayfield, Inc. (Atlanta, Fulton County) -- coil winders, reamers, steel tanks, water coolers, automatic bottle washers.

MAP 13-D TEXTILE MACHINERY



MACHINERY, EXCEPT ELECTRICAL

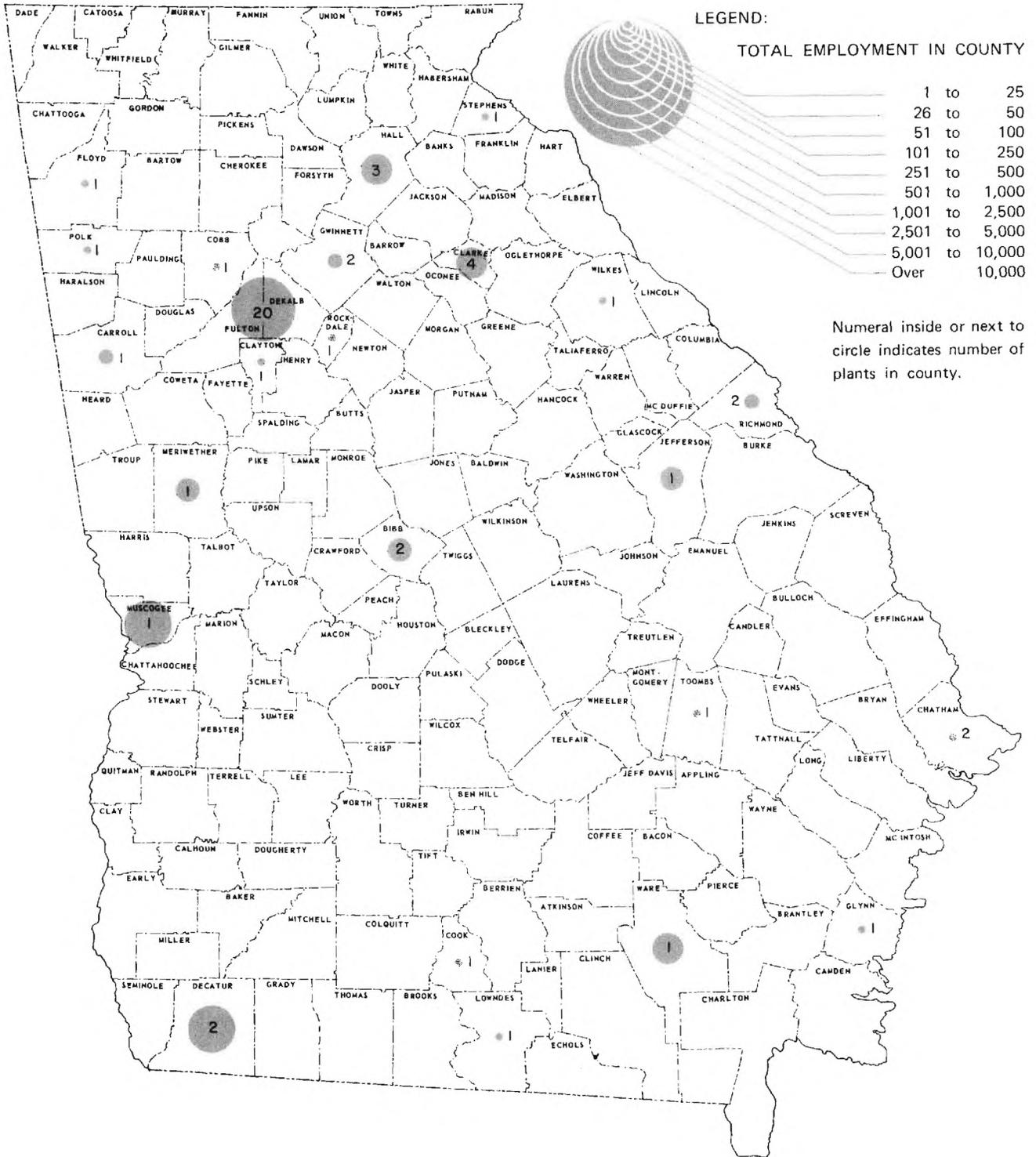
Textile Machinery
(SIC 3552)

Textile machinery is manufactured by 52 companies in Georgia, giving employment to 2,000 workers in 21 counties. The major concentration of employment is in the Fulton-DeKalb area, followed by Whitfield County (where the numbers of both plants and employees have continued to increase to supply the needs of the tufted textile industry) and Muscogee County. Over one-half of the plants and nearly 62% of the workers of the industry are located in these four counties.

Company size varies from one man making textile machine parts to plants employing several hundred persons. Nearly 60% of the companies, however, employ less than 25 workers, and most of the larger plants combine the production of textile machinery with some other operation.

Two major companies, Lummas Cotton Gin Company in Muscogee County and Southern States, Inc., in Henry County, manufacture textile machinery and parts as secondary lines of production. Other large companies with textile machinery as their main output include West Point Foundry and Machine Company (West Point, Troup County) -- textile machines, gray iron castings, brass castings, aluminum castings; Pioneer Heddle and Reed Company, Inc. (Atlanta, Fulton County) -- textile machinery; Meadows Manufacturing Company, Division Saco-Lowell Shops (Atlanta, Fulton County) -- textile machinery and parts, plastic compression molding; and Singer Company, Dalton Plant (Dalton, Whitfield County) -- textile machinery and equipment.

MAP 13-E OTHER SPECIAL INDUSTRY MACHINERY



MACHINERY, EXCEPT ELECTRICAL

Other Special Industry Machinery
(SIC 355, excluding 3552)

A variety of machines, other than those already mentioned, are made for specific industries. Taken together, their manufacture provides work for some 2,300 persons in 53 plants located in 25 counties of the state.

Nearly 1,000 workers are in the Fulton-DeKalb area; Muscogee County has over 300, and Decatur County has between 250 and 300 workers. The four counties together account for over two-thirds of the employment in this group of manufacturers.

Machines for use by the food and beverage industry are made by 17 plants. Six of these are in the Fulton-DeKalb area, three each in Clarke and Hall counties, and the other five in Carroll, Chatham, Decatur, Meriwether, and Stephens counties.

Four companies in Fulton County make woodworking machinery, and six other such plants are located in Glynn, Jefferson, Rockdale, Toombs, Ware, and Wilkes counties. Only three small firms, with less than 25 employees each, make machinery for the paper industry -- in Chatham, Clayton, and Fulton counties.

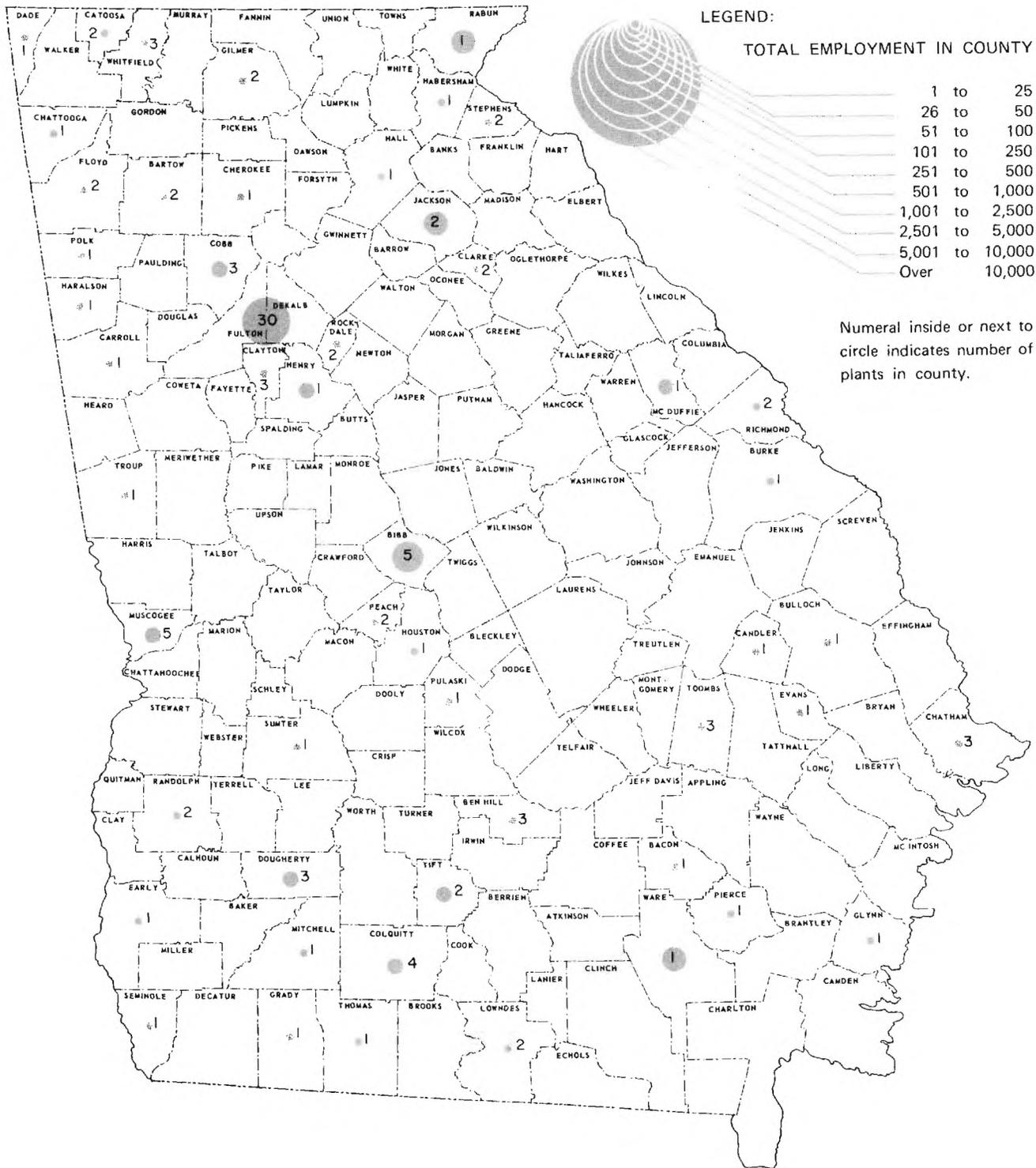
The makers of equipment for the printing trade are all in or near Atlanta. Four plants are in the Fulton-DeKalb area, and one is in the adjacent county of Gwinnett.

Other special industry machinery made in Georgia includes various types of weighing and packaging machinery, plastic processing equipment, machinery for cotton gins and fertilizer and oil mills, aerosol equipment, nailing machines, chemical machine parts, and tire recapping equipment; many of these items are made in plants which also manufacture other product lines.

Major companies with the manufacture of special industry machinery as their first line of operations include Lummus Cotton Gin Company (Columbus, Muscogee County) -- cotton ginning machinery, textile machinery, industrial hydraulic presses, industrial steel valves; Dell Industries, Waycross Machine Shops Division (Waycross, Ware County) -- veneer sizing machinery, special containers, special tool design; The Woodman Company (Decatur, DeKalb County) -- food packaging machinery; Auto-Nailer Company, Division of Auto-Soler

Company (Atlanta, Fulton County) -- nailing machines for shoe repair, nailing machines for woodworking; Gainesville Machine Company, Inc. (Gainesville, Hall County) -- poultry processing equipment, overhead conveyors; and Miller Hydro Company (Bainbridge, Decatur County) -- bottlers' and packers' machinery.

MAP 13-F
MACHINE SHOPS, JOBBING AND REPAIR



MACHINERY, EXCEPT ELECTRICAL

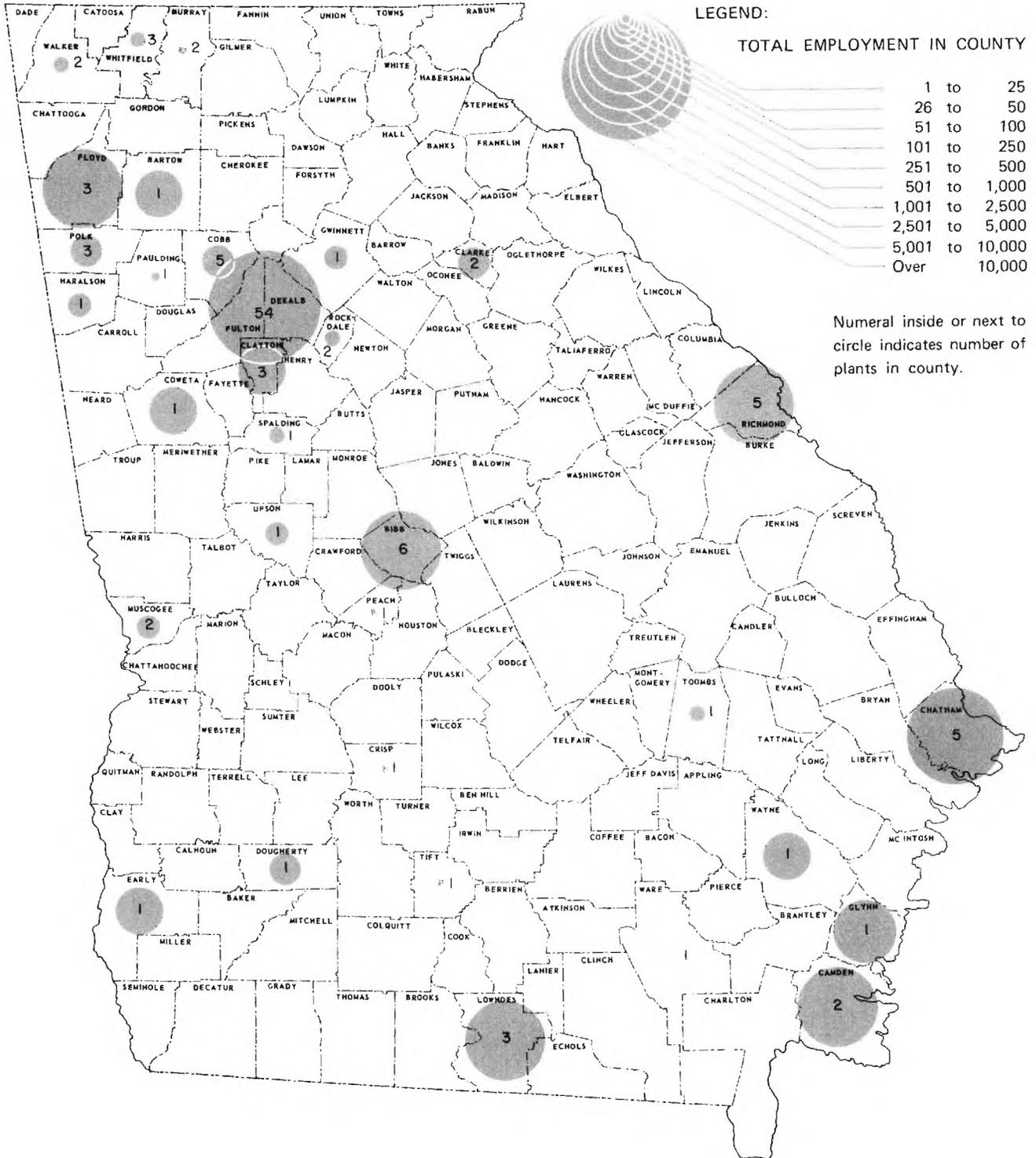
Machine Shops, Jobbing and Repair
(SIC 3591)

Machine shops are defined in the 1957 edition of the Standard Industrial Classification Manual as "establishments primarily engaged in producing or repairing machine and equipment parts not elsewhere classified, on a job or order basis for others. These shops may use their own materials or may perform machinery operations on material owned by others, and are equipped with machine tools and other power-driven metalworking machinery capable of manufacturing a wide range of machine and equipment parts."

There are 119 such machine shops in Georgia, located in 53 counties and employing over 1,400 workers. Nearly 30% of the workers are in 30 plants in the Fulton-DeKalb area; Bibb County is next in number of employees, with over 200 workers in five plants.

Over one-half of the machine shops are part of companies with other lines of production, and most of the individual shops are small operations. Larger companies with the machine shop forming the major part of the business include Georgia Steel Erectors and Fabricators Division, Macon Machine Shop (Macon, Bibb County) -- machine shop, steel fabrication; and Bankhead Welding Service, Inc. (Atlanta, Fulton County) -- welding.

MAP 14 PAPER AND ALLIED PRODUCTS



PAPER AND ALLIED PRODUCTS
(SIC 26)

Paper and allied products remains sixth in employment ranking among the major manufacturing groupings in Georgia. The 118 plants in this industry are located in 33 counties and employ 21,700 workers.

The Fulton-DeKalb area is now the leading employment center, with 26% of the state's employees in 46 plants. Chatham County has dropped to second place, with 23% of the workers in five plants. Other counties with over 1,000 employees each, in descending order, are Bibb County (over 2,000), Camden, Richmond, Floyd, and Lowndes; in addition, Glynn County is just under the 1,000 level. Together these nine counties account for over 86% of the total employment of this industry.

Two separate maps are given for pulp, paper, and paperboard mills and for paperboard containers and boxes. The variation in the type of manufacturing done in the major centers is illustrated in these maps. Production in the Fulton-DeKalb area covers a wide variety of converted paper, paperboard containers and boxes, and other paperboard items, whereas paperboard mills account for most of Chatham County's employment.

Data given on the subsidiary maps are, of course, included in the map of the total industry, together with the remaining paper companies, which produce converted paper and paperboard products (except containers and boxes). This latter group covers many miscellaneous items made from purchased paper and paperboard.

Eight companies manufacture coated, glazed, or varnished paper, such as waxed paper and gummed labels. Four of these are in the Fulton-DeKalb area, and the other four are in Camden, Chatham, Coweta, and Richmond counties.

Envelopes are made by six companies, all in the Fulton-DeKalb area.

There are 17 plants making bags from paper, cellophane, polyethylene, and similar materials (excluding textile bags). Four of these are in the Fulton-DeKalb area, three in Lowndes County, two each in Chatham and Whitfield counties, and one each in Bartow, Camden, Clayton, Muscogee, Paulding, and Rockdale counties.

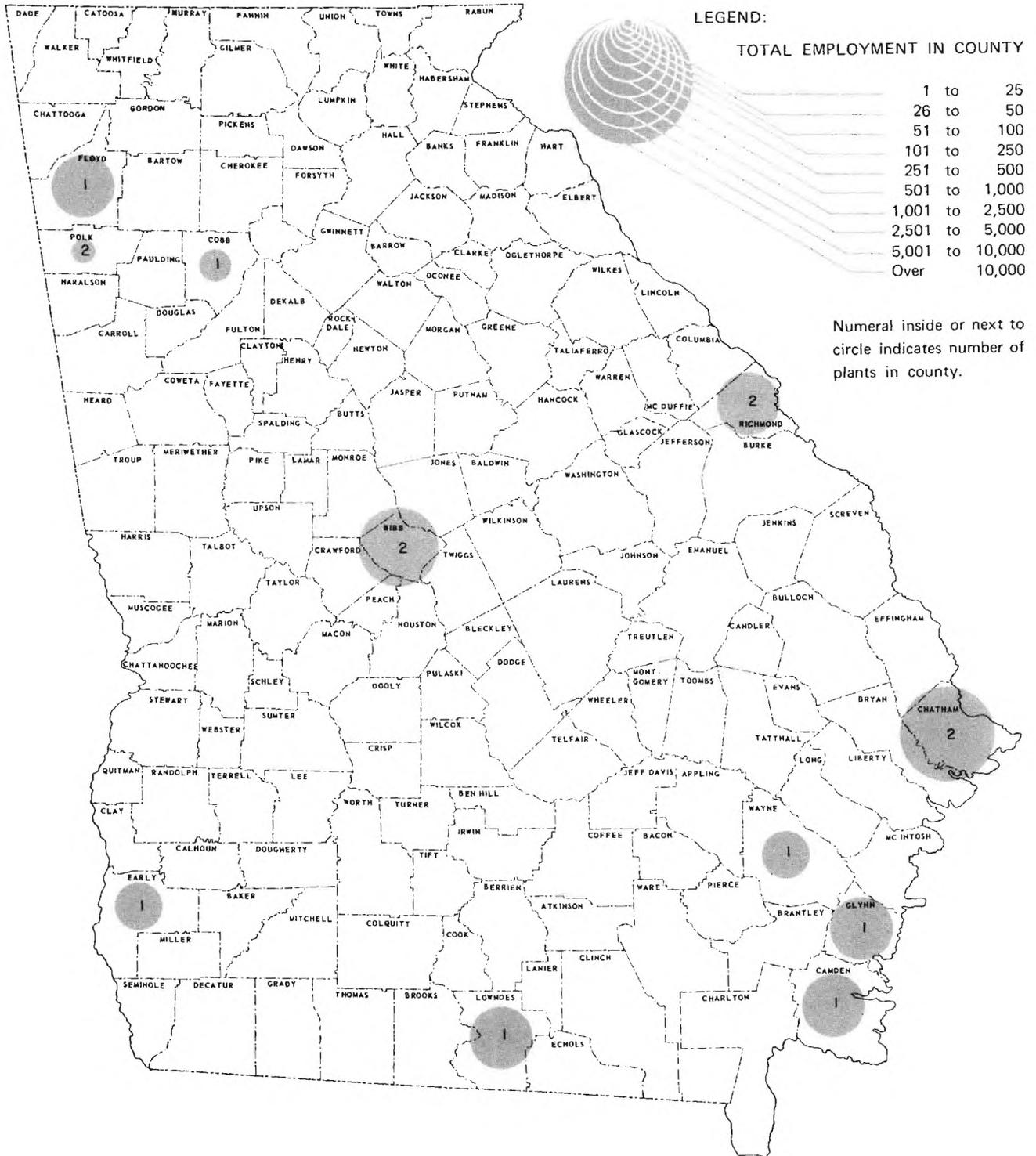
Four companies in Fulton County and one in Crisp County are engaged in die-cutting paper and paperboard, and one company in Fulton County produces egg cartons.

Rolls of paper, school supplies, stationery, tickets, tags, and other miscellaneous paper items are made by 25 firms. Six of these are in Clarke, Cobb, Haralson, Peach, Polk, and Spalding counties; all the others are in the Fulton-DeKalb area.

Many of these manufacturers produce more than one line of goods -- usually, but not always, under the same major classification of paper and allied products.

Among the larger companies, excluding those with their major line recorded on a subsidiary map, are the Mead Packaging Division of The Mead Corporation (Atlanta, Fulton County) -- paper converters, packaging machinery systems; Montag, Inc., Division of Westab, Inc. (Atlanta, Fulton County) -- stationery, school supplies; Kraft Bag Division, Gilman Paper Company (St. Marys, Camden County) -- paper bags, gummed tape; and two subsidiaries of Union Camp Corporation. One subsidiary, at Stone Mountain, DeKalb County, makes labels and folding boxes and does paper converting; the other, at Chamblee, also in DeKalb County, produces paper, notebooks, and fillers. (The main Union Camp plant in Georgia, at Savannah, makes bags and containers, but its major listing is as a paperboard mill.)

MAP 14-A PULP, PAPER, AND PAPERBOARD MILLS



PAPER AND ALLIED PRODUCTS

Pulp, Paper, and Paperboard Mills (SIC 261, 262, 263, 266)

Georgia has 15 mills engaged in the manufacture of pulp or the production of paper, paperboard, and building board from wood pulp and other fibers.

The leading mill is Union Camp Corporation in Savannah (Chatham County). Some 5,200 persons are employed at this plant, which manufactures kraft paperboard as its first line of production. Output of the company also includes bags, containers, and chemicals, and part of its payroll is, therefore, attributable to these other categories.

Nine other mills manufacture paperboard. Georgia Kraft Company has two plants, one in Coosa (Floyd County) with between 800 and 900 workers and one in Macon (Bibb County) with some 700 workers.

Continental Can Company, Inc., also has two mills, one in Port Wentworth (Chatham County) and one in Augusta (Richmond County), each of them with 500 to 600 employees.

Brunswick Pulp and Paper Company (Brunswick, Glynn County) has nearly 1,000 employees. As its name implies, it is also a pulp mill, with bleached sulfate pulp as its major product.

Owens-Illinois Forest Products Division (Valdosta, Lowndes County), with some 800 employees, has liner board as its major product, but also make multi-wall bags.

Great Southern Division of Great Northern Paper Company was established in Cedar Springs (Early County) in 1963 and now has nearly 500 employees making kraft liner boards.

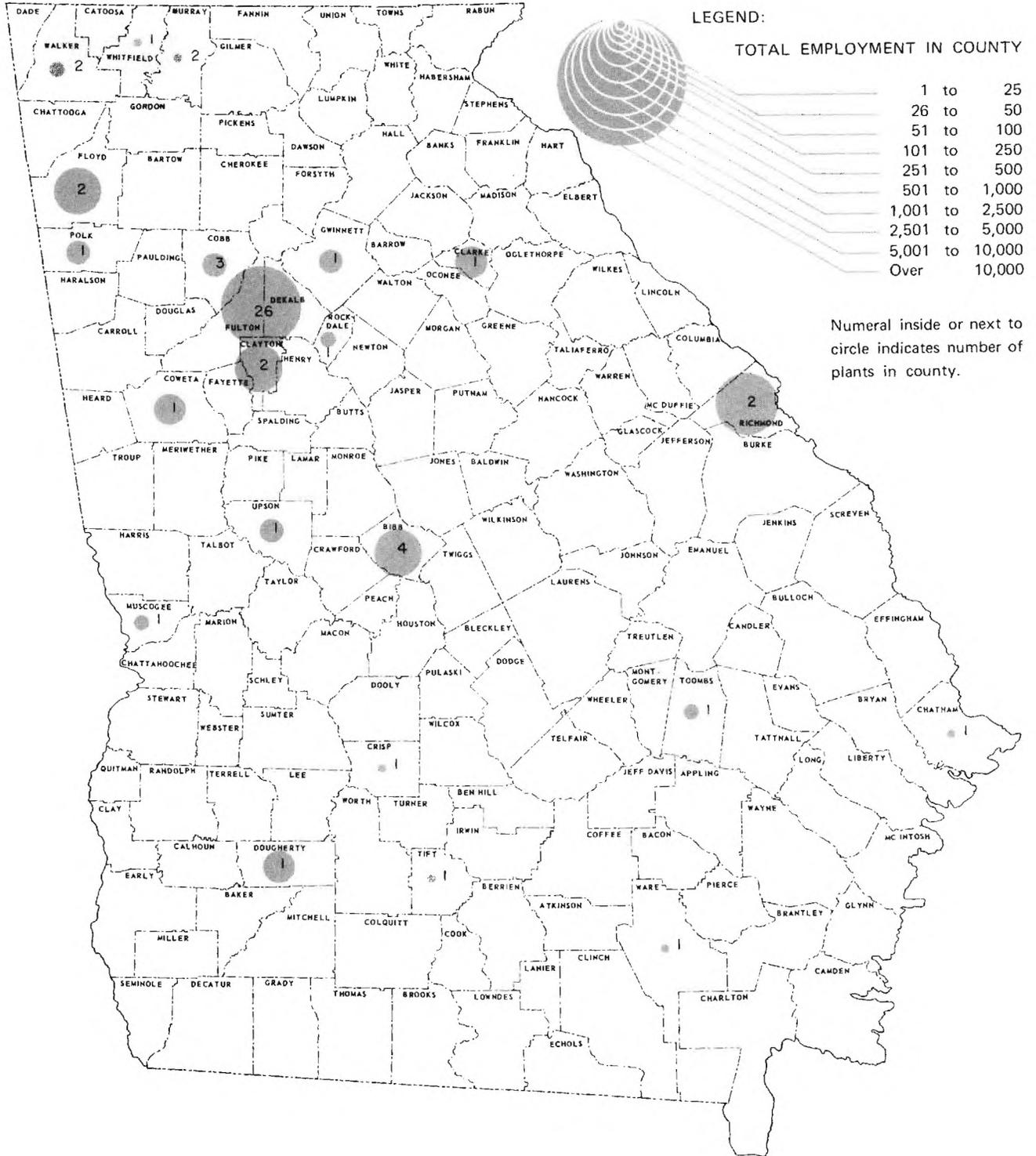
Two smaller companies manufacture paperboard for boxes and tubes. Austell Box Board Corporation (Austell, Cobb County) has some 140 workers, and Noble Manufacturing Company (Cedartown, Polk County) has just under 50 workers.

The only other pulp mill in addition to the Brunswick Pulp and Paper Company already mentioned is Rayonier, Inc. (Jesup, Wayne County), with some 750 employees. The company's major product is paper pulp, but its output also includes chemical cellulose, turpentine, and tall oil.

There are three paper mills, the largest being St. Marys Kraft Division, Gilman Paper Company (St. Marys, Camden County), with nearly 1,000 employees. Cox Newsprint, Inc. (Augusta, Richmond County), has under 200 workers, and Cedartown Paperboard Company, which produces newsprint as a second line to miscellaneous paper rolls, has under 100 workers.

The remaining member of this group is Armstrong Cork Company, which employs over 1,000 workers at Macon (Bibb County) in producing insulation board and acoustical tile.

MAP 14-B PAPERBOARD CONTAINERS AND BOXES



PAPER AND ALLIED PRODUCTS

Paperboard Containers and Boxes (SIC 265)

Paperboard containers and boxes are manufactured by 57 companies which are located in 23 counties in Georgia and provide employment for some 4,600 persons.

The Fulton-DeKalb area is the major center for the production of these items, with over 2,000 workers in 26 plants. Richmond County is next in employment ranking, with over 500 employees in two plants.

Folding paperboard boxes are manufactured in 12 plants, five of them in the Fulton-DeKalb area, two in the adjacent counties of Cobb and Gwinnett, and the other five in Bibb, Crisp, Richmond, Upson, and Ware counties. Nine companies make set-up paperboard boxes. Four are in the Fulton-DeKalb area, including two firms that also make folding boxes; the other five are in Bibb, Cobb, Floyd, Muscogee, and Toombs counties. Together the folding and set-up box manufacturers employ some 1,100 workers, with folding box production accounting for an estimated 70% of this number.

Sixteen companies make corrugated and solid fiber boxes. Half of them are in the Fulton-DeKalb area, two are located in Bibb County, and one each in Chatham, Clayton, Dougherty, Floyd, Murray, and Rockdale counties. The total number of workers making boxes in the 16 plants is some 2,000 persons, approximately one-half being in the Fulton-DeKalb area.

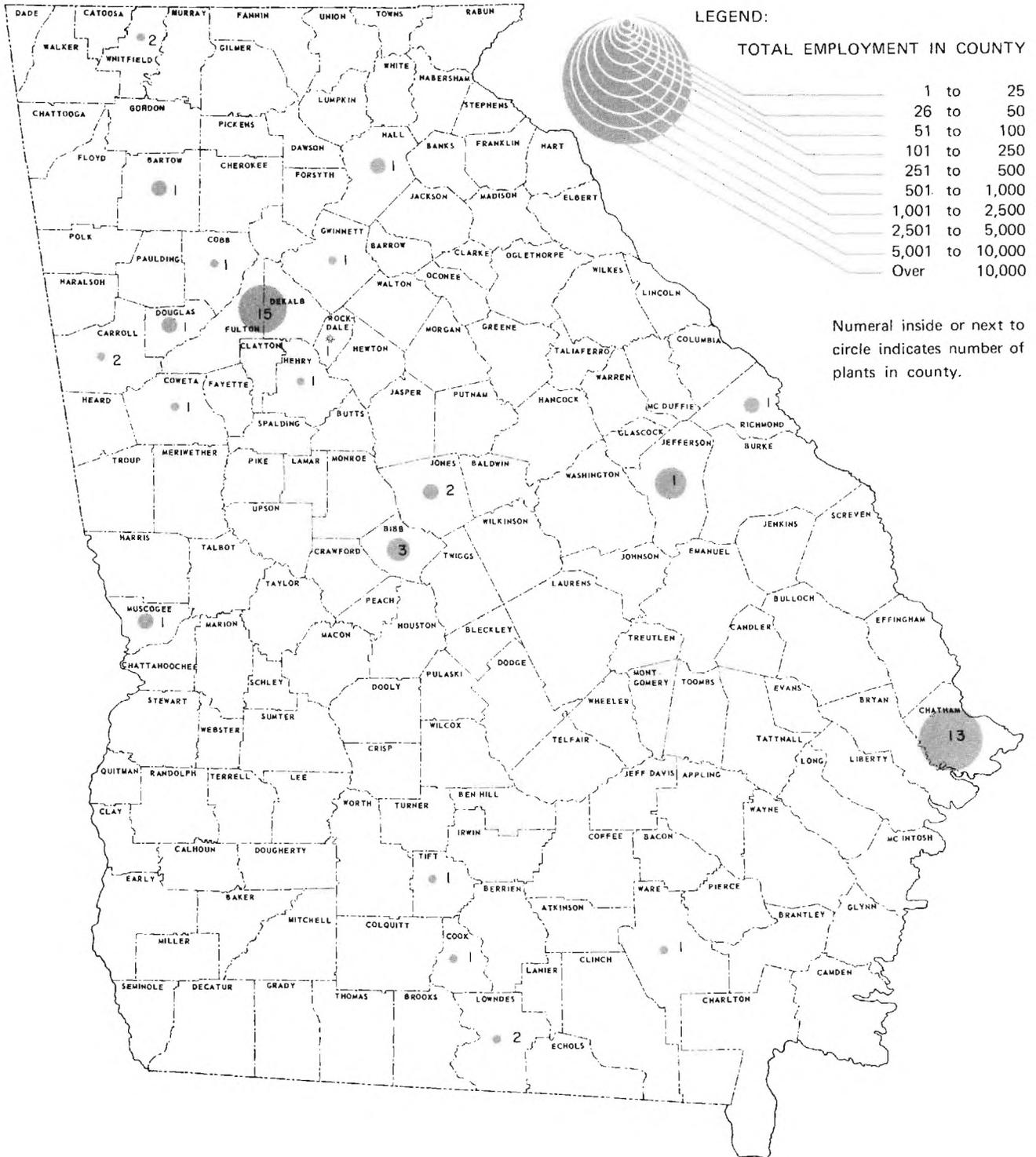
Seven of the 12 companies manufacturing sanitary food containers are in the Fulton-DeKalb area, and the other five are in Clarke, Clayton, Coweta, Richmond, and Tift counties. Half of the plants also carry other lines of production. The number of workers making food containers in all 12 plants is estimated at 1,200 persons, 40% of them working for the Lily Tulip Cup Corporation in Richmond County.

The 10 remaining companies of this group manufacture fiber cans, tubes, drums, and similar products. Four of these are in the Fulton-DeKalb area, two in Walker County, and one each in Cobb, Murray, Polk, and Whitfield counties. Combined employment for the 10 companies is just over 400 persons.

Major companies in the paperboard containers and boxes category include Lily Tulip Cup Corporation (Augusta, Richmond County) -- paper cups and

containers; Inland Container Corporation (Macon, Bibb County, and Coosa, Floyd County) -- corrugated containers; Sonoco Products Company (Atlanta, Fulton County, two plants) -- folding cartons, paper cones and tubes for the textile industry; Gaylord Container Division, Crown Zellerbach Corporation (DeKalb County) -- corrugated containers; American Can Company, Marathon Division (Newnan, Coweta County) -- sanitary food containers (another plant in Clayton County also makes sanitary food containers as a second line of production); and Mead Containers Division of The Mead Corporation (Atlanta, Fulton County) -- corrugated containers, die cuts.

MAP 15 PETROLEUM PRODUCTS



PETROLEUM PRODUCTS
(SIC 29)

No petroleum refining takes place in Georgia, and this industry is limited to the manufacture of paving and roofing materials and the blending and compounding of lubricating oils and greases. Fifty-three companies are engaged in these operations, providing work for nearly 1,600 persons in 22 counties.

Nearly two-thirds of these workers are employed in three counties. Chatham County has over 600 workers in 13 plants, and the Fulton-DeKalb area has nearly 400 in 15 plants.

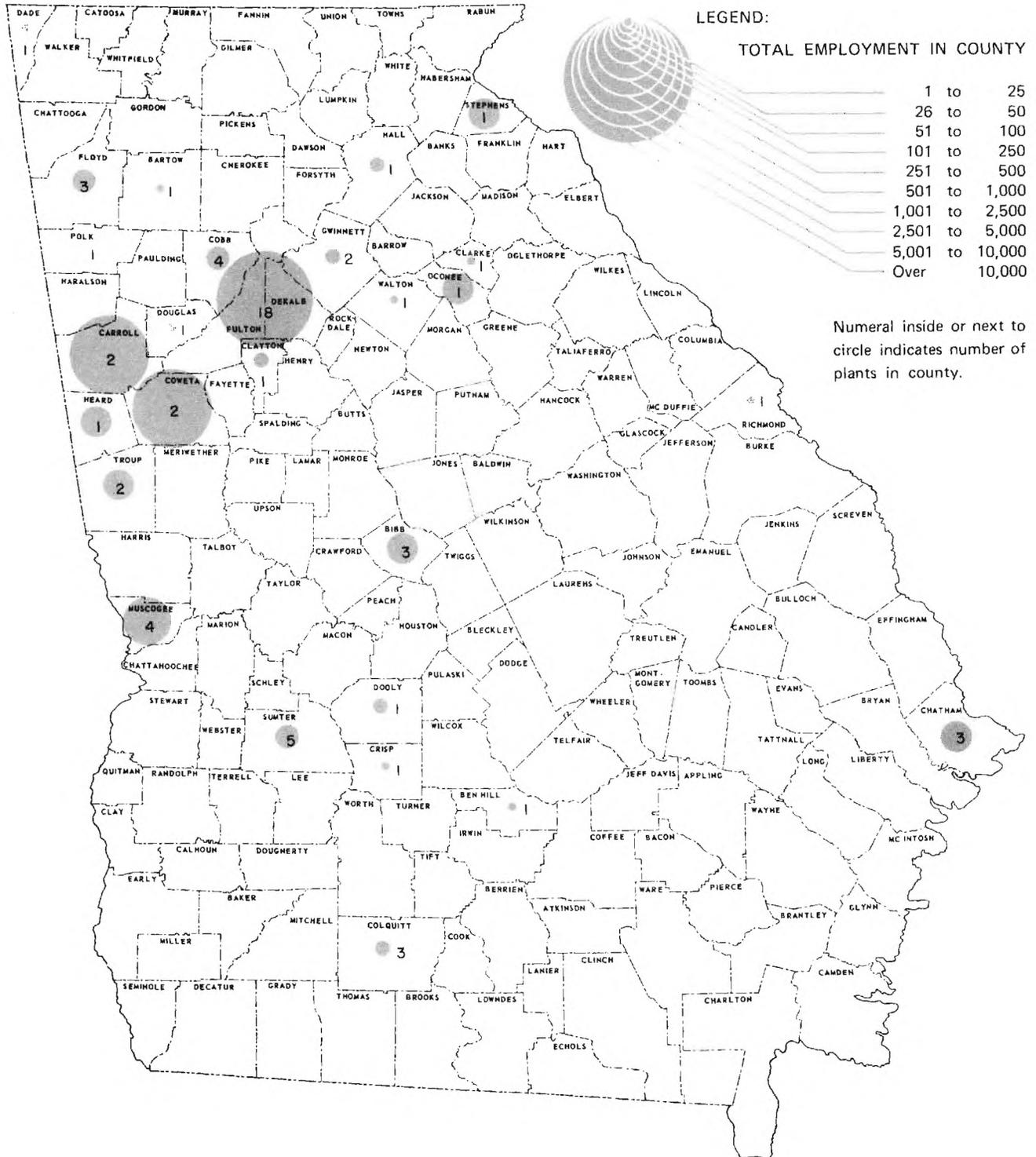
Half the workers in this industry are engaged in manufacturing asphalt and tar-paving mixtures. Ten of the 34 companies in this category are in the Fulton-DeKalb area; six are in Chatham County; Jones, Lowndes, and Whitfield counties have two each; and the other 12 are in Bartow, Bibb, Carroll, Cook, Coweta, Douglas, Hall, Henry, Jefferson, Muscogee, Tift, and Ware counties.

Eleven companies make asphalt felts and coatings -- six of them in Chatham County (including one that also makes paving mixtures), two in Fulton County, and the others in Bibb, Gwinnett, and Rockdale counties.

The other nine companies produce lubricating oils and greases. Three are located in the Fulton-DeKalb area, two in Chatham County, and the other four in Bibb, Carroll, Cobb, and Richmond counties.

Plant size varies from a two-man operation to firms with 150 to 200 employees. The larger companies include Certain-teed Products Corporation (Savannah, Chatham County) -- asphalt building and roofing materials; The Ruberoid Company (Savannah, Chatham County) -- roofing felt and asphalt roofing; and R. G. Foster and Company (Wadley, Jefferson County) -- asphalt and road construction.

MAP 16 PRIMARY METAL INDUSTRIES



PRIMARY METAL INDUSTRIES
(SIC 33)

Sixty-six companies in Georgia, providing employment for some 6,600 persons in 28 counties, are classified under the primary metal industries. Most of the employees are concentrated in and around Atlanta, with 40% of the workers in the Fulton-DeKalb area and a further 32% in the nearby counties of Carroll and Coweta.

Eight companies are engaged in the manufacture of basic steel shapes, including rolled steel, wire, nails, pipes, and tubes. The Fulton-DeKalb area has two companies, Gwinnett and Sumter counties have two each, and the remaining two are in Carroll and Muscogee counties. Total employment for this group is over 1,900, but 90% of the workers belong to one company (Atlantic Steel Company) in Fulton County.

Castings made of gray iron or steel are made by 24 companies located in 19 counties. Some of these foundries are subsidiary operations making castings to be incorporated into other products of the same company, while others manufacture on a job order basis. Two companies produce both gray iron and steel castings (in Richmond and Hall counties), three (in Crisp, DeKalb, and Stephens counties) make steel castings only, and 19 foundries concentrate on gray iron castings. Chatham County has three gray iron foundries; Fulton, Floyd, and Muscogee counties have two each; and the other 10 are located in Bartow, Bibb, Clarke, Colquitt, Dooly, Polk, Spalding, Sumter, Troup, and Walton counties.

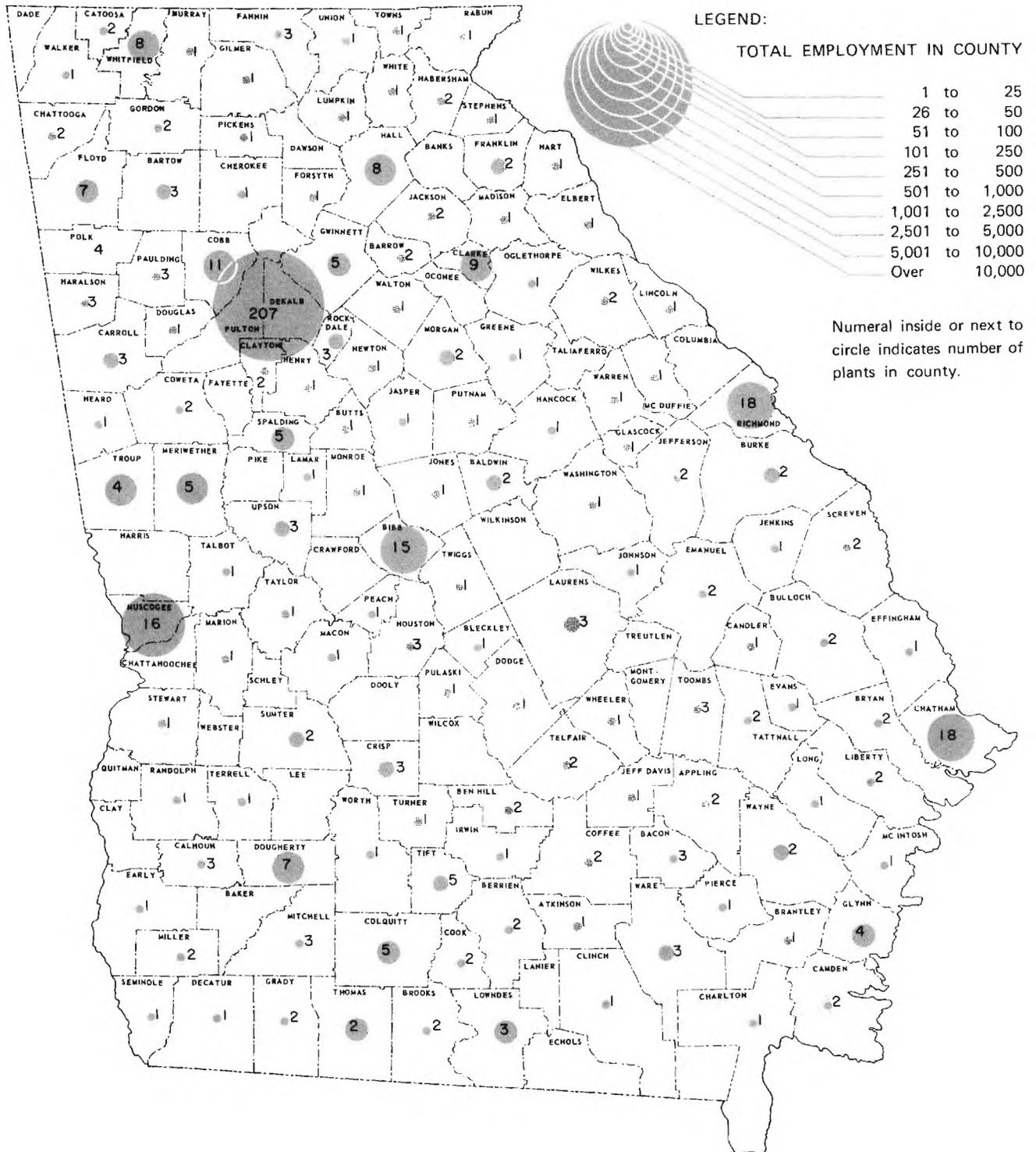
There are 19 foundries producing castings of aluminum, brass, bronze, and other nonferrous metals and alloys, most of them on a job order basis for other establishments. Four are in the Fulton-DeKalb area, Colquitt and Floyd counties have two each, and the other 11 are in Ben Hill, Bibb, Chatham, Clayton, Cobb, Coweta, Dade, Douglas, Richmond, Sumter, and Troup counties.

Three companies, in Bibb, Cobb, and Fulton counties, carry out secondary smelting and refining -- recovering nonferrous metals and alloys from new and used scrap and dross. Five plants produce aluminum extrusions, in Fulton, DeKalb, Cobb, Coweta, and Heard counties. Other nonferrous metals are extruded by two companies in Fulton County, one in Muscogee, and one in Sumter County. Three companies, in Carroll, DeKalb, and Oconee counties, are engaged in drawing

and insulating nonferrous wire, and two companies in DeKalb and Muscogee counties manufacture iron and steel forgings.

Major companies in the primary metals industry in Georgia include Atlantic Steel Company (Atlanta, Fulton County) -- rolled steel, wire, nails; The William L. Bonnell Company, Inc. (Newnan, Coweta County) -- aluminum extruded shapes; Southwire Company (Carrollton, Carroll County) -- wire and cable products; and Grinnell Corporation (Atlanta, Fulton County) -- flanged cast iron and water main fittings.

MAP 17 PRINTING, PUBLISHING, AND ALLIED INDUSTRIES



PRINTING, PUBLISHING, AND ALLIED INDUSTRIES
(SIC 27)

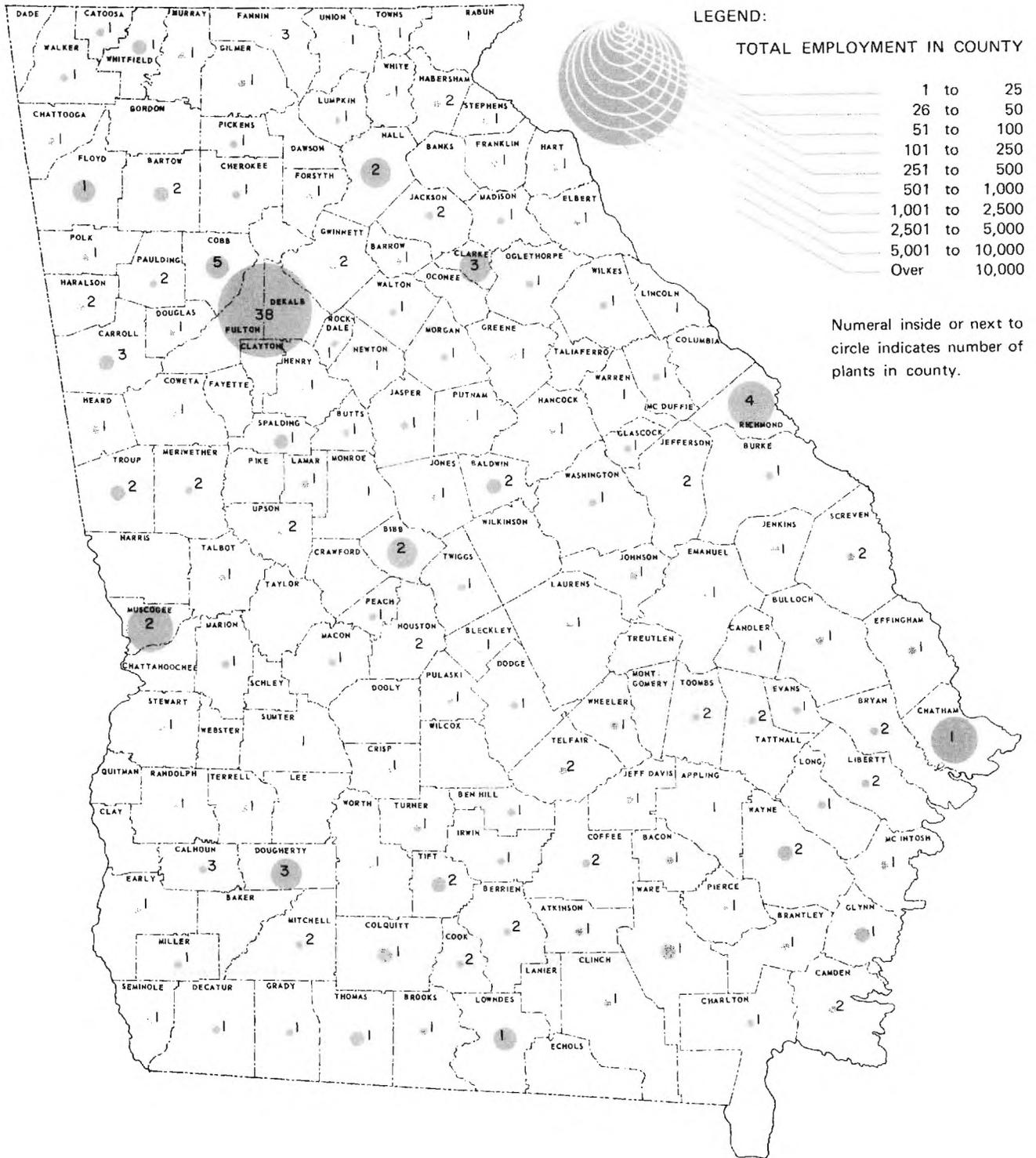
Some form of printing or publishing is carried on in 135 of Georgia's 159 counties. Over 11,600 persons are employed by 540 companies. Less than 100 of the companies, however, have more than 25 employees, and many of those in the 1 to 25 employee category employ only two or three workers.

The dominance of the Fulton-DeKalb area is shown very clearly on the accompanying map of the total industry. Nearly 7,000 persons are employed by the 207 companies in these two counties.

Two subsidiary maps have been prepared: "Printing and Publishing of Newspapers, Periodicals, and Books" and "Commercial Printing and Services." The latter covers all types of commercial printing, the manufacture of manifold business forms, greeting cards, blankbooks, loose-leaf and library binders, and other miscellaneous related work and service industries for the printing trade.

In this particular industry, it was felt that a more satisfactory picture would be presented if the total employment of each firm was allocated to its major type of service, with no attempt to estimate the number of employees engaged to a lesser degree in other printing work. Considerable overlapping exists in the printing and publishing field. Commercial printing, for example, is often done by newspaper printers as a sideline, and general printers may print newspapers or periodicals on a contract basis. On the two subsidiary maps, therefore, companies are recorded only once, either under "Printing and Publishing of Newspapers, Periodicals, and Books" or under "Commercial Printing and Services."

MAP 17-A PRINTING AND PUBLISHING OF NEWSPAPERS, PERIODICALS, AND BOOKS



PRINTING, PUBLISHING, AND ALLIED INDUSTRIES

Printing and Publishing of Newspapers, Periodicals, and Books (SIC 271, 272, 273, 274)

This printing and publishing group contains 212 companies employing more than 6,100 persons in 132 counties of the state. Over half the employment is in the Fulton-DeKalb area.

Newspaper printing and publishing accounts for 182 of the companies, with a total employment of some 4,600 persons. Most of the firms are small, employing only one or two people; only 22 of them have more than 25 employees. The Fulton-DeKalb area has over 1,700 employees in 13 plants -- dominated by Atlanta Newspapers, Inc., with some 1,500 employees.

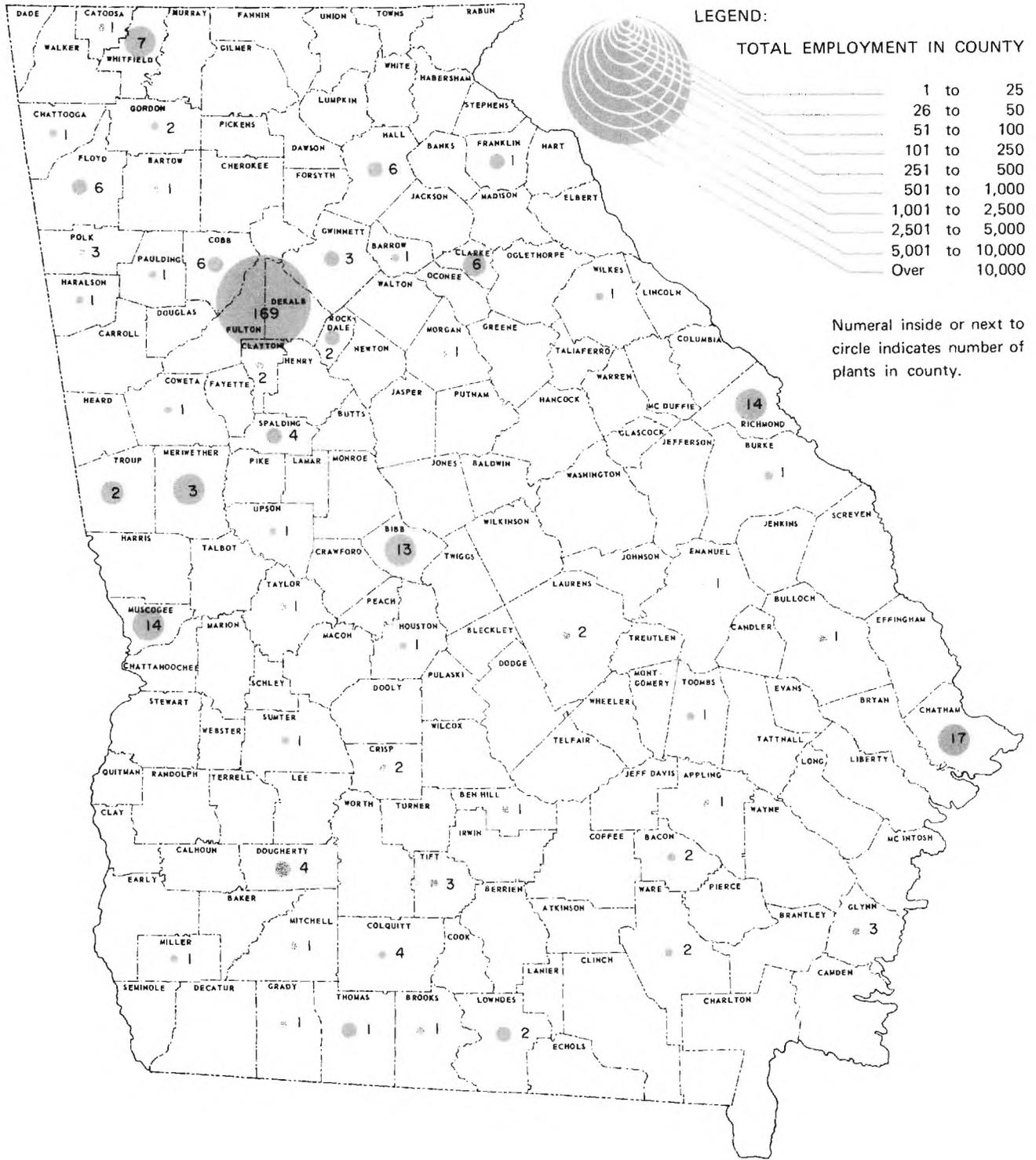
Magazine printing and publishing (chiefly trade magazines) is the main operation of 16 companies with a total of over 300 workers. Twelve of these companies and over three-quarters of the employees are in the Fulton-DeKalb area.

Ten companies concentrate on book printing and publishing. Employment totals over 800, with 96% of it in the Fulton-DeKalb area.

The remaining companies, all in the Atlanta area, are engaged in miscellaneous publishing activities, producing such items as directories and reports.

The largest company in this group of printers and publishers has already been mentioned: Atlanta Newspapers, Inc. (Atlanta, Fulton County) -- newspapers, printing. Other major firms include Foote and Davies, Division of McCall Corporation (Doraville, DeKalb County) -- book printing; Ledger-Enquirer Company (Columbus, Muscogee County) -- newspaper; Savannah News-Press (Savannah, Chatham County) -- newspaper; Southeastern Newspapers, Inc. (Augusta, Richmond County) -- newspaper printing; and Macon Telegraph Publishing Company (Macon, Bibb County) -- newspaper.

MAP 17-B COMMERCIAL PRINTING AND SERVICES



PRINTING, PUBLISHING, AND ALLIED INDUSTRIES

Commercial Printing and Services (SIC 275, 276, 278, 279)

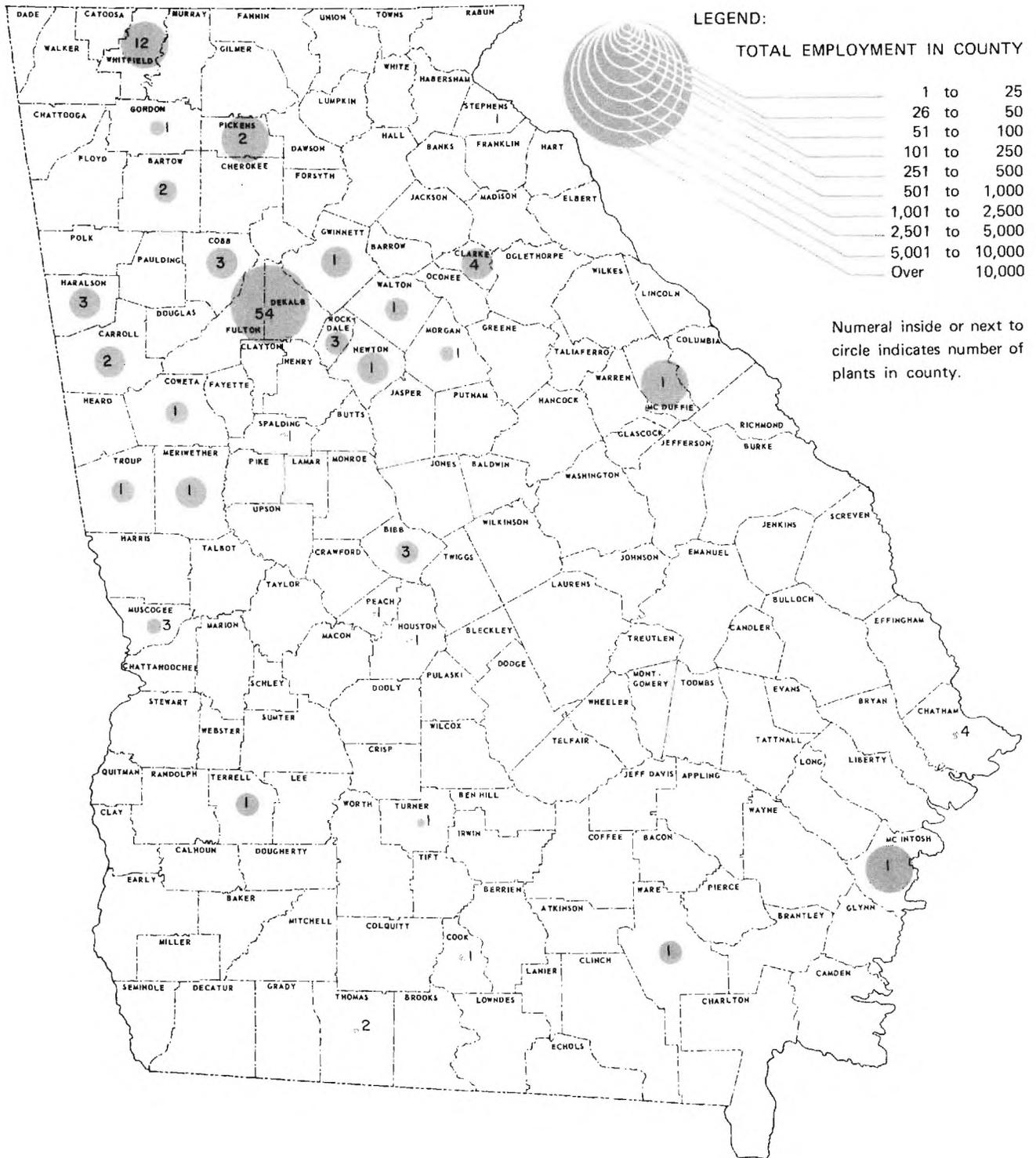
There are 328 companies engaged in commercial printing or related services, employing nearly 5,500 persons in 53 counties. Again the major concentration is in the Fulton-DeKalb area, where 169 firms provide employment for some 3,800 workers.

General commercial or job printing (including printing by the lithographic process and engraving and plate printing) is the major function of 283 of these companies, with a total of over 4,300 workers. The Fulton-DeKalb area accounts for some 3,100 employees in 130 companies.

Many of these commercial printers also do other printing work and services (chiefly for their own benefit); however, 45 companies specialize in various types of printing and printing services. Over 1,100 workers are employed in printing business forms, making blankbooks and loose-leaf binders, bookbinding and its related operations, typesetting, photoengraving, electrotyping, stereotyping, and other specialized work. Some 60% of these workers are in the Fulton-DeKalb area.

Most of the companies in commercial printing and services are small operations. Larger companies include Ruralist Press, Inc. (Atlanta, Fulton County) -- commercial printing, electrotyping, lithographic printing; The Stein Printing Company (Atlanta, Fulton County) -- lithographic printing, commercial printing, typesetting; and Woodbury Business Forms, Inc. (Woodbury, Meriwether County, and LaGrange, Troup County) -- blankbooks, loose-leaf binders, tabulating forms, carbon forms.

MAP 18 RUBBER AND MISCELLANEOUS PLASTICS PRODUCTS



RUBBER AND MISCELLANEOUS PLASTICS PRODUCTS
(SIC 30)

Georgia has 115 companies engaged in the manufacture of rubber and miscellaneous plastics products. The plants are located in 32 counties and employ nearly 4,500 persons. Nearly half the firms are in the Fulton-DeKalb area; they employ nearly 1,300 workers -- over 27% of the state total.

Two counties -- Pickens and Whitfield -- have between 400 and 500 employees each, and three counties -- McDuffie, McIntosh, and Newton -- have between 300 and 400 each. These five counties, plus the Fulton-DeKalb area, account for two-thirds of the employment in this industry.

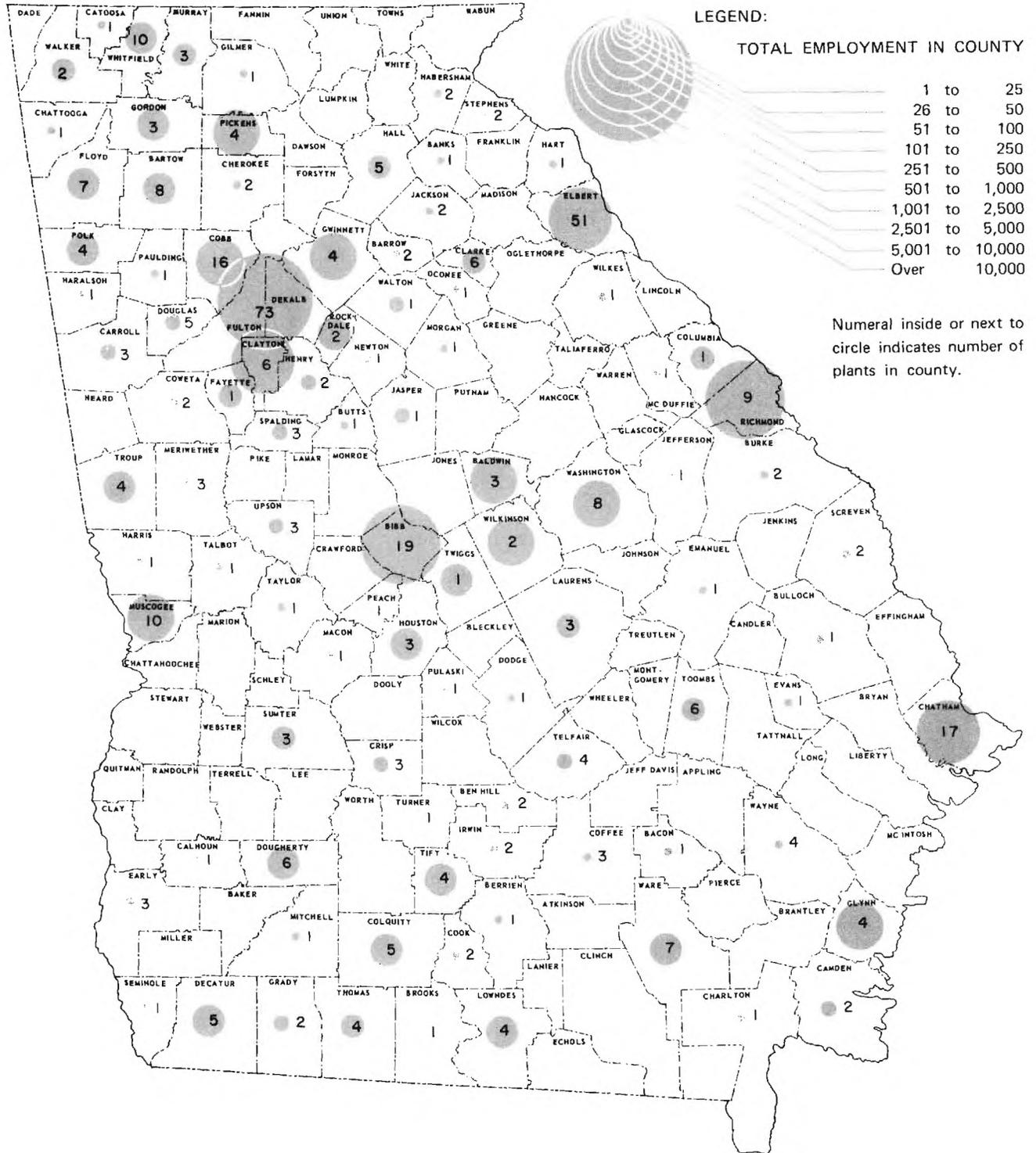
Seven companies, with a combined employment of some 300 workers, make tread rubber and other materials for tires; they are located in Bibb, Carroll, Clarke, DeKalb, Haralson, Rockdale, and Turner counties. Four companies, in Fulton, McDuffie, McIntosh, and Pickens counties, make rubber footwear. The Fulton County firm is comparatively small, with less than 25 employees, but the other three are sizable, with a combined work force of over 900 persons.

Other fabricated rubber products include latex backing for carpets (particularly in Whitfield County), latex foam, and a variety of molded rubber items. One-third of the 39 companies in this miscellaneous category also make other (nonrubber) articles. It is estimated that 1,700 to 1,800 persons are engaged in fabricating rubber products.

Many of the 72 miscellaneous plastics companies have other lines in addition to the plastic panels, pipes, film, containers, and other custom-molded items which come under this classification. The estimated number of employees engaged in plastic work is just under 1,500 persons.

Plant size in this industry varies from a one-man operation to companies employing several hundred workers. Among the larger companies are Uniroyal, Inc. (Thomson, McDuffie County) -- rubber-soled canvas shoes; Hi-Pals Footwear, Inc. (Darien, McIntosh County) -- rubber footwear; Pickens Footwear Company, Inc. (Jasper, Pickens County) -- molded footwear; The Textile Rubber Company, Inc. (Bowdon, Carroll County) -- semi-pneumatic tires, molded rubber products, molded plastics products; and Lamex, Inc. (Norcross, Gwinnett County) -- fabricated plastics products.

MAP 19 STONE, CLAY, AND GLASS PRODUCTS



STONE, CLAY, AND GLASS PRODUCTS
(SIC 32)

The stone, clay, and glass industry provides employment for 16,300 workers in Georgia. There are 429 plants located in 98 counties. Two subsidiary maps present the location of establishments manufacturing concrete products and structural clay products.

Nearly 23% of the employment in this industry is in the Fulton-DeKalb area, where 3,700 workers are employed by 73 plants. Next in employment size are Richmond and Bibb counties, with 2,200 and 1,200 workers, respectively. Elbert County, the center of the state's granite industry, has 51 plants and nearly 900 workers. These five counties employ approximately one-half of the workers of this industry.

Employment not included on the subsidiary maps covers a wide range of products. Glass containers are made by only two companies, located near each other in the Atlanta Metropolitan Area: Owens Illinois, Inc., Glass Container Division (Hapeville, Fulton County) and Knox Glass, Inc. (Forest Park, Clayton County). These two companies provide employment for a total of some 1,300 persons. Seven companies produce other glass products, such as glass doors and panels, and stained and leaded glass windows. Four are in the Fulton-DeKalb area, two in Colquitt County, and one in Gwinnett County. Four of them have additional lines, chiefly the manufacture of aluminum frames for doors and windows. The number of workers employed on glass work in the seven plants is estimated at some 300 persons.

Five companies make cement in Fulton (two plants), Chatham, Houston, and Polk counties, with a combined employment of nearly 400 workers.

Pottery products include one company in Fulton County manufacturing vitreous china plumbing fixtures and eight small firms in Banks, Bartow, Bibb (two firms), Cobb (two plants), Hall, and Meriwether counties making a variety of art pottery and flower pots.

Three companies make gypsum building materials, National Gypsum Company and The Flintkote Company in Savannah (Chatham County) and Bestwall Gypsum Company in Brunswick (Glynn County). Their combined employment is some 500 workers.

Agricultural or industrial lime is produced by five plants (four of them in conjunction with some other operation) in Chattooga, Colquitt, Fulton, Walker, and Whitfield counties.

As indicated earlier, Elbert County is the center of the granite industry, and 49 of its 51 companies in the stone, clay, and glass industry are concerned with granite products. Georgia also has 35 other firms manufacturing cut stone and stone products; they have a combined employment of nearly 600 persons in 24 counties. Pickens County has the largest cut stone manufacturer in the state -- The Georgia Marble Company, which, in addition to its mining operations at Tate, has a marble fabricating plant in Nelson with 250 to 300 employees.

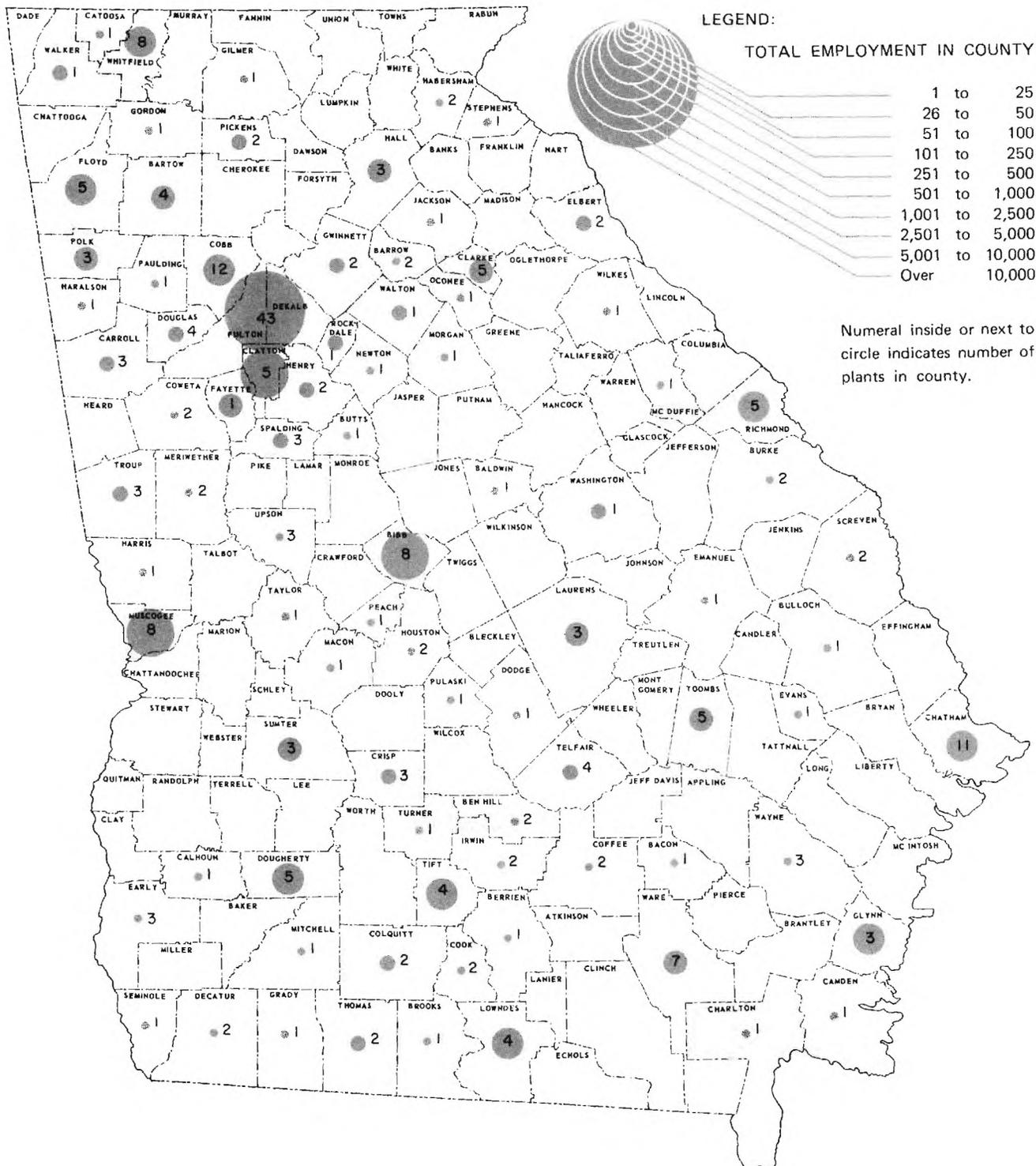
Seven companies manufacture asbestos products. Two of them, in Bartow and Chatham counties, have other major lines of production. Of the other five, DeKalb County has two and Camden, Talbot, and Troup counties have one each. The largest is Uniroyal, Inc.'s asbestos plant in Hogansville (Troup County), which makes asbestos yarns and fabrics.

Southern Pipe Coating Division, L. B. Foster Company, Inc., in Norcross (Gwinnett County) is the largest of the makers of packing and insulation materials, with nearly 200 employees. Four other small companies are located in Fulton County, and one is found in Muscogee County.

Twenty-eight companies are engaged in treating various minerals and earths, but in most of the larger ones mining is the most important part of their operations. Ten companies in Washington, Wilkinson, and Twiggs counties process the kaolin clay found in the area. Other materials processed include feldspar, mica, limestone, fuller's earth, and talc.

Two small companies in Fulton County manufacture mineral wool insulation products, and six companies produce nonclay refractories -- three in Fulton County and one each in DeKalb, Gordon, and Richmond counties.

MAP 19-A CONCRETE PRODUCTS



STONE, CLAY, AND GLASS PRODUCTS

Concrete Products (SIC 3271, 3272, 3273)

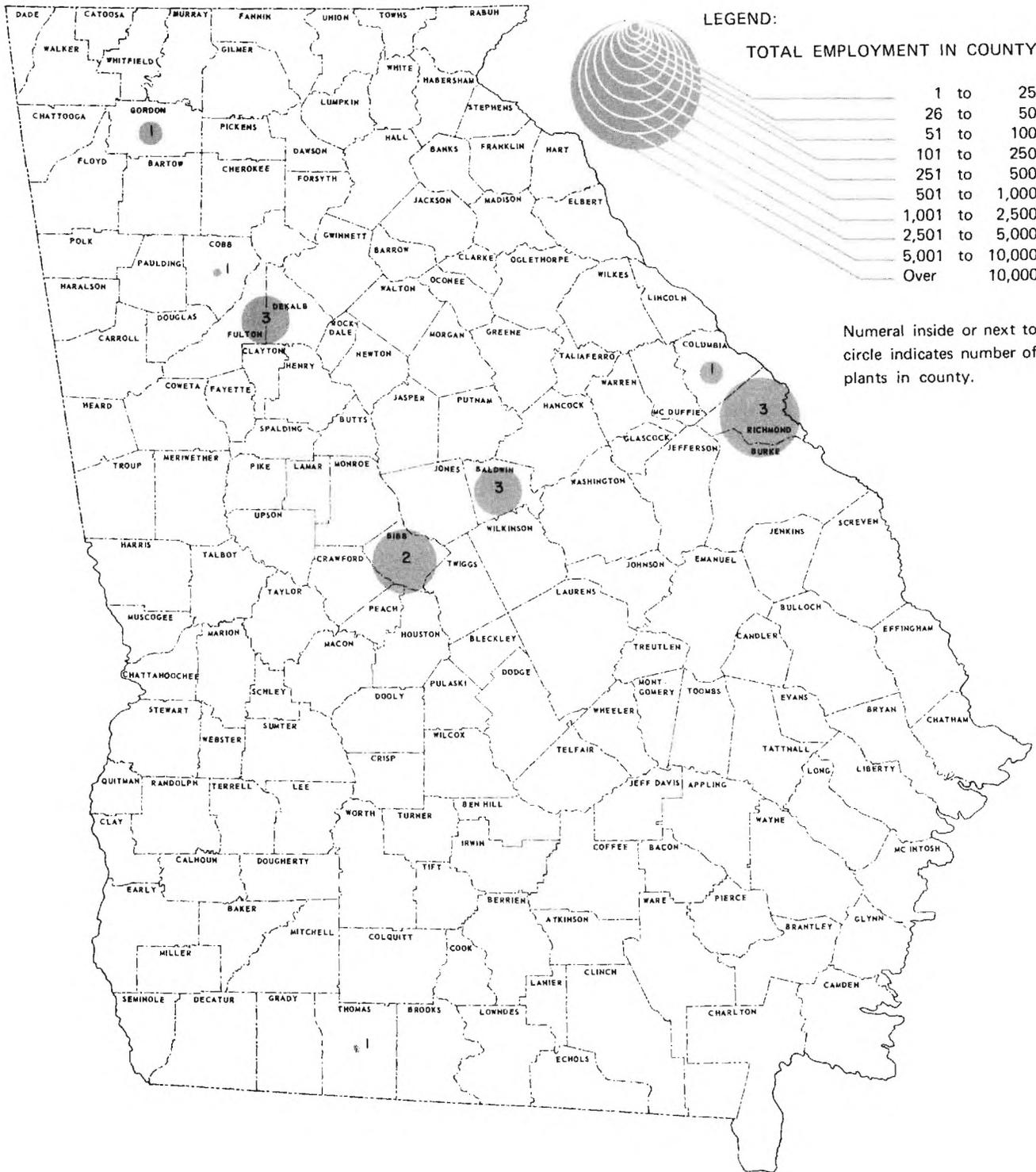
Concrete products are manufactured by 257 plants in Georgia. They are located in 87 counties and employ some 6,000 persons -- 37% of the total employment in the stone, clay, and glass industry. The Fulton-DeKalb area is the major employment center, with nearly 1,700 workers. Muscogee, Bibb, and Clayton counties are next in employment size, with a combined work force of some 1,100 persons.

Although the concrete products industry can be divided into three classifications -- concrete brick and block, concrete products except brick and block, and ready-mixed concrete -- the output of many of the plants covers two and sometimes all three of these categories.

Major companies in Georgia include Vulcan Materials Company (Atlanta, Fulton County; Scottdale, DeKalb County; Gainesville, Hall County; Stockbridge, Henry County; and Marietta, Cobb County) -- concrete brick and block, concrete pipe, ready-mixed concrete^{1/}; Bickerstaff Clay Products Company (Columbus, Muscogee County) -- concrete brick and block; Peavy Concrete Products, Inc. (Atlanta, Fulton County and DeKalb County; East Point, Fulton County) -- concrete brick and block, ready-mixed concrete; Concrete Materials, Inc. of Georgia (Forest Park, Clayton County) -- concrete building panels; Concrete Products, Inc. (Brunswick, Glynn County) -- roof decks.

^{1/} Vulcan Materials Company also operates several quarries in the state, chiefly in and around Atlanta.

MAP 19-B STRUCTURAL CLAY PRODUCTS



STONE, CLAY, AND GLASS PRODUCTS

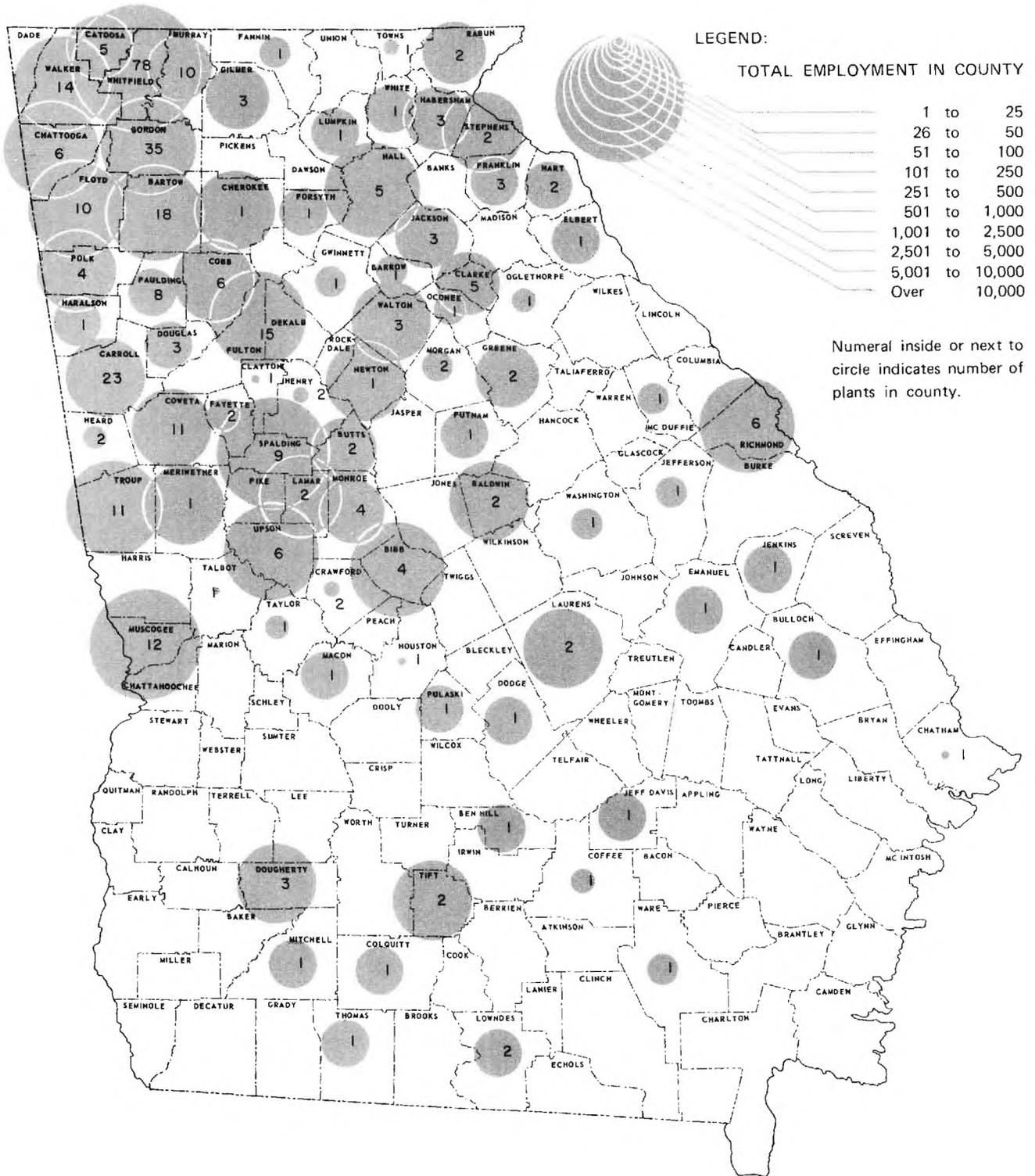
Structural Clay Products (SIC 325)

Although only 15 companies are engaged in the manufacture of structural clay products, they employ some 3,100 persons -- 19% of the total employment in the stone, clay, and glass industry. Richmond County is the major center, with 1,600 employees in its three plants. Bibb County is next with some 550 employees in two plants, followed by Baldwin with nearly 500 workers in three plants.

Eight of the companies make brick and structural clay tile. Two of them (both in Richmond County) include other structural clay products in their output. The other seven firms manufacture clay firebrick and other clay refractories. Two of these companies also make sewer pipe and drain tiles, and the Richmond County plant in this group has nonclay refractories as a second line of production.

Major companies producing structural clay products are Babcock and Wilcox Company, Refractories Division (Augusta, Richmond County) -- clay refractories, nonclay refractories; Merry Brothers Brick and Tile Company (Augusta, Richmond County) -- structural clay tile, structural clay products; Oconee Clay Products, Division Griffin Pipe Products Company (Milledgeville, Baldwin County) -- firebrick and flue lining, vitrified sewer pipe and tiles; and Cherokee Brick and Tile Company (Macon, Bibb County) -- structural clay, tile, and brick.

MAP 20 TEXTILE MILL PRODUCTS



TEXTILE MILL PRODUCTS
(SIC 22)

In the last few years, textile employment in Georgia has shown healthy growth. However, the number of workers in this industry tends to fluctuate, and the annual figures of the Bureau of Labor Statistics show that employment has not yet climbed back to the high recorded in 1951. Meanwhile, the growth of other industries in Georgia has reduced the relative size of the textile work force. Nevertheless, this industry still employs more workers than any other type of manufacturing in the state, accounting for 25% of all manufacturing employment in 1966.

A total of 392 textile plants, employing some 106,400 workers, are located in 82 counties in Georgia. The heaviest concentrations of employment are in the upper half of the state, led by Whitfield County with over 11,500 workers. The second county by employment size is Muscogee, in mid-state, with 9,400 workers; it is followed by Spalding County with 7,400. The Fulton-DeKalb area and Troup, Upson, Walker, and Floyd counties have between 4,000 and 5,000 employees each, while Chattooga, Gordon, and Richmond counties are in the 3,000 to 4,000 range. Together these 12 counties employ over 60,000 textile workers.

Four subsidiary maps give the locations of fabric mills, knitting mills, floor covering mills, and yarn, thread, and cord mills. The remaining textile operations are discussed below.

Miscellaneous Textile Products

Plants in the miscellaneous textile products group include those engaged in dyeing and finishing textiles; manufacturers of felt goods (except woven felts and hats), paddings and upholstery fillings, and artificial leather and oilcloth; and processors of textile mill waste. These operations are carried on in 45 plants in 25 counties and have a combined employment of just under 5,000 workers.

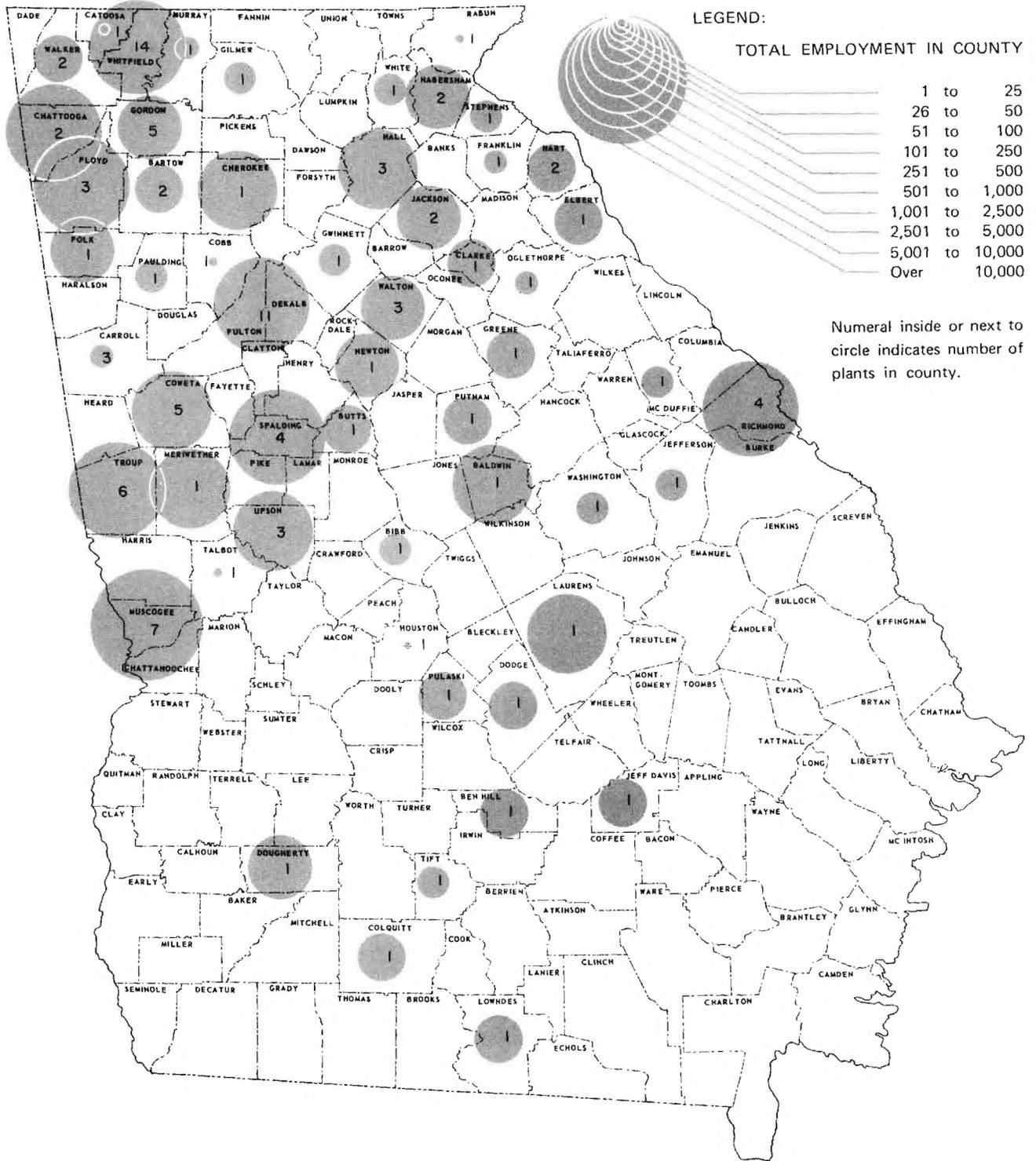
Over three-quarters of this employment is in the dyeing and finishing of fabrics. Some 3,800 workers are employed in 21 plants in 12 counties. Over 1,000 workers are employed by the three companies in Walker County. Next in employment size are Spalding and Upson counties, each with only one plant. Seven firms are operating in Whitfield County, with a combined employment of just under 500 persons. Emanuel County, Carroll County (two plants), and Gordon

County each has over 100 workers. The remaining five counties are Coweta, Bartow, Cobb, Crawford, and Fulton, each with one small operation.

Four companies manufacture felt goods -- in Ware, Richmond, Carroll, and Chattooga counties. Seven make padding and upholstery filling -- in three plants in Fulton County and one each in Henry, Jackson, Lowndes, and Walker counties. Textile waste is processed in eight plants in Carroll, Chattooga, Clarke, Fayette, Morgan, Troup, Walker, and Whitfield counties. Three manufacturers of coated and impregnated textiles are located in Gordon, Muscogee, and Whitfield counties.

The largest companies in this miscellaneous group of manufacturers are all in the dyeing and finishing of textiles. They include Lowell Bleachery (Griffin, Spalding County); Thomaston Mills Bleachery Division (Thomaston, Upson County); Rossville Yarn Processing Company (Rossville, Walker County); and Swainsboro Printing and Finishing Company, Division of Troy Textiles (Swainsboro, Emanuel County).

MAP 20-A FABRIC MILLS



TEXTILE MILL PRODUCTS

Fabric Mills (SIC 221, 222, 223, 224)

Fabric mills account for nearly 50% of the employment in Georgia's textile industry. Nearly 52,000 persons work in 119 mills located in 56 counties. Most of these plants are in the northern half of the state, but Muscogee County has the greatest concentration of employees for any one county, with some 7,300 workers in its seven mills. Three other counties have over 3,000 employees each -- Spalding, Floyd, and Whitfield.

Nearly 83% of the workers in fabric mills are engaged in producing broad woven cotton fabrics. Most of the output of the 94 plants in this category is wholly or chiefly of cotton -- only 18 of the 94 are recorded as having other secondary lines of production, and seven carry other items as their main line, with broad woven cotton as a subsidiary product.

Twenty-two broad woven fabric mills use man-made fibers -- nine with synthetic fiber fabrics as their main line of production and 13 with other types of textiles as their major product (including nine using cotton for their first line).

Seven mills are engaged in weaving or finishing woolen fabrics -- two as secondary operations. Twelve companies weave or braid narrow fabrics -- usually small firms or subsidiary divisions of one of the large companies.

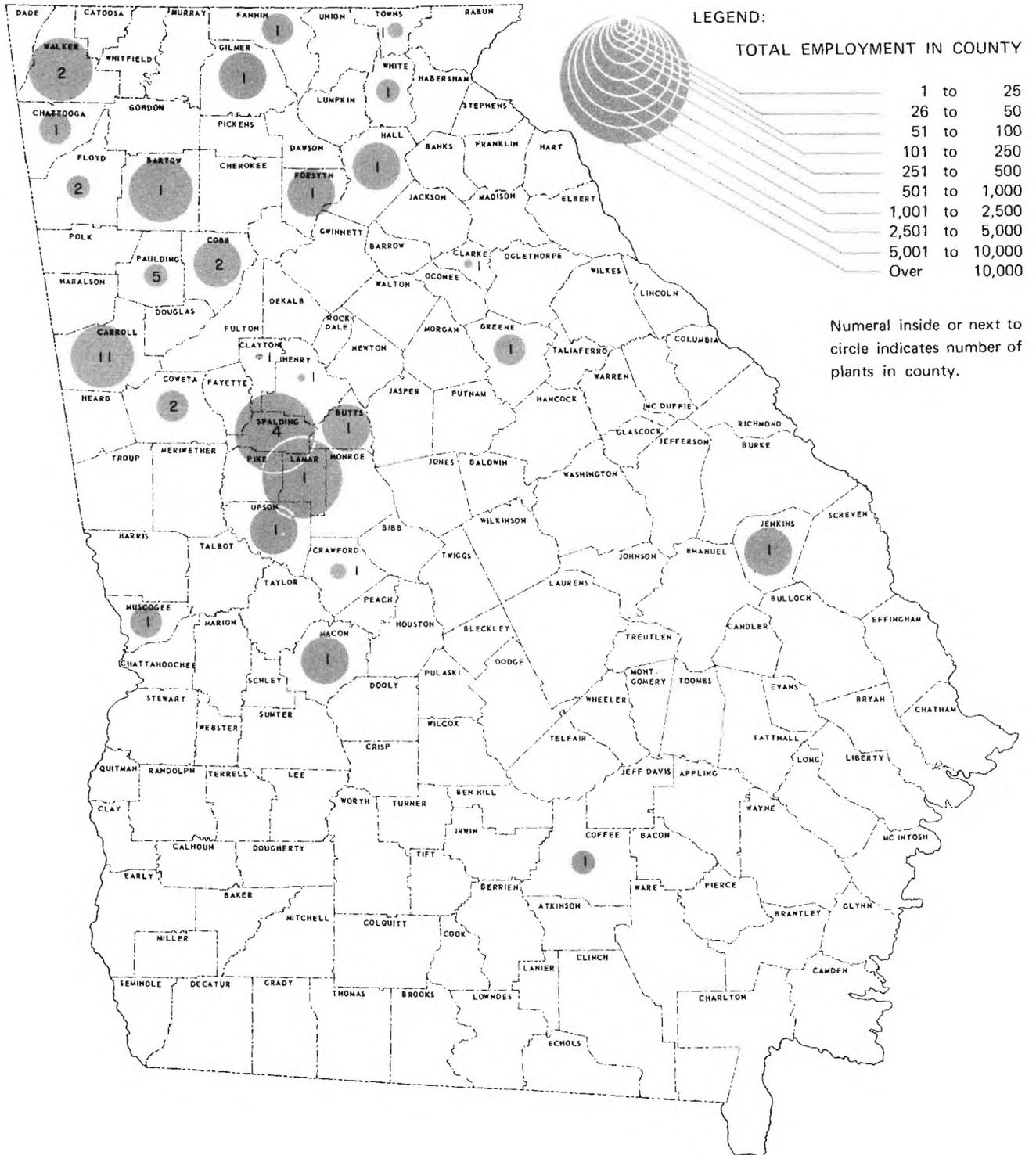
Although some companies employ only two or three persons, the average fabric mill provides jobs for many hundreds of workers. Sixteen companies in Georgia employ over 1,000 persons, and a number of those companies own more than one mill. J. P. Stevens and Company, Inc., owns several mills in the state; five of them are engaged in fabric weaving in Laurens, Baldwin, Fulton, Tift (subsidiary to other textile work), and Jefferson counties. The mills in Laurens and Baldwin counties manufacture woolen textiles (each has over 1,000 employees); the Fulton County plant makes sheetings and corduroy; some woolen fabric is made in Tift County; and the operation in Jefferson County is a finishing plant for wool cloth.

Bibb Manufacturing Company has two mills, each with over 2,000 employees, producing a variety of textiles in this category. The major product of their

Muscogee County plant is broad woven fabrics; in Newton County, cotton is combined with synthetics for both fabric and yarns.

Other multiple mill owners include the West Point-Pepperell group, making broad woven fabrics in Floyd, Troup (two plants), and Muscogee counties; Callaway Mills Company, with three mills in Troup County and one in Meriwether County; Thomaston Mills -- Upson (two plants) and Spalding counties; Chicopee Manufacturing Corporation (Johnson and Johnson) in Clarke, Habersham, Hall, and Gwinnett counties; and Graniteville Company with two plants in Richmond County. Other major plants include Dundee Mills (Griffin, Spalding County) -- towels, cotton goods, with some 3,500 employees; and Riegel Textile Corporation (Trion, Chattooga County) -- finished piece goods, with nearly 2,500 workers.

MAP 20-B KNITTING MILLS



TEXTILE MILL PRODUCTS

Knitting Mills (SIC 225)

There are 48 knitting mills in Georgia, located in 27 counties and providing work for over 9,200 persons. Over 30% of this work force is employed by the five companies in Spalding and Lamar counties. Three other counties -- Carroll, Bartow, and Walker -- account for a further 24% of total employment.

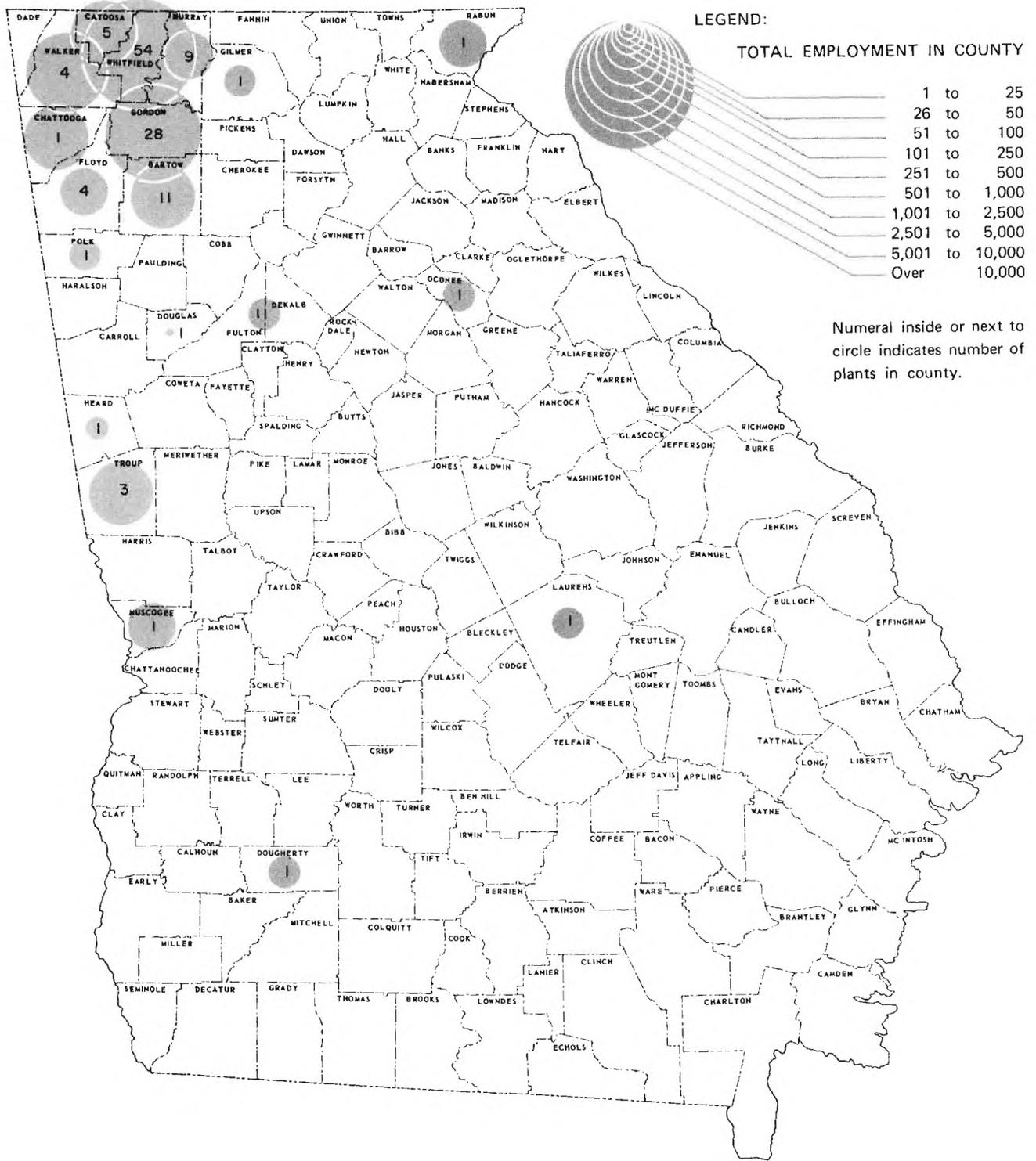
More than two-thirds of these mills make hosiery. The plants vary in size from a small operation of four or five people making socks to companies employing several hundred workers. Combined employment in the 33 hosiery mills is nearly 4,100 persons. Three plants manufacture both full-fashioned and seamless hosiery, 24 firms concentrate on seamless, and the other six make full-fashioned hosiery.

Twelve companies make knit underwear and outerwear; with the exception of one small plant, employment in the mills ranges between 200 and 1,200 persons, with a combined total of over 4,000 workers. All six of the outerwear manufacturers have other lines of production, with five of them producing underwear (usually as the major output) and the other being primarily a manufacturer of worsted fabrics.

Four other companies make miscellaneous knitted fabrics, two of them as subsidiary operations in plants manufacturing other textile goods.

The largest company in Georgia's knitting mill industry is The William Carter Company, with three plants (Barnesville, Lamar County; Thomaston, Upson County; and Forsyth, Monroe County) making underwear and outerwear for men, women, and children. Other major mills include E-Z Mills, Inc. (Cartersville, Bartow County) -- knit underwear, sleepwear, and playwear; Spalding Knitting Mills (Griffin, Spalding County) -- women's and children's hosiery; and Griffin-Jaco Mills, Inc. (Griffin, Spalding County) -- knit T-shirts, sweat shirts, sportswear.

MAP 20-C FLOOR COVERING MILLS



TEXTILE MILL PRODUCTS

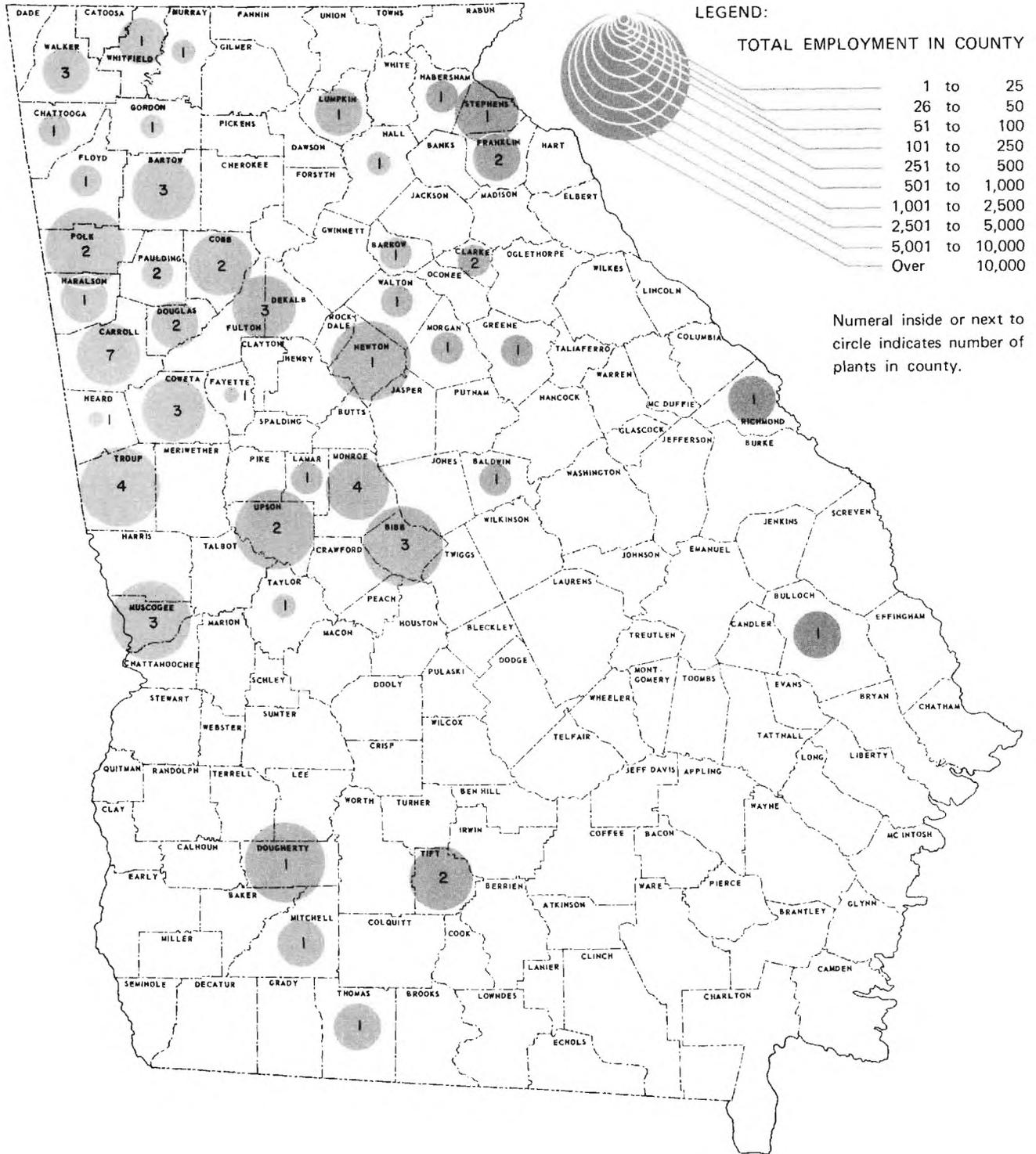
Floor Covering Mills (SIC 227)

Georgia's employment in floor covering mills continues to increase. Some 17,500 persons currently work in 129 plants located in 20 counties of the state. Except for four comparatively small companies -- two making chenille rugs and two, braided rugs -- this industry is dominated by the production of floor coverings made by the tufting process.

Dalton, in Whitfield County, is the center of the tufted textile industry, which has now spread around the world. Over 7,000 people are engaged in the manufacture of tufted carpets, rugs, and mats in Whitfield County -- some 41% of Georgia's total employment in this industry. Next in employment size are the adjacent counties of Gordon and Walker, with a combined total of 4,700 employees.

Major companies include Barwick Carpet Mills, with plants in Walker and Whitfield counties; Cabin Crafts, Inc. (Dalton, Whitfield County); Callaway Mills Company (two plants in LaGrange, Troup County); Thomas Pride Mills, Inc. (Calhoun, Gordon County, and Dalton, Whitfield County); Georgia Rug Mill, Division Bigelow-Sanford, Inc. (Summerville, Chattooga County); and Sweetwater Rug Corporation (Ringgold, Catoosa County).

MAP 20-D YARN, THREAD, AND CORD MILLS



TEXTILE MILL PRODUCTS

Yarn, Thread, and Cord Mills (SIC 228, 2296, 2298)

Yarn, thread, and cord mills in Georgia employ over 22,700 workers in 74 plants located in 43 counties. Bibb County has the greatest number of employees in this group, with nearly 2,500 workers in three mills. Polk and Upson counties are next in employment size, followed by Newton, Muscogee, Troup, and Dougherty counties, each with over 1,000 workers.

Over 14,600 employees (64% of the total) are engaged in spinning, throwing, twisting, or winding various types of yarn, in 56 companies. None of the plants has less than 30 workers, and some employ 2,000 and more. Many of the larger operations manufacture more than one type of textile product.

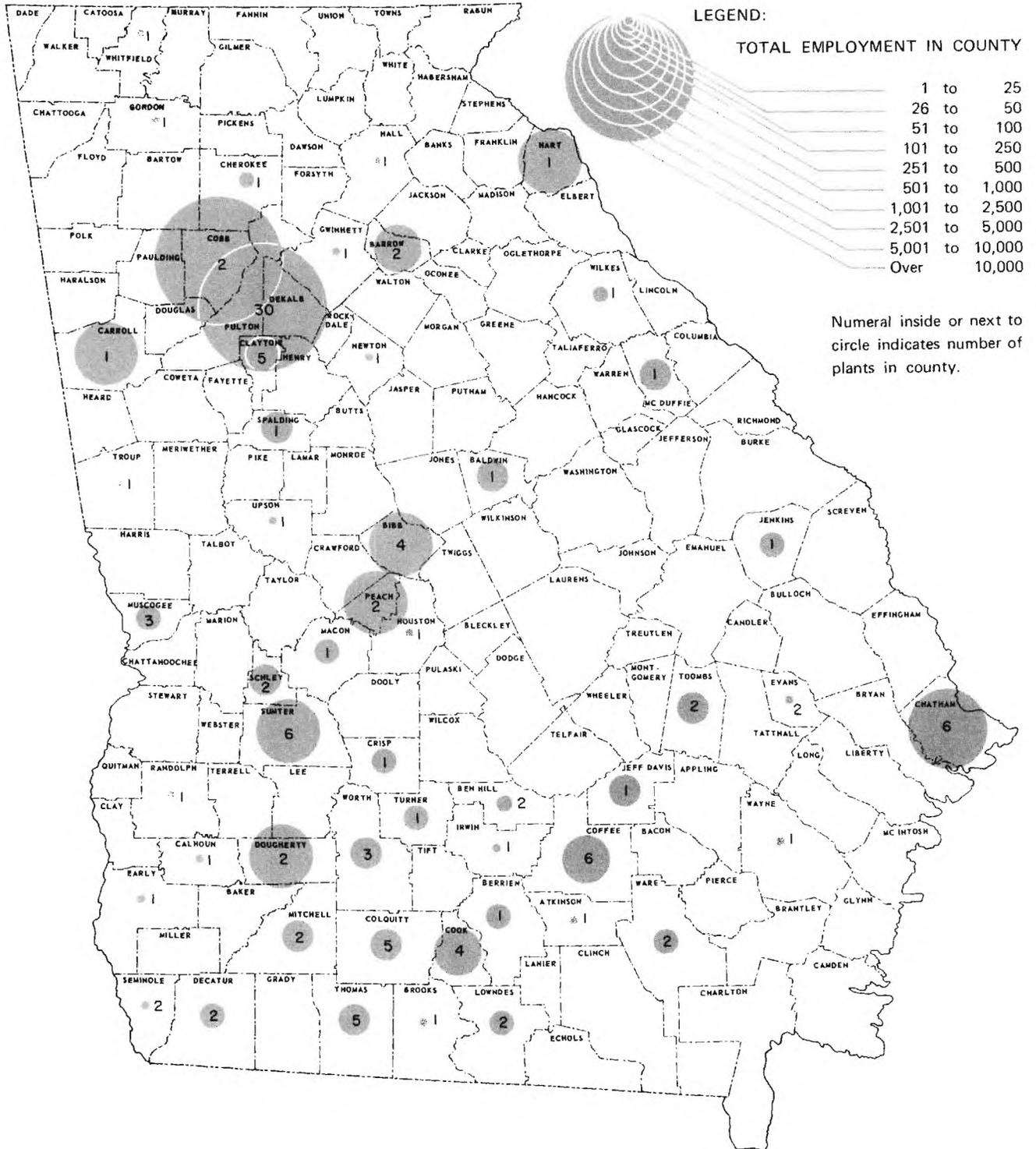
Six of the seven thread mills in the state are operated by Coats and Clark, Inc., which has two plants in Cobb County and one each in Dougherty, Mitchell, Stephens, and Thomas counties. The Dougherty and Stephens plants both manufacture zippers as subsidiary products, and the Dougherty plant also engages in wool spinning. The one remaining thread company is The American Thread Company in Haralson County.

Goodyear Tire and Rubber Company has three plants in Georgia manufacturing tire fabrics -- two in Polk County and one in Bartow. B. F. Goodrich has a major tire fabric plant in Upson County, where it also manufactures cotton yarns and broad woven fabric. In Barnesville (Lamar County), General Tire and Rubber Company has a tire fabric plant, and in Muscogee and Troup counties, Bibb Manufacturing Company and Callaway Mills Company produce tire fabrics as secondary lines.

Ten firms make various types of cordage and twine, including three of the yarn spinning companies. Four of the 10 plants are in Carroll County, two are in Monroe County, and the other four are in Bibb, Clarke, Fulton, and Morgan counties.

Some of the major companies engaged in the production of yarn, thread, and cord have already been mentioned. An important addition to this list is Bibb Manufacturing Company, with plants in Bibb, Monroe, Muscogee, Newton, and Taylor counties, producing all kinds of yarns (cotton, wool, rug, chenille, synthetics) twine, and tire fabrics, as well as other textile products.

MAP 21 TRANSPORTATION EQUIPMENT



TRANSPORTATION EQUIPMENT
(SIC 37)

The manufacture of transportation equipment in Georgia ranks fourth in total persons employed in major industry groups, with 45,300 workers in 131 plants, located in 53 counties. The industry is dominated by the companies in Fulton, DeKalb, and Cobb counties. The Lockheed-Georgia Company in Cobb County employs over 50% of all the workers in Georgia (the other plant in Cobb County is a very small operation), and the 30 companies in the Fulton-DeKalb area account for another 30% of total employment.

In addition to Lockheed, Georgia has five comparatively small aircraft plants^{1/} -- Aero Commander, Inc., in Albany, Dougherty County; a small branch of Lockheed in Fulton County (which includes aircraft and missile checkout equipment in its output); Rohr Corporation in Winder (Barrow County), which makes nacelles for aircraft; and two small firms in Fulton and Clayton counties that include aircraft parts in their output.

Motor vehicles and motor vehicle equipment plants are scattered more widely throughout Georgia and are located on a subsidiary map. A separate map also is given for trailer coaches (mobile homes).

Nineteen companies, with a combined employment of some 800 persons, are engaged in building or repairing ships and boats. Over 42% of this employment is in four companies in Chatham County, including the Diamond Manufacturing Company, Inc. (manufacturing and repairing marine craft) and the Savannah Machine and Foundry Company, which has a shipbuilding and repair work division. Three firms in the Fulton-DeKalb area employ a further 32%, the leading company being the Atlanta Boat Works. Other boat companies are scattered throughout the state in Atkinson, Berrien, Brooks, Cobb, Cook, Gwinnett, Mitchell, Muscogee (two plants), Seminole, Thomas, and Troup counties.

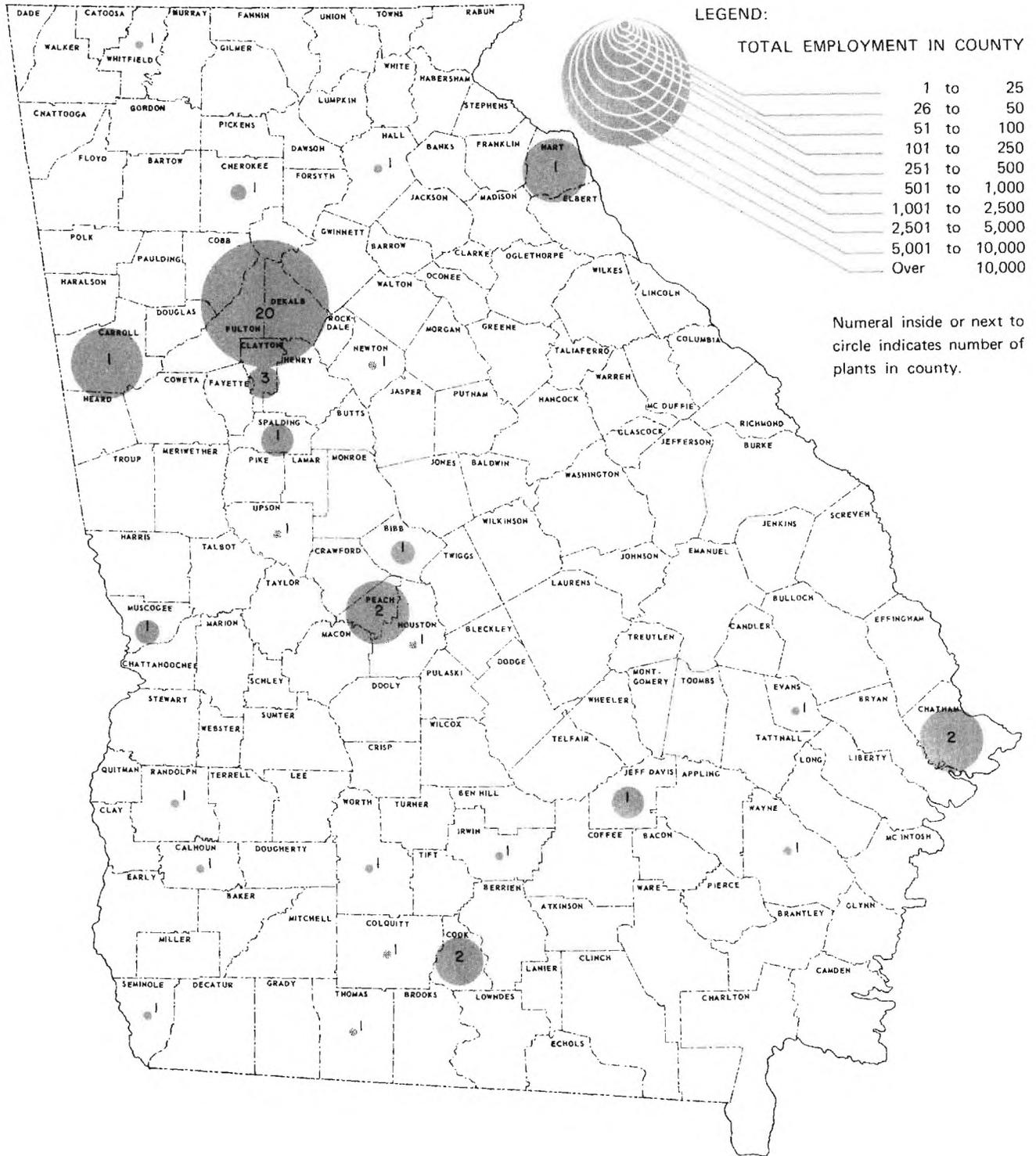
Only four plants are concerned with railroad equipment, the largest being the 300-employee Macon Division of Transco, Inc., which produces railroad cars and parts in Bibb County. The Southern Iron and Equipment Company has two

^{1/} This does not include the new Grumman Aircraft Engineering Corporation plant in Savannah, Chatham County, with some 300 employees at the end of 1967 -- expected to expand to four times that number when in full operation.

plants handling rolling stock, in Chamblee and Atlanta, both in DeKalb County. The fourth company is a smaller establishment doing tank car repairs in Ware County.

Other miscellaneous operations throughout the state include one small company making motor scooters and a number of plants that make trailers (or trailer parts) for use in farming or camping.

MAP 21-A MOTOR VEHICLES AND MOTOR VEHICLE EQUIPMENT



TRANSPORTATION EQUIPMENT

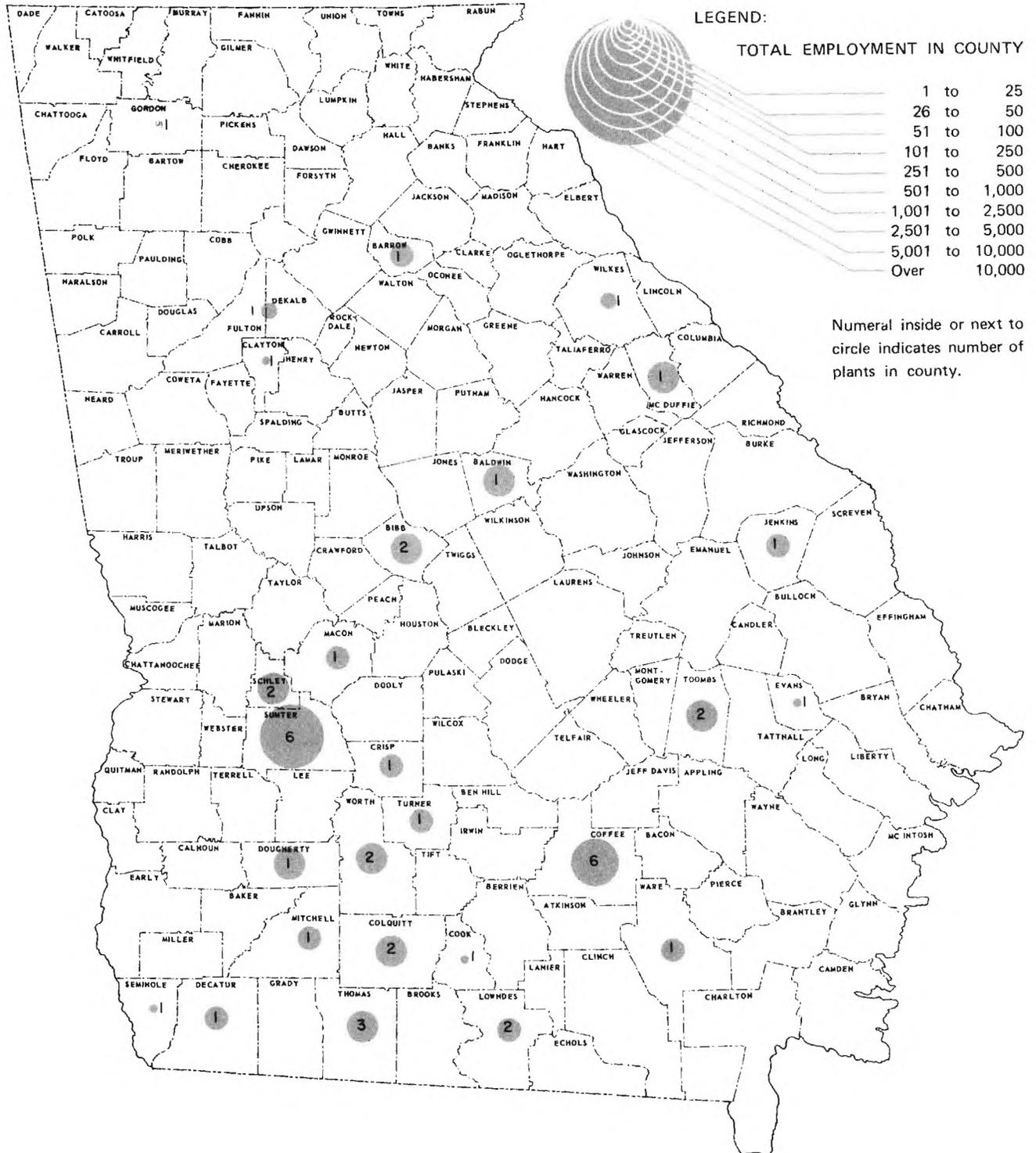
Motor Vehicles and Motor Vehicle Equipment (SIC 371)

Fifty companies in Georgia are engaged in the manufacture or assembly of motor vehicles and motor vehicle equipment. These companies employ some 16,700 persons in 27 counties. Nearly 78% of this employment, however, is concentrated in the Fulton-DeKalb area, which has some 13,000 workers in 20 plants.

General Motors Corporation has three plants in this area -- an assembly division in Doraville (DeKalb County) and the Chevrolet Motor Division and Fisher Body Division in Atlanta (Fulton County). Ford Motor Company has an assembly plant in Hapeville (Fulton County). These four plants provide jobs for over 12,000 workers -- over 72% of the total employment in the state. The other 16 companies in the Fulton-DeKalb area are much smaller operations. They make or rebuild parts and engines, truck and bus bodies, and truck trailers.

No other county has more than 1,000 employees. Chatham, Hart, Carroll, and Peach counties are next in size, with a combined employment of 2,700 workers. Each of these counties has one plant in the 500 to 1,000 worker range: Monroe Auto Equipment Company (Hartwell, Hart County) -- shock absorbers; Great Dane Trailers, Inc. (Savannah, Chatham County) -- truck and tank trailers, containers; Douglas and Lomason Company (Carrollton, Carroll County) -- auto body parts; and Blue Bird Body Company (Fort Valley, Peach County) -- truck and bus bodies.

MAP 21-B TRAILER COACHES



TRANSPORTATION EQUIPMENT

Trailer Coaches (SIC 3791)

The manufacture of trailer coaches (various types of mobile homes) has been increasing in Georgia in recent years. There are now 45 companies employing 3,600 workers in this industry; they are located in 27 counties, chiefly in the southern half of the state.

Roughly 1,000 people are employed in six plants in Sumter County. Next in employment size is Coffee County, with some 300 workers, followed by Schley, Thomas, Toombs, Bibb, and McDuffie counties.

Eleven of the plants have 100 or more employees, the largest company being Redman Industries (Americus, Sumter County). Next is Marlette Coach Company (another Americus firm), followed by Chickasha Mobile Homes, Inc. (Vidalia, Toombs County), Knox Mobile Home Corporation (Thomson, McDuffie County), and Detroit Mobile Homes, Inc. (Albany, Dougherty County).

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