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INDUSTRIAL DEVELOPMENT IN GEORGIA SINCE 1947

Progress, Problems and Goals

by

Kenneth C. Wagner

and

M. Dale Henson

Industrial Development Branch  
Engineering Experiment Station  
Georgia Institute of Technology  
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## Table of Contents

	<u>Page</u>
Foreword	i
Acknowledgments	iii
Introduction	v
I. A Set of Goals -- And a Challenge	1
Additional Disposable Income Produced by Equalizing with U.S.	6
Trends in Per Capita Income, Georgia and U.S., With Projections to 1985	7
Manufacturing Jobs Added, 1947-1958, Compared with Jobs Needed, 1960-1985	8
Georgia's 1985 Income Potentials	9
II. Georgia's Gains -- and Losses	11
Georgia's Employment Trends	12
Personal Income by Major Source, 1958	14
Manufacturing Gains and Losses -- and Some Disturbing Imbalances	16
Concentration of 1947-1958 Manufacturing Employment Gains	17
Distribution of 1947-1958 Manufacturing Employment Losses	19
Population Changes, 1950-1960	20
Geographic Distribution of Manufacturing Employment, 1958	22
Distribution of Manufacturing Employment by Industry, 1958	24
III. How Do Georgia's Gains Compare?	31
Electronics Employment in the Southeast, 1960	33
Synthetic Fiber Plants in the Southeast, 1960	34
Pulp and Paper Mills, 1960	35
Net Manufacturing Employment Gains in Selected States, 1947-1958	36
Net Manufacturing Employment Gains in Selected States, 1947-1954 and 1954-1958	38
Comparison of Manufacturing Employment Gains in Georgia, Florida and North Carolina, 1947-1958	40
Comparison of Manufacturing Employment Gains in Georgia, Florida and North Carolina, 1947-1954	42
Comparison of Manufacturing Employment Gains in Georgia, Florida and North Carolina, 1954-1958	44
Annual Job Needs	46

	<u>Page</u>
Annual Job Deficit	47
Gains in Manufacturing Employment in Selected Industries, Georgia and U.S., 1947-1958	48
Percentages of Total Manufacturing Employment in Selected Industries in Georgia and U.S., 1958	50
Growth in Per Capita Income, 1930-1960, Georgia, U.S. and California	52
Disposable Per Capita Income by County, 1958, Compared with U.S.	54
Average Weekly Manufacturing Wages, 1958, Selected Counties Compared with Georgia and U.S. Averages and Selected States	58
Manufacturing Wages of Georgia Industries Compared with Georgia and U.S. Average Weekly Wages, 1958	60
IV. Conclusions	64

#### Appendices

- A Methodology
- B County Data
- C Manufacturing Employment Gains in Selected States, 1947-1954, 1954-1958, and 1947-1958
- D Publications of Industrial Development Branch



## Foreword

This report is another in the series whose completion was made possible by the special allocation of \$100,000 which the Industrial Development Branch received last fall from Governor Ernest Vandiver and the Board of Regents.

It is the first of a new series designed to penetrate steadily deeper into Georgia's industrial progress, problems and potentials. As quickly as additional data become available, the analysis will be carried through 1960.

No analysis of this sort is ever complete. Numerous questions raised by the study remain to be answered. For example, we have learned that 68 counties suffered manufacturing employment losses between 1947 and 1958. But we do not yet know why. Do some of them have easily remedied weaknesses? Do they have unmeasured or unexploited resources which could be readily developed? Or are they hopelessly committed to a continuing backward and downward trend?

Future studies will attempt to answer these and other questions important to Georgia's industrial future.

Like many of the studies which IDB has completed, this one points up again the need for more extensive resource surveys and for stepped up research activities. While we can be proud of our gains, we cannot be satisfied. Not enough jobs are being created. Not enough of the types of jobs Georgia needs have been generated. Too many of our young people must continue to leave their home counties and their state. The importation of college and high school graduates into our metropolitan areas in no way can replace the thousands of young people who have left our smaller towns and cities.

I hope readers will find the contents of the report both useful and provocative. Your reactions and comments are earnestly solicited.

Kenneth C. Wagner, Head  
Industrial Development Branch



## Acknowledgments

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Mrs. Ila Benson, Mrs. Margaret Textor and Mrs. Connie Ongemach typed the text. The special effort expended by Mrs. Ongemach and particularly by Mrs. Textor in working extra hours to complete the manuscript is gratefully acknowledged.



## Introduction

Significant forward strides have marked Georgia's industrial and economic progress since 1947. However, when compared to the rest of the nation, Georgia's economic growth has not been spectacular.

The prime consideration in any attempt to determine whether we have done well enough is a comparison of the number of jobs created with the state's job needs. Percentage gains are relatively meaningless. Comparisons also distract us from our prime concern: Are we creating the number and type of jobs we need?

The answer, unfortunately, is no. Not enough new jobs have been generated to prevent migration to other states. Even more important to the survival of many of our smaller towns and counties, not enough jobs are being created in the less populous areas to prevent many persons from moving to Atlanta and our other larger cities.

The lack of development of industries requiring skilled labor has tended to slow down efforts to close the gap between income in Georgia and in the U.S. As a matter of fact -- despite the misleading percentage gains which have been made -- the most recent income data indicate that the gap has actually widened.

Little about industrial development in Georgia is "normal," or, for that matter, particularly logical. It therefore seems reasonable to depart from our standard procedure in presenting the study's findings. The first section is essentially an editorial comment on the over-all report. It presents a proposed set of goals for the next 25 years. The findings which provide the basis for the recommendations made in the first section follow.

The set of goals presented in the first section provides a challenge -- a challenge for Georgia to marshal her many talents and resources in a dynamic program designed to rapidly accelerate the state's industrial and economic progress.

Since a challenge without specifics can be quite meaningless, specific steps are suggested as the means through which the goals set forth can be achieved. Acceptance of the goals as being even remotely possible is predicated, of course, on implementation of action programs of the sort recommended in the first section. Certainly there is no reason to believe such a set of goals can be reached without a bold new approach. Since in many ways -- as

indicated by the title of one of IDB's first major reports in 1957 -- Georgia is entering a new frontier, a new approach would seem to be very much in order.

Simply stated, the first section of this report is intended to suggest a means by which we can more rapidly and more efficiently bring Georgia to the leading position she is capable of commanding not only in the South but in the nation.

The main body of the report presents many details about the changes which have taken place in Georgia's economy since 1947. Comparisons are made with other southern states and with the U.S. to provide perspective. But the principal focus is on the many specifics which tell the story of Georgia's industrial growth.

Lack of comparable data for 1960 has made it necessary to use 1958 as the base year for many of the comparisons presented. Where available and appropriate, 1960 figures have been used.

I

A SET OF GOALS -- AND A CHALLENGE

## A Set of Goals -- And a Challenge

Georgia's industrial and economic progress since 1947 are detailed in the pages which follow. The conclusion is clear: We have done well, but not well enough.

Perhaps one of our greatest needs as we attempt to more effectively develop the state's industrial potentials in the years ahead is a set of specific goals. It is not enough to aim to "do better." We need a challenge to achieve particular gains of sufficient magnitude to enable us to get where we want to go.

And precisely where do we want to go -- where do we need to go?

A partial idea of the challenge which lies before us can be seen in the map on page 6. An additional \$1,697,237,000 would have been added to Georgia's disposable income in 1958 if the state had only been up to the U.S. average.

Looking ahead, a sharply defined goal can be set:

To reach the U.S. average by 1985 -- in just 25 years.

The magnitude of this task is graphically presented on page 7. In terms of the dollar gap which exists between Georgia and the U.S. average, we have actually been dropping slightly behind. Assuming that the U.S. trend would continue at approximately the same rate of advance experienced in recent years, a sharp upturn in Georgia's rate would be necessary.

The challenge, then, is to not merely maintain our past pace, but to turn Georgia's trend line sharply upward in order to close the gap completely by 1985.

What would this mean in terms of an average annual increase?

We would have to jump from the \$35 per person we have gained each year during the last 30 years to a gain of \$72 per person yearly -- an increase of 106%. Since it would take time to get the required state-wide development program underway, the dollar increase necessary during the latter years of the period would actually have to be larger than the average increase required over the 25-year period.

What would this mean at the end of 25 years?

An additional \$5,000,000,000 would be added to the state's income in 1985! (See chart on page 9.) This amount and more would be added each year thereafter.

Figures of this size tend to become meaningless. When translated back into per capita terms they take on new meaning. The average citizen of Georgia



in 1985 would have an income of \$3,374 if the present income gap could be closed by that time. This would mean an increase of \$1,790 per person per year over the present figure.

How realistic is this goal?

It is completely unrealistic if we continue at our present rate of effort. Without bold new steps Georgia might never reach the U.S. average.

To achieve such an income goal we would need to carry out a program which would greatly increase the number of new manufacturing jobs added to Georgia's work force each year. This gives us a second tangible goal:

To add an average of at least 15,000 new manufacturing jobs per year during the 25 year period.

Furthermore, a substantial proportion of these jobs need to be in the "new type" industries which have not yet been attracted to Georgia in appreciable numbers: electronics, chemicals, fabricated metals, machinery and others.

This would require an increase of at least two and one half times the number of new jobs added annually between 1947 and 1958 -- almost five times the number gained yearly between 1954 and 1958. (See page 8.)

Together with the additional jobs which would be produced in trade, services, construction and elsewhere, the new manufacturing jobs would create enough employment to make it possible to provide suitable work for all those who need it and at the same time make it possible to achieve the income goal set forth above.

This high job goal has not been set simply because this number of jobs will be required to achieve the income goal specified. A much more important reason exists: At least 27,000 jobs of all kinds are needed to provide employment each year for those actively seeking jobs.

This figure is based on an estimate of the number of jobs needed to provide suitable employment for the thousands of high school and college graduates, high school drop-outs, and displaced farm workers who must seek new jobs each year. Not included are the thousands of under-employed -- those who are not engaged in work which occupies them full time, or which fully utilizes their talents, or which produces the level of income they should be capable of earning. These, too, must be provided with suitable employment if we are to make the most effective possible use of the human resources available for the development of the state's industrial potentials.

Usually overlooked in the evaluation of a state's development program is this crucial question of whether enough jobs have been provided to meet existing job needs. Figures on total jobs added each year often are misleading, since they do not take into account losses which may occur in some industries at the same time the gains are being made. Percentage gains also tend to confuse and distract rather than enlighten.

As noted on pages 46 and 47, we have not been creating enough new jobs to provide employment for the thousands who must seek new jobs yearly. As a result, thousands of Georgians leave the state each year to seek employment.

To make the achievement of the income and job goals set forth above possible, however, a prior set of goals must first be reached.

1. The state's present industrial arts and industrial vocational training programs must be greatly expanded and strengthened within the next three to five years. Unless this is done, we cannot expect to provide the more highly trained, "industry-ready" labor required to attract and staff plants in the higher wage industries which must be secured to achieve the income goal.

2. Certain obstacles now discouraging many companies from coming to Georgia must be eliminated. An example is the 3% use tax on equipment and materials going into the construction of new manufacturing facilities (including the expansion of existing plants).

3. A greatly intensified audit and analysis of the state's resources must be carried out to determine precisely what natural and other resources exist in each section of the state.

4. A greatly intensified and continuing analysis of specific industrial potentials must be carried out to determine what "best bets" exist for developing new payrolls in each section of the state.

5. A greatly expanded program of technical assistance must be provided to local development groups to insure that they effectively use available data to attract those types of industries best suited to their particular areas.

6. A strong and expanded program of technical assistance to established manufacturers is needed, particularly for smaller firms, to provide the guidance often required to insure continuing and profitable operations, and to assist them in their efforts to expand and diversify.

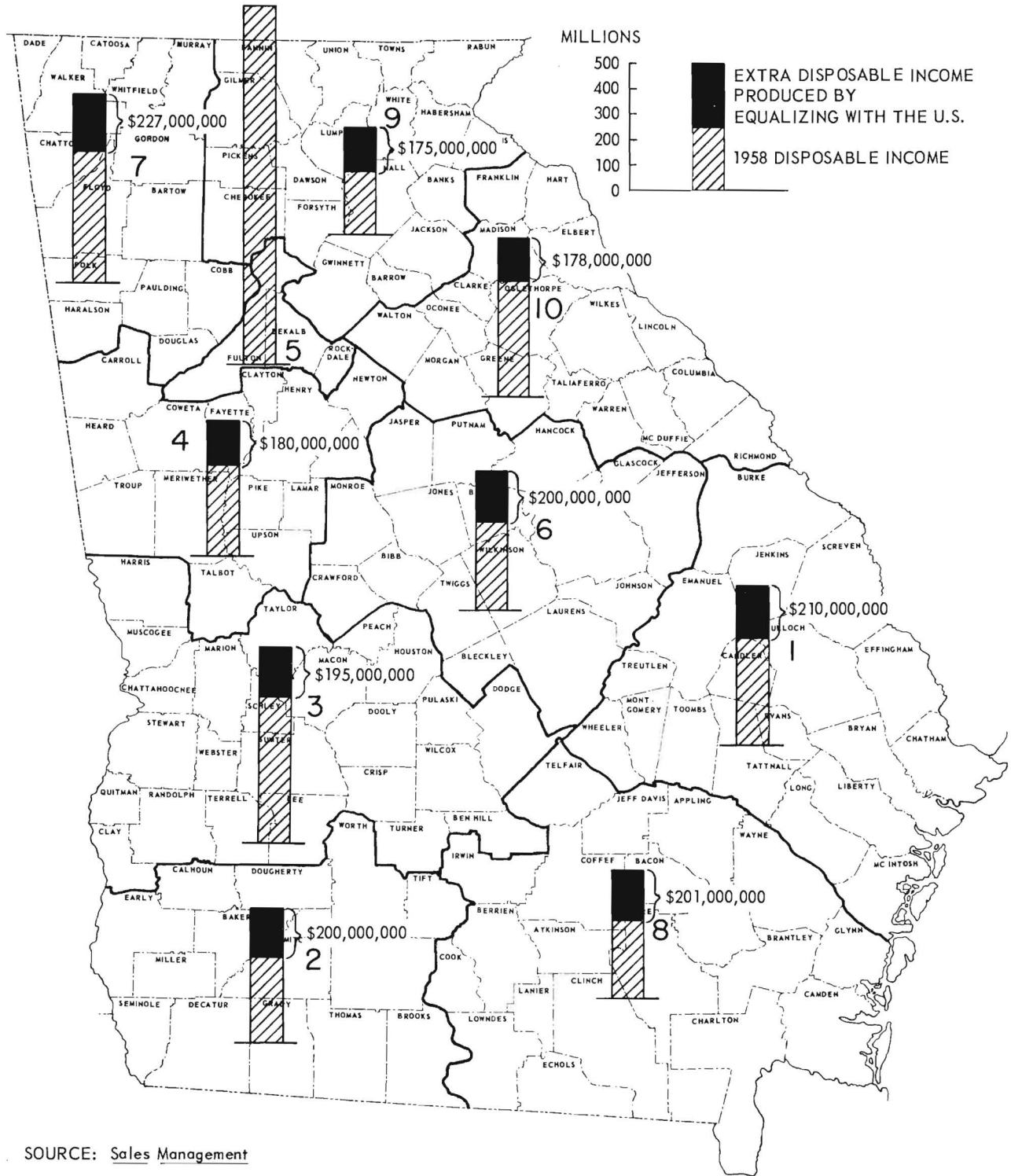
7. The state's port facilities and port potentials must be vastly expanded to enable Georgia's ocean and inland ports to compete successfully against the much more advanced ports found in our competitor states.

This set of goals can, of course, be reduced to a still simpler and more detailed list. For example, we need to complete the topographic mapping of the state as one of many specific steps involved in the analysis of our industrial resources. Laboratory research programs in the minerals and wood products fields are needed to expedite the development of new products using Georgia's raw materials. An industrial research center, which could encompass such programs and provide a full-scale industrial development effort, would be invaluable also in attracting the types of industries we need.

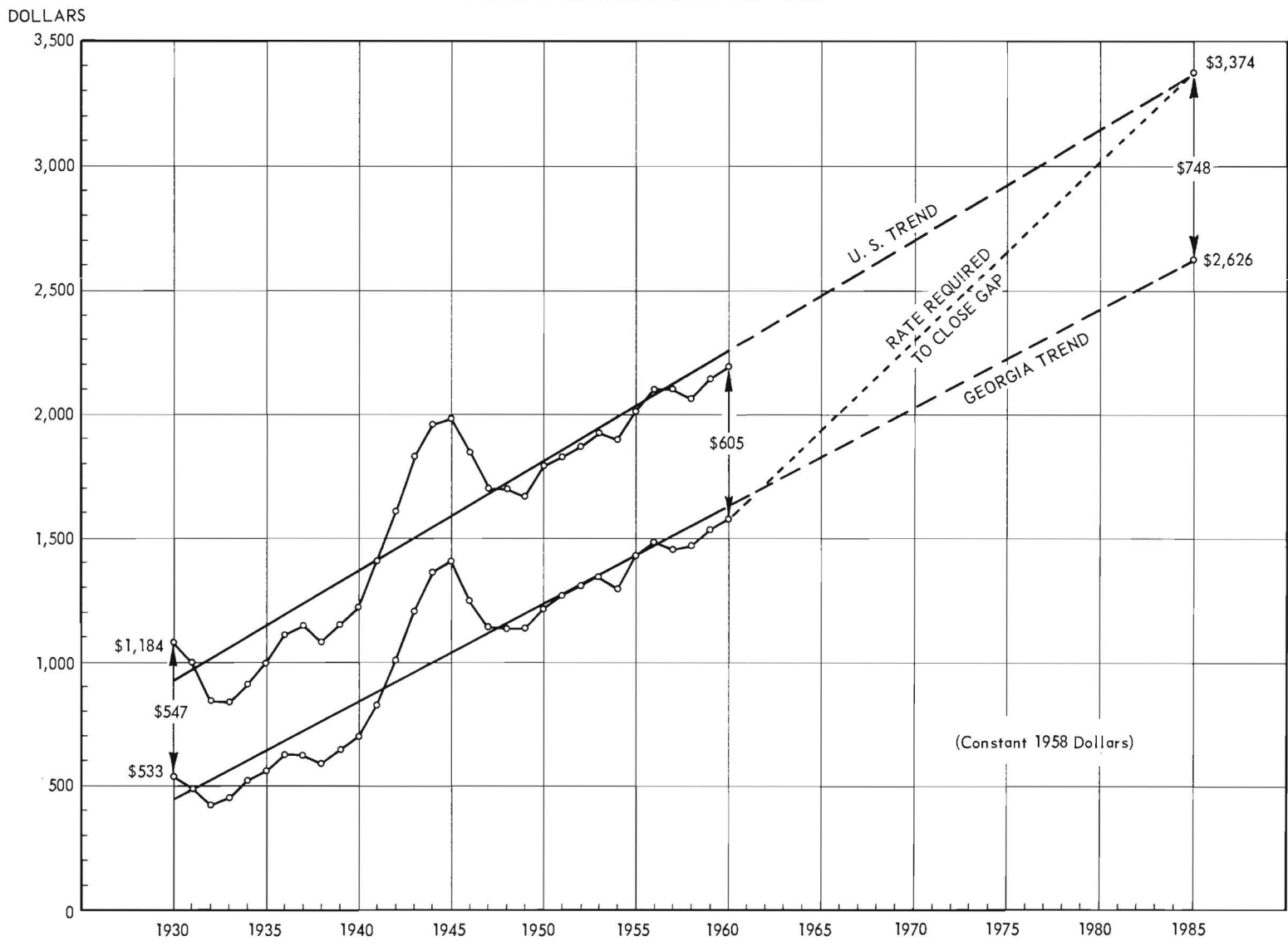
Each time such a reduction is made in the level of abstraction the original goals become more manageable and nearer reality. "A Blueprint for Industrial Development in Georgia," listed in Appendix D, presents such a more detailed breakdown. This "Blueprint" is being revised and expanded.

This, then, is our challenge: To work systematically toward a set of realistic, yet ambitious goals, to create not only more jobs but more of the types of jobs needed to keep our talented young people, to balance and strengthen the state's economy -- and thereby to more effectively utilize our natural, man-made and human resources.

# ADDITIONAL DISPOSABLE INCOME PRODUCED BY EQUALIZING WITH U. S.



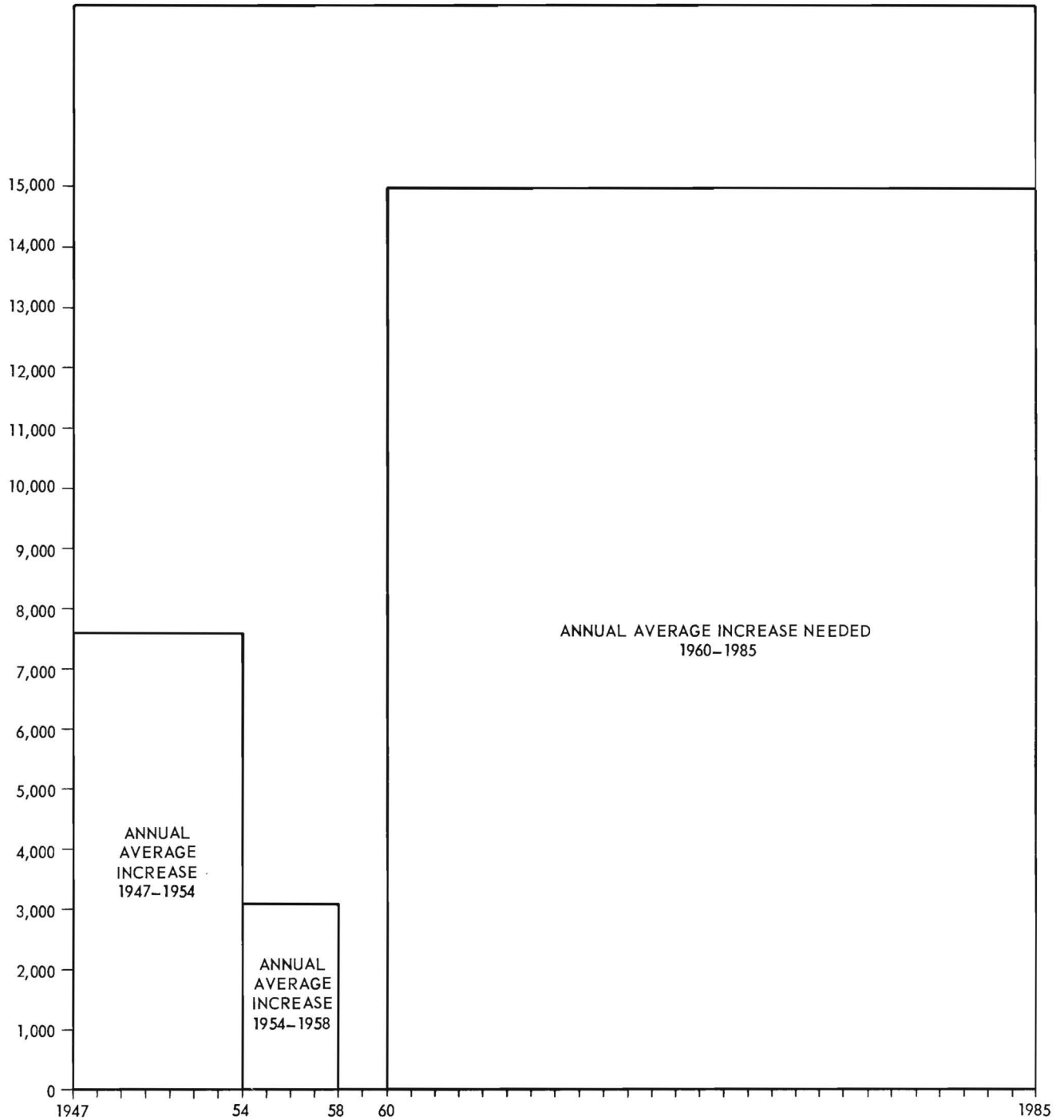
# TRENDS IN PER CAPITA INCOME GEORGIA AND UNITED STATES WITH PROJECTIONS TO 1985



SOURCE: U.S. Department of Commerce, Office of Business Economics

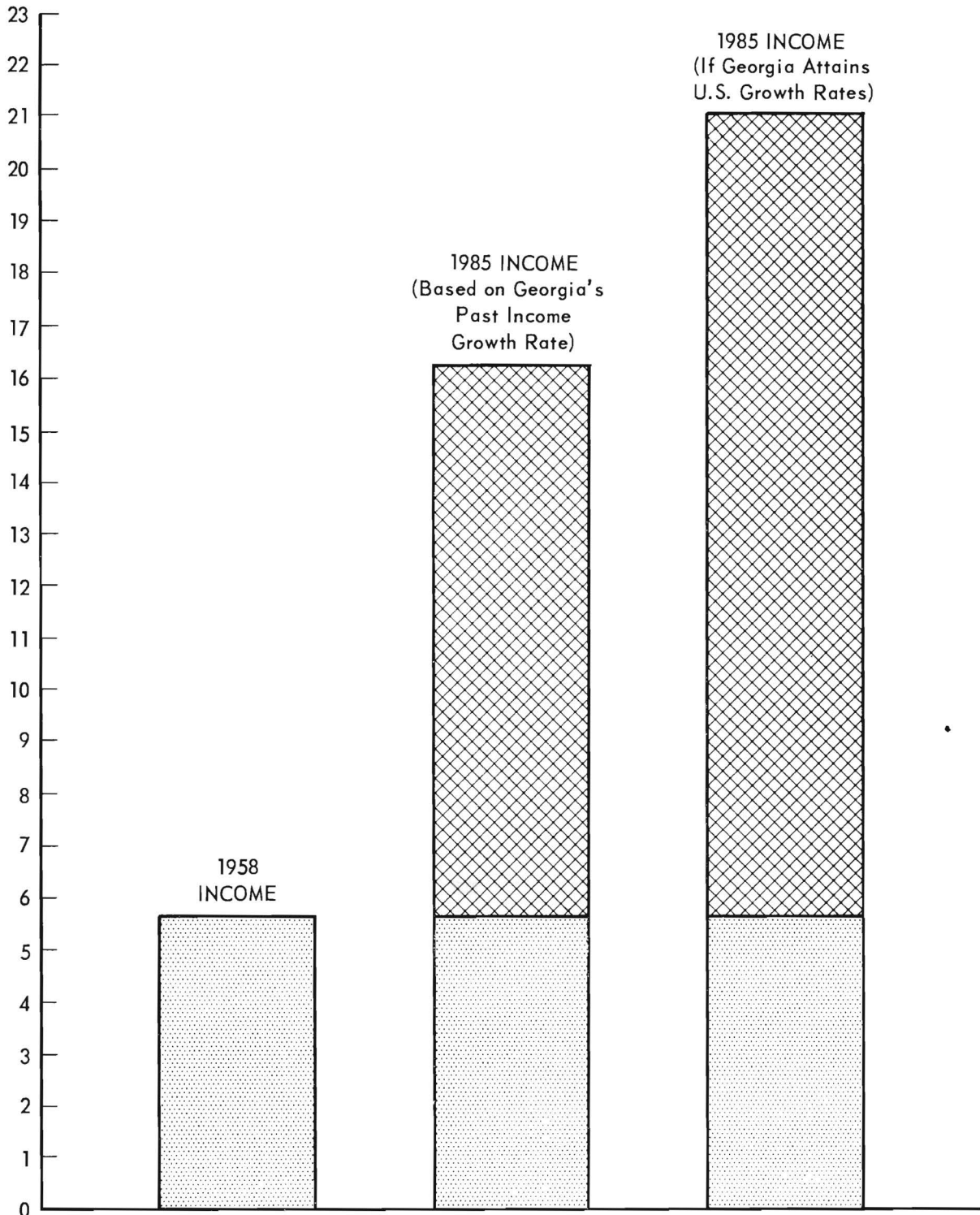
# MANUFACTURING JOBS ADDED, 1947-1958 COMPARED WITH JOBS NEEDED, 1960 TO 1985

AVERAGE YEARLY  
MANUFACTURING JOBS

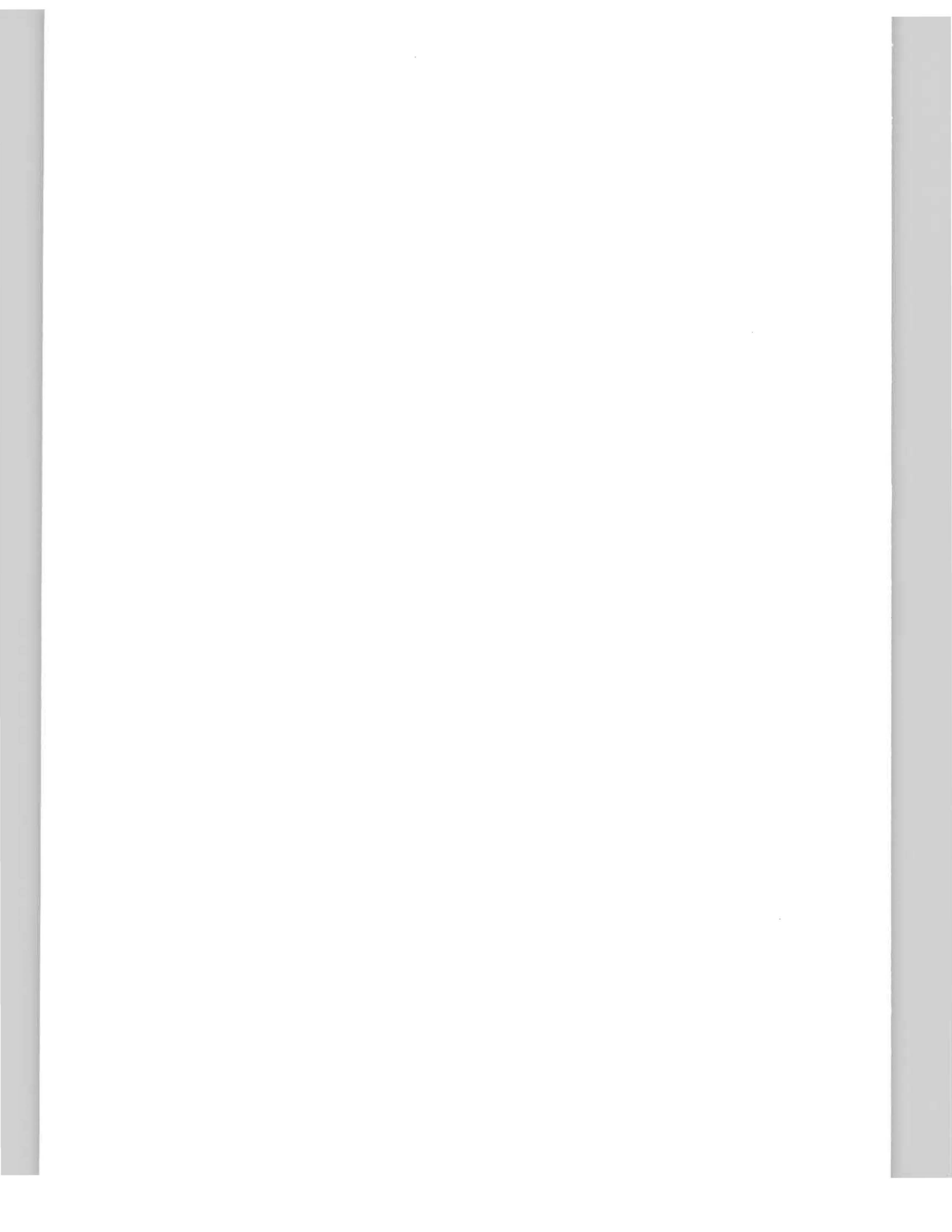


# GEORGIA'S 1985 INCOME POTENTIALS

BILLIONS  
OF DOLLARS



SOURCES: Survey of Current Business, U.S. Department of Commerce  
U.S. Department of Commerce, Bureau of the Census  
Industrial Development Branch Projections





II

GEORGIA'S GAINS -- AND LOSSES

## Georgia's Employment Trends

An unheralded but highly significant occurrence took place in 1949 -- Georgia became a predominantly manufacturing state. In that year manufacturing employment passed agricultural employment as the state's number one employer. Since 1949 the gap has been steadily widening.

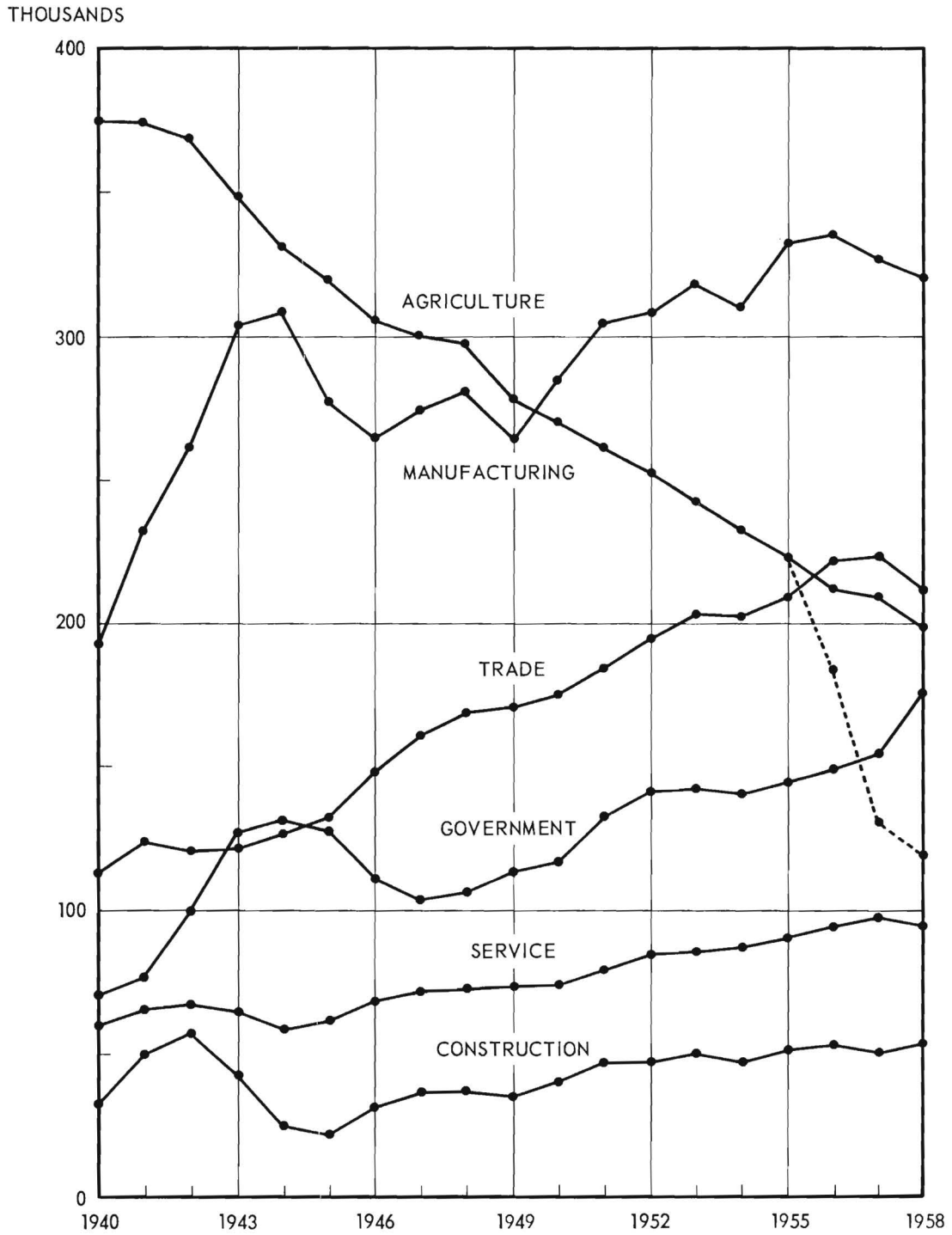
If figures from a special Georgia Department of Labor study are used, trade and government employment now rank second and third. As the dotted line on the accompanying chart shows, the Department of Labor's figures on "effective farm employment" (persons who farm as their main source of livelihood) for 1956 and 1957 indicate a sharp drop from earlier figures. Even employing the broader definition of the U. S. Department of Agriculture, the number of workers in the trade category has definitely moved into second place.

The primary importance of this fact is that Georgians can no longer count on agriculture to provide a substantial portion of the new jobs needed each year. Our college graduates, our high school graduates, school dropouts -- and the more than 11,000 farm workers who have been pushed off the farm each year for many years -- must look to manufacturing and other sources of employment.

As Georgia's farms become larger and more mechanized they become more efficient. And as farm efficiency increases, more farm workers are displaced. The need for manufacturing and other non-farm jobs therefore rises, as agricultural efficiency rises.

Industrial development efforts obviously must be strengthened rapidly enough not only to provide jobs for the great majority of our school dropouts and graduates, but also to provide employment for displaced farm workers. The more effective our farm programs become, the more difficult is the industrial developer's task. Since the downward trend in agricultural employment is expected to continue at least until 1985 and likely beyond, the problem will continue to demand attention in the years ahead.

# TRENDS IN MAJOR EMPLOYMENT SOURCES 1940 - 1958



SOURCES: Georgia Department of Labor, Employment Security Agency  
 U. S. Department of Labor, Bureau of Labor Statistics  
 U. S. Department of Agriculture, Agricultural Marketing Service

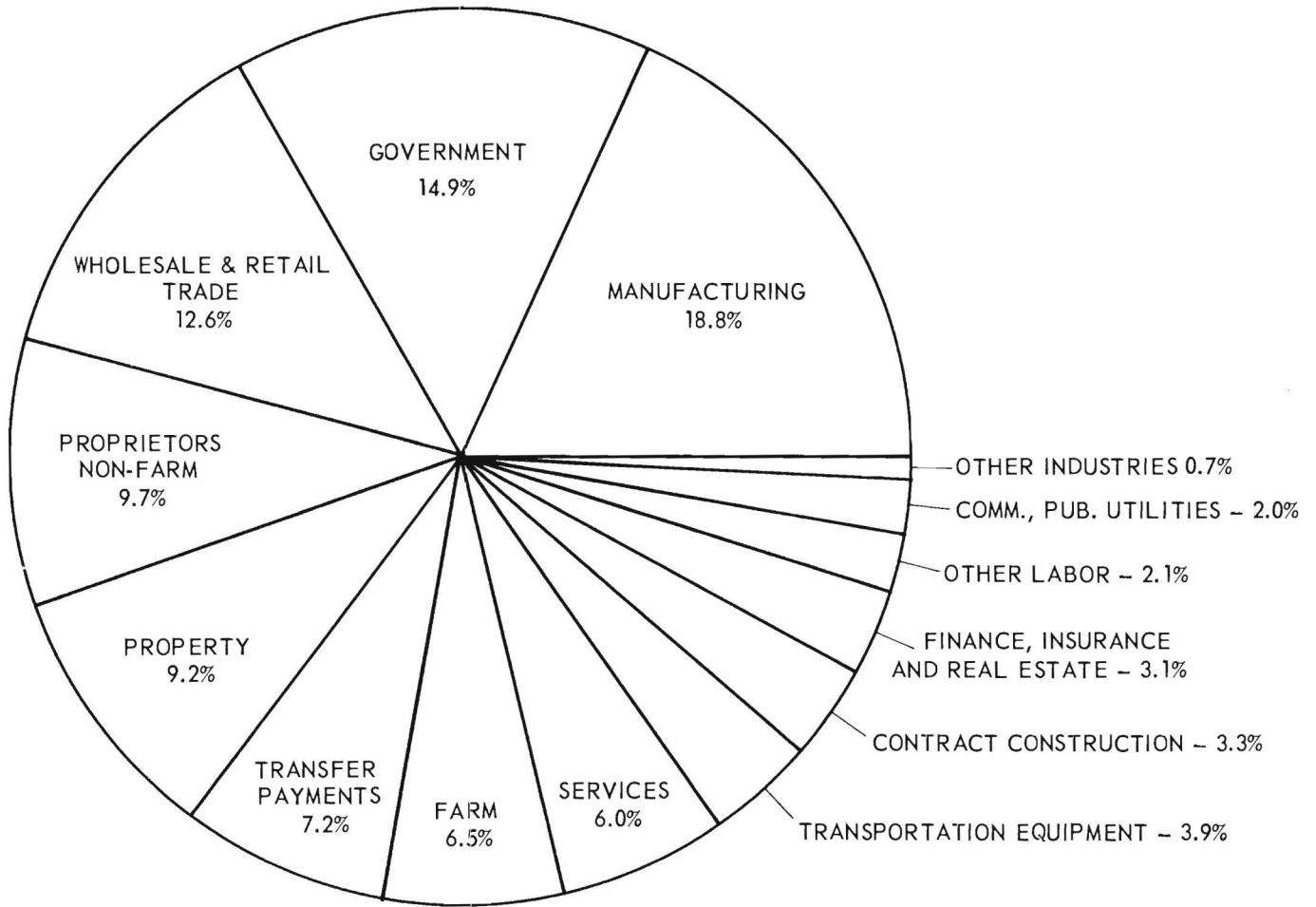
## Personal Income

Manufacturing's importance in Georgia's economy is thrown into sharp focus when the state's major sources of income are compared. A whopping 18.8% of all personal income in 1958 came from this one source.

The steady rise in the number of governmental jobs -- and the higher than average wages paid the predominantly white collar employees -- is reflected in the 14.9% of personal income which came from local, state and Federal Governments. The lower wages paid workers in wholesale and retail trade are evidenced in the fact that although second in number of jobs, trade ranked third as a source of income, accounting for 12.6% of the total.

The plight of the farmer, whose share of the retail cost of food has shrunk steadily in recent years, is clearly shown in the fact that only 6.5% of the state's income was accounted for by farming. Manufacturing, government, trade, proprietors (non-farm), property, and transfer payments all accounted for a larger portion of personal income.

PERSONAL INCOME BY MAJOR SOURCE  
1958



SOURCE: Survey of Current Business

Manufacturing Gains and Losses --  
and Some Distrubing Imbalances

Atlanta's unusually well balanced economy has often been commented on. Its tremendous strength is shown in the fact that more than 36% of the net increase in manufacturing employment between 1947 and 1958 occurred in just three counties -- Fulton, DeKalb and Cobb. As might be expected, a substantial portion of the jobs produced were also in the higher wage brackets.

A total of seven counties -- the three mentioned plus Chatham, Hall, Glynn and Clarke -- accounted for almost 50% of the total net increase. To put it another way, 152 counties shared barely half the state's gain during the 11 years.

The geographic imbalance is further shown in the map on page 18, which shows the 21 counties which accounted for almost three-fourths of the total net manufacturing employment gains. The remaining 138 counties divided a mere 26.5% of the total.\*

Even more discouraging is the fact that 68 counties actually lost manufacturing employment during the study period. (See page 19.) And an additional 20 counties had such a small gain -- from 1 to 9 annually -- that the manufacturing segment of their economies must be considered to be growing at a less than healthy rate.\*

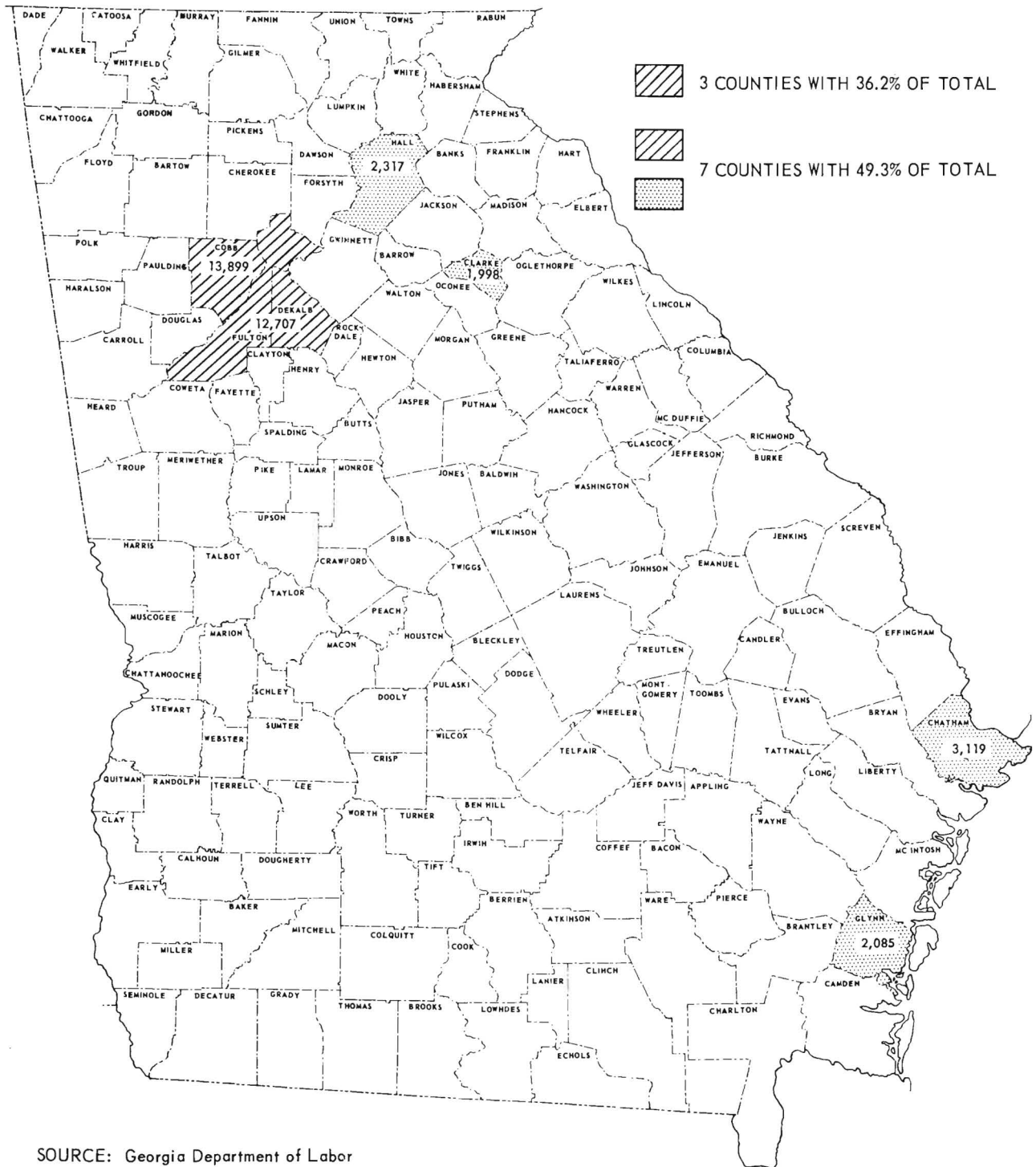
A total of 88 counties -- 55% of the state's total -- must therefore be considered to have an urgent need for new manufacturing or other payrolls. Many others have a pressing, if less urgent need.

Changes since 1958 appear to be significant only in a few instances. Richmond County is one such case. After suffering a net loss of 43 between 1947 and 1958, preliminary 1960 figures indicate that it nevertheless had an overall gain of more than 700 for the 13-year period 1947 through 1960 as a result of securing several plants which have gone into production since 1958. Cobb County, on the other hand, has had a substantial drop during the last two years. Its large earlier gains still keep it strongly in the "plus" column, however.

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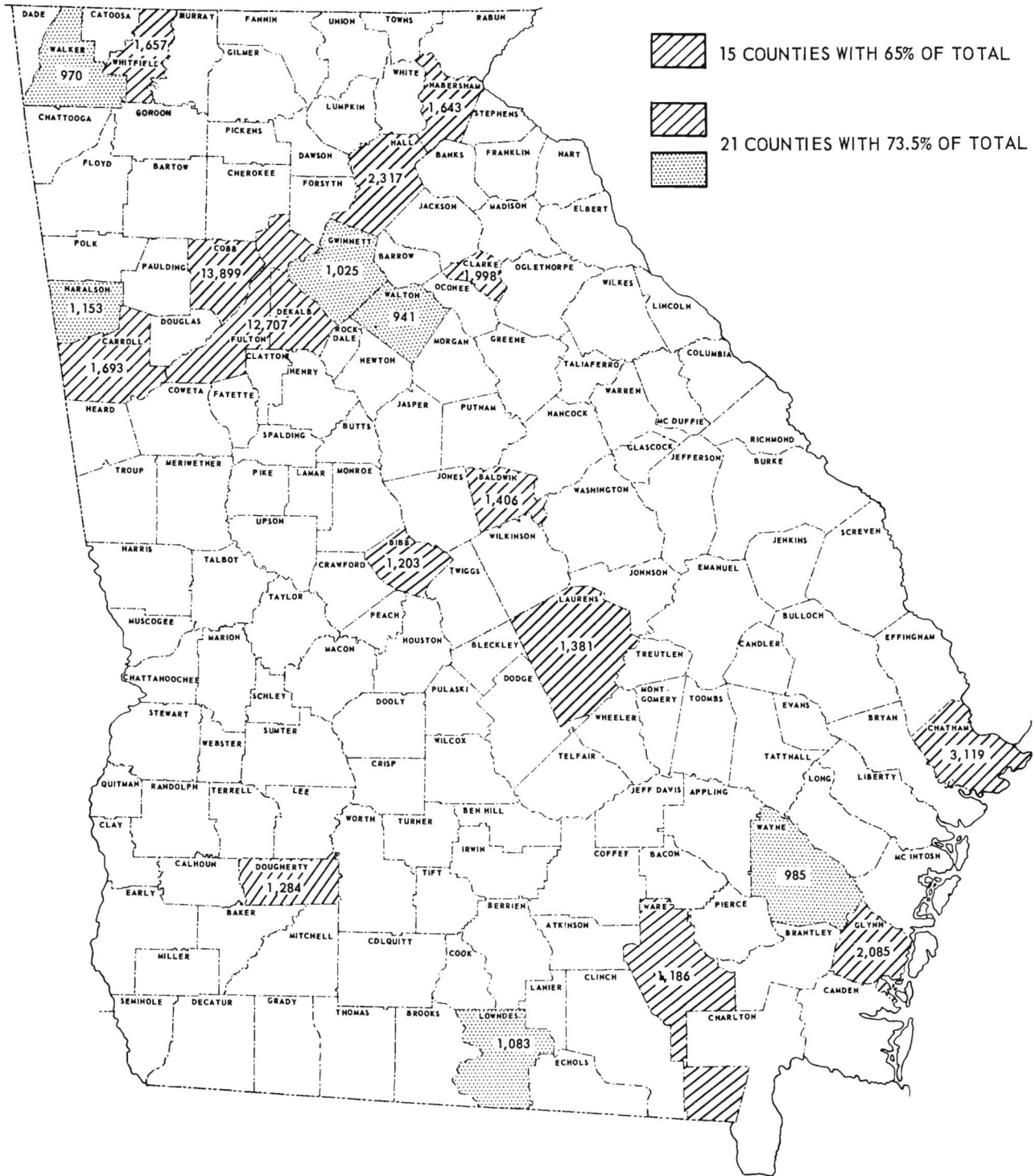
\*Clay processing, which is not classified as manufacturing, is not included in these figures.

# CONCENTRATION OF MANUFACTURING EMPLOYMENT GAINS 1947 - 1958



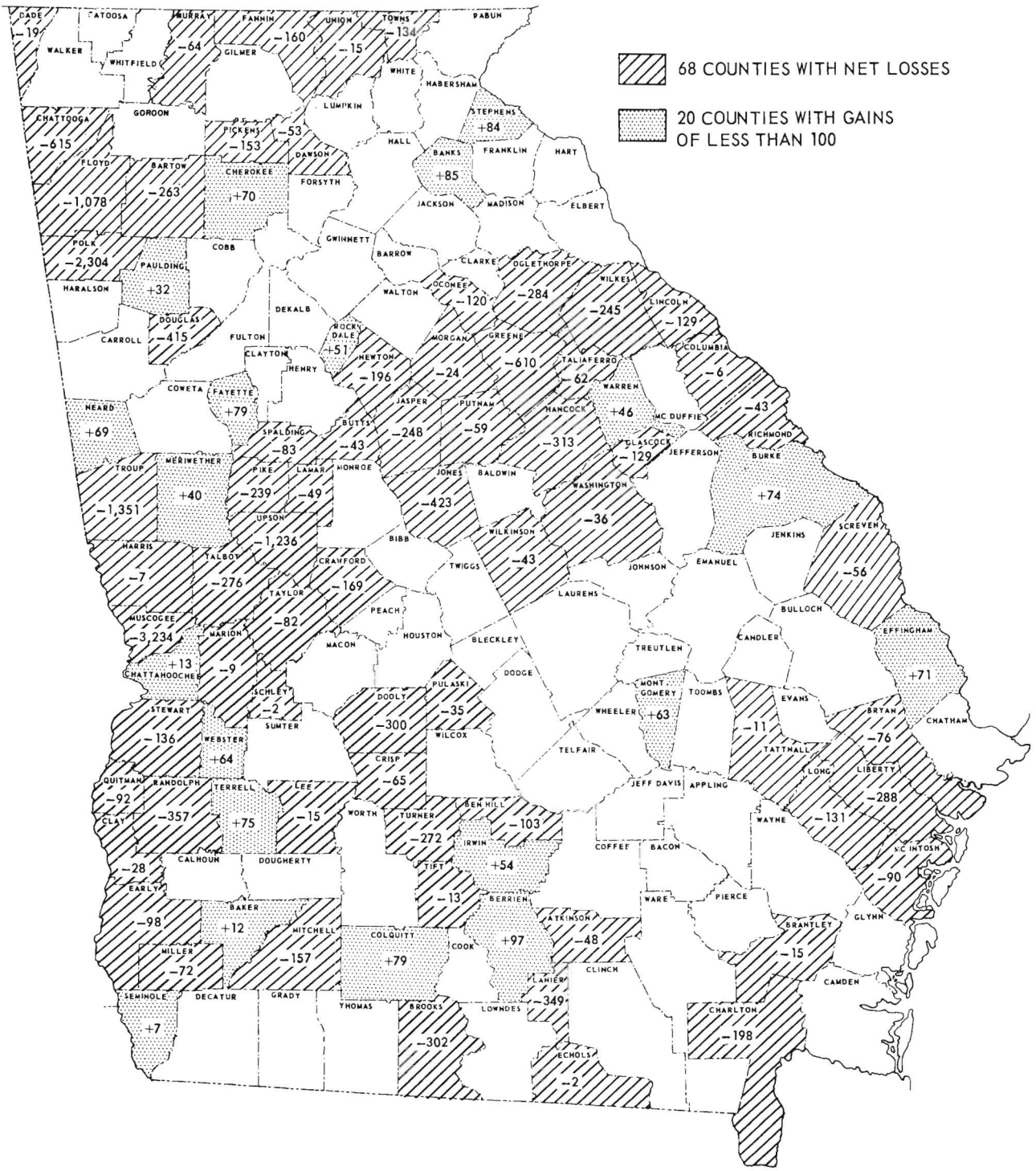
SOURCE: Georgia Department of Labor  
Employment Security Agency

# CONCENTRATION OF MANUFACTURING EMPLOYMENT GAINS 1947 - 1958





# DISTRIBUTION OF MANUFACTURING EMPLOYMENT LOSSES 1947 - 1958



## Population Changes

The impact of the farm and manufacturing job losses experienced in many counties -- and the concentration of manufacturing gains -- is clearly seen in the red shaded areas of the accompanying map.

A total of 92 counties lost population between 1950 and 1960. Many of these have been losing steadily for a much longer period. There can be little doubt that a number of the smallest counties have suffered such great losses that they have virtually no hope of rebuilding their economies.

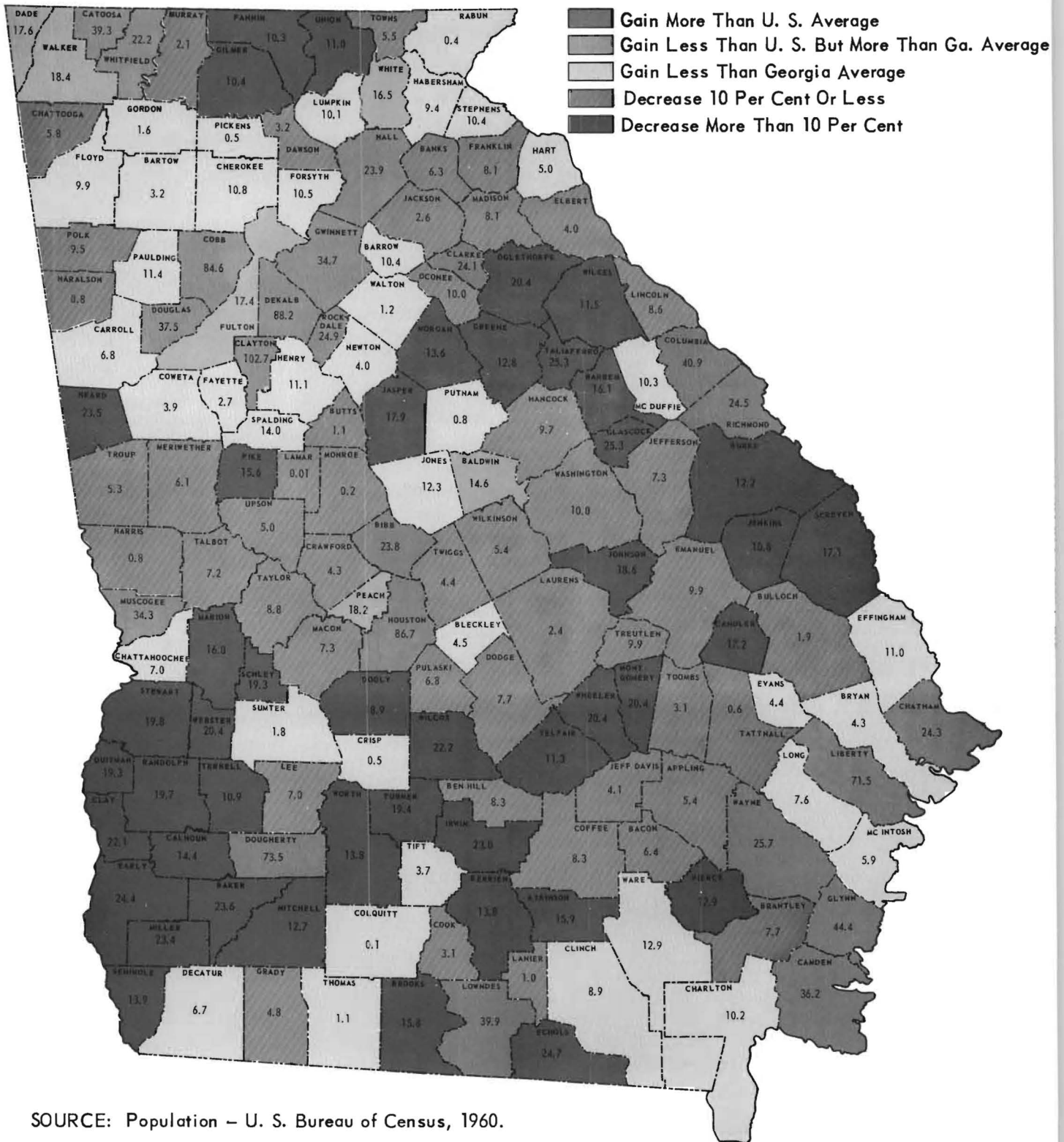
It would be quite misleading to assume that all the counties which appear in the "plus" column -- all those in green -- have strong economies, however. If we assume that the average rate of gain experienced throughout the country is a reasonably healthy rate, then only 21 counties are strongly on the plus side of the ledger.

Further research is essential to determine precisely how healthy or unhealthy the status of many of the marginal counties may be. The extent to which a local economy is diversified, the income level, and other factors must be evaluated.

As expected, the larger cities are the focal points for the major gains. The two northern counties which experienced substantial increases are tied closely to Chattanooga.

More than half -- 55% -- of Georgia's citizens now live in towns and cities as the result of the much-discussed migration from rural to urban areas. This is a 10% increase from the 45% which lived in our towns and cities in 1950. The steady rise in urban population is expected to continue indefinitely. The need for new payrolls will necessarily rise with the cities' population growth.

POPULATION CHANGES  
1950 - 1960



SOURCE: Population - U. S. Bureau of Census, 1960.

## Geographic Distribution of Manufacturing Employment

Four of the state's five largest metropolitan areas are the only areas in the state with 10,000 or more manufacturing employees. These "blue chip" counties are shown in solid blue on the accompanying map. The 13 counties with more than 4,000 but less than 10,000 are shown in blue dots.

At the opposite extreme are the 75 counties with fewer than 500 workers.\* As might be expected, these are at the same time both predominantly agricultural and generally low income counties. Most have also experienced continuing population declines.

The geographic imbalance is further shown in the fact that the immediate Atlanta area (Fulton, DeKalb, and Cobb counties) account for more than 25% of the state's total manufacturing employment. Chatham, Bibb, Floyd, Troup, Richmond, Whitfield and Hall account for an additional 26.8% -- a total of 52% in only 10 counties.

More than two-thirds of the state's manufacturing jobs are found in 21 counties. The other 138 counties shared the slightly more than 100,000 jobs which made up the remaining one-third -- an average of less than 850 jobs per county.

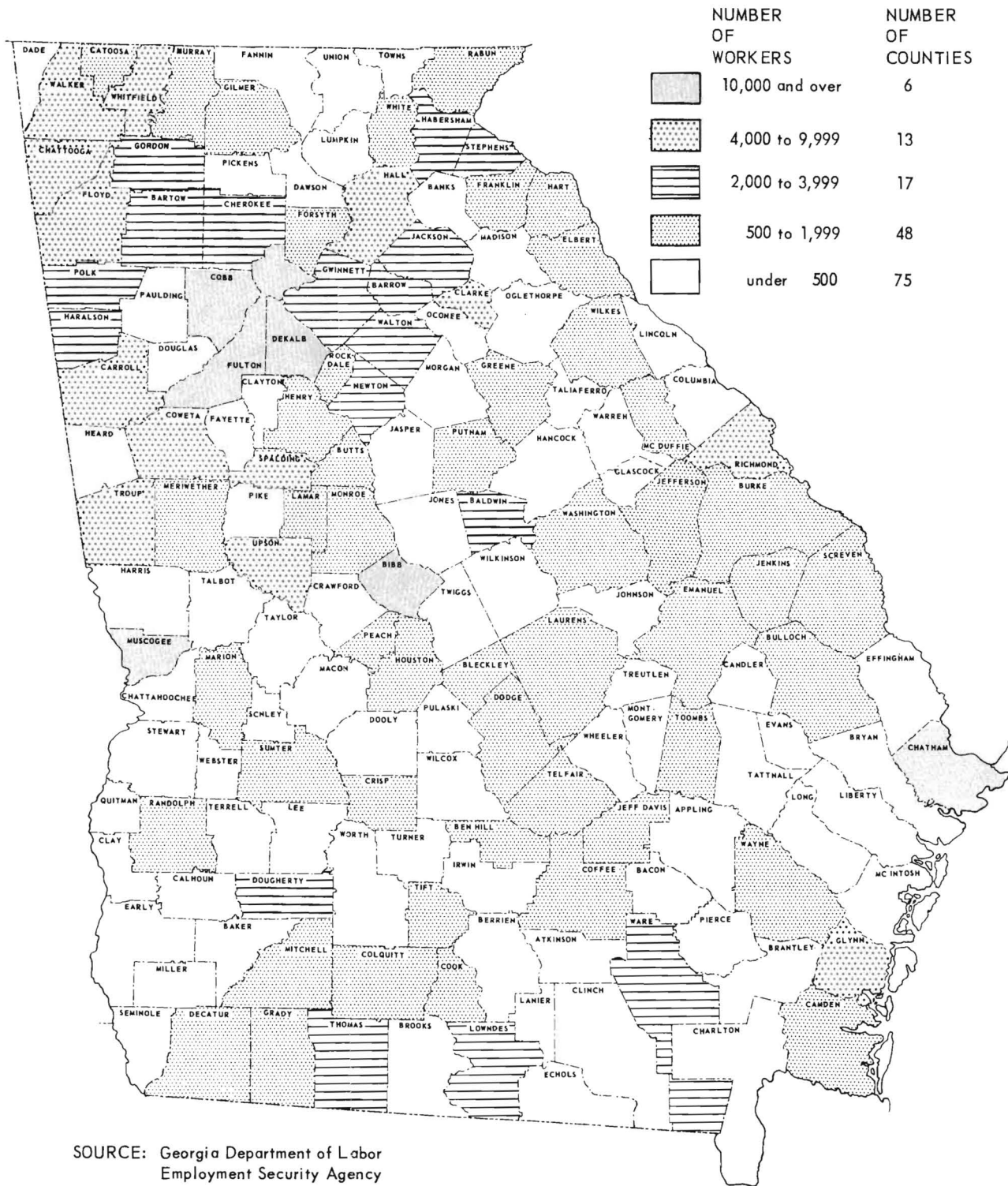
While much work remains to be done to determine how many of the counties with extremely limited manufacturing employment may have little chance of strong future growth, it nevertheless is apparent that many counties definitely are in danger of slipping beyond a point from which they cannot expect to rebuild. It is highly probable -- assuming that enough funds and enough local action just are not likely to be generated -- that some counties are already beyond recall.

In most cases, however, strong local effort -- carried out over a period of years, not months -- can bring new payrolls and new economic life. The challenge before such marginal counties is obvious: they must produce, or shrivel up and eventually blow away.

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\*Clay processing, which is not classified as manufacturing, is not included in these figures.

# DISTRIBUTION OF MANUFACTURING EMPLOYMENT 1958



Distribution of Manufacturing Employment  
by Industry, 1958

The heavy concentration of Georgia's manufacturing employment in only four industries adds a second problem to the geographic imbalance already discussed. More than 62% of all manufacturing jobs in the state are found in textiles, food, apparel and lumbering.\* All are relatively low-wage industries.

An encouraging sign appears in the fact that in 1947 these four industries accounted for almost three-fourths of the state's total. By 1954 the proportion had dropped to a little over two thirds, but no significant change has taken place since that time.

Almost one third of the state's total manufacturing employment still is concentrated in the textile industry. And as the map on page 26 shows, only 16 counties account for 70% of the total textile employment. Just 32 counties share almost 90% of the state total.

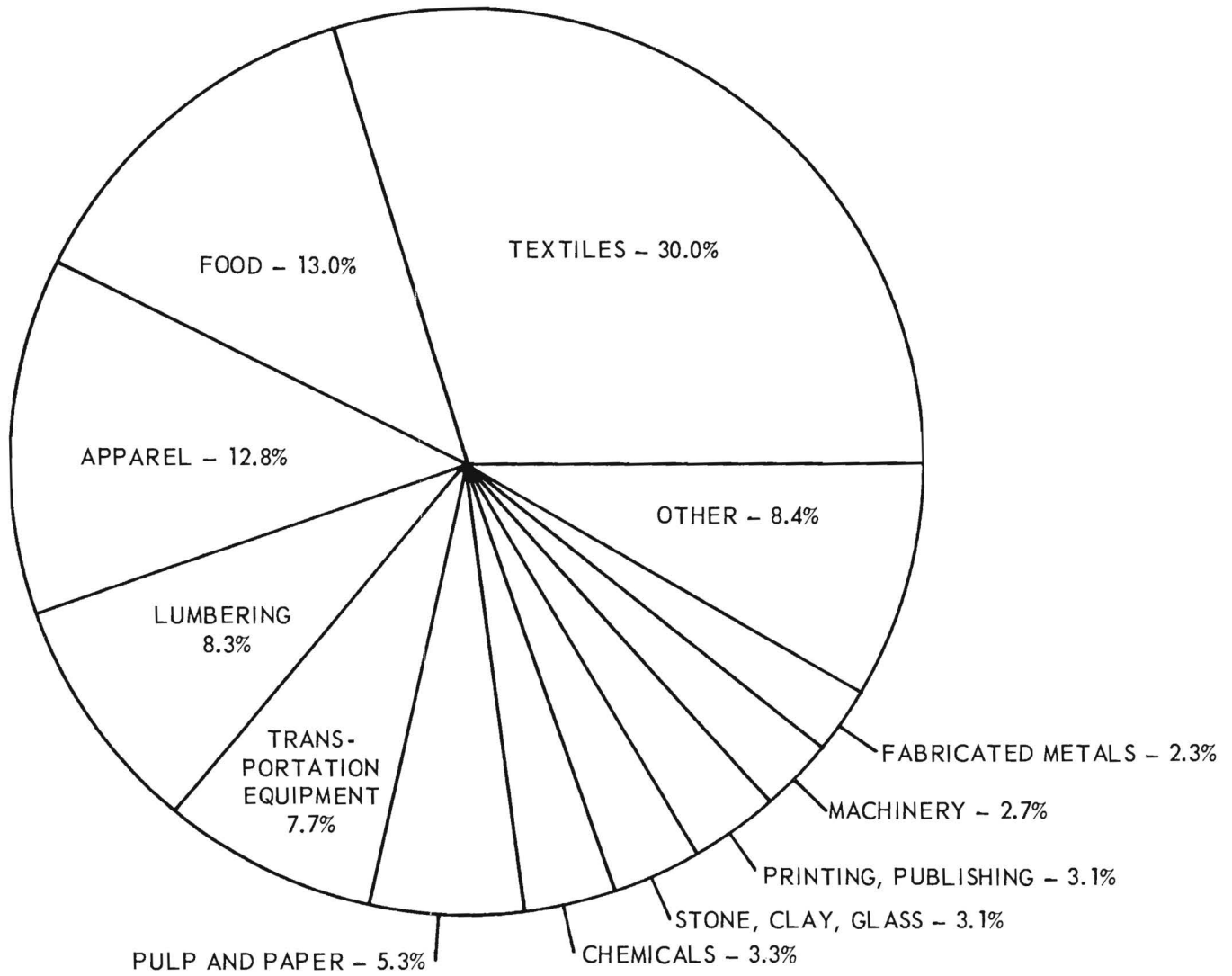
Even more highly concentrated is the food industry, with 10 counties accounting for 67% of the jobs. Lumbering shows greater geographic dispersion, as expected by the nature of the industry. Even in this field, however, only 40 counties account for more than 62% of the total.

Considerable dispersion has occurred in the apparel industry, despite its strong concentration. The 70% of the industry's employment which was shared by 28 counties in 1958 was distributed among only 17 counties in 1955. This industry continues to gain strongly, accounting for one in five new manufacturing jobs added in the state between 1947 and 1958.

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\*The difference in percentages shown here and on pages 60 and 61 are due to the necessity of using both Census of Manufactures and Georgia Department of Labor figures, which have different bases. See Appendix A.

DISTRIBUTION OF MANUFACTURING EMPLOYMENT BY INDUSTRY  
1958



SOURCE: Census of Manufactures



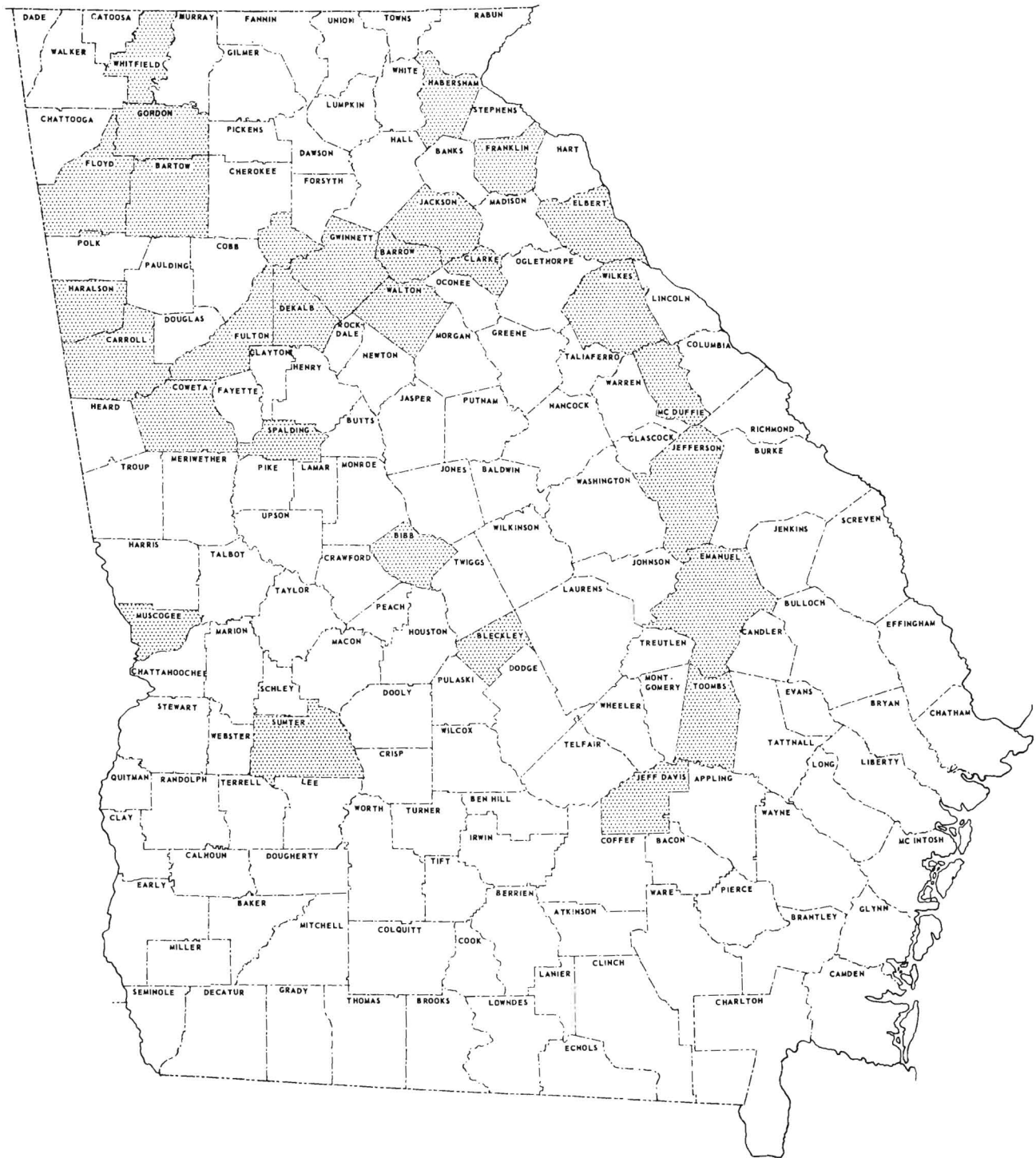
TEXTILES  
16 COUNTIES ACCOUNT FOR  
70% OF TEXTILE EMPLOYMENT



SOURCE: Georgia Department of Labor  
Employment Security Agency



APPAREL  
28 COUNTIES ACCOUNT FOR  
70% OF APPAREL EMPLOYMENT



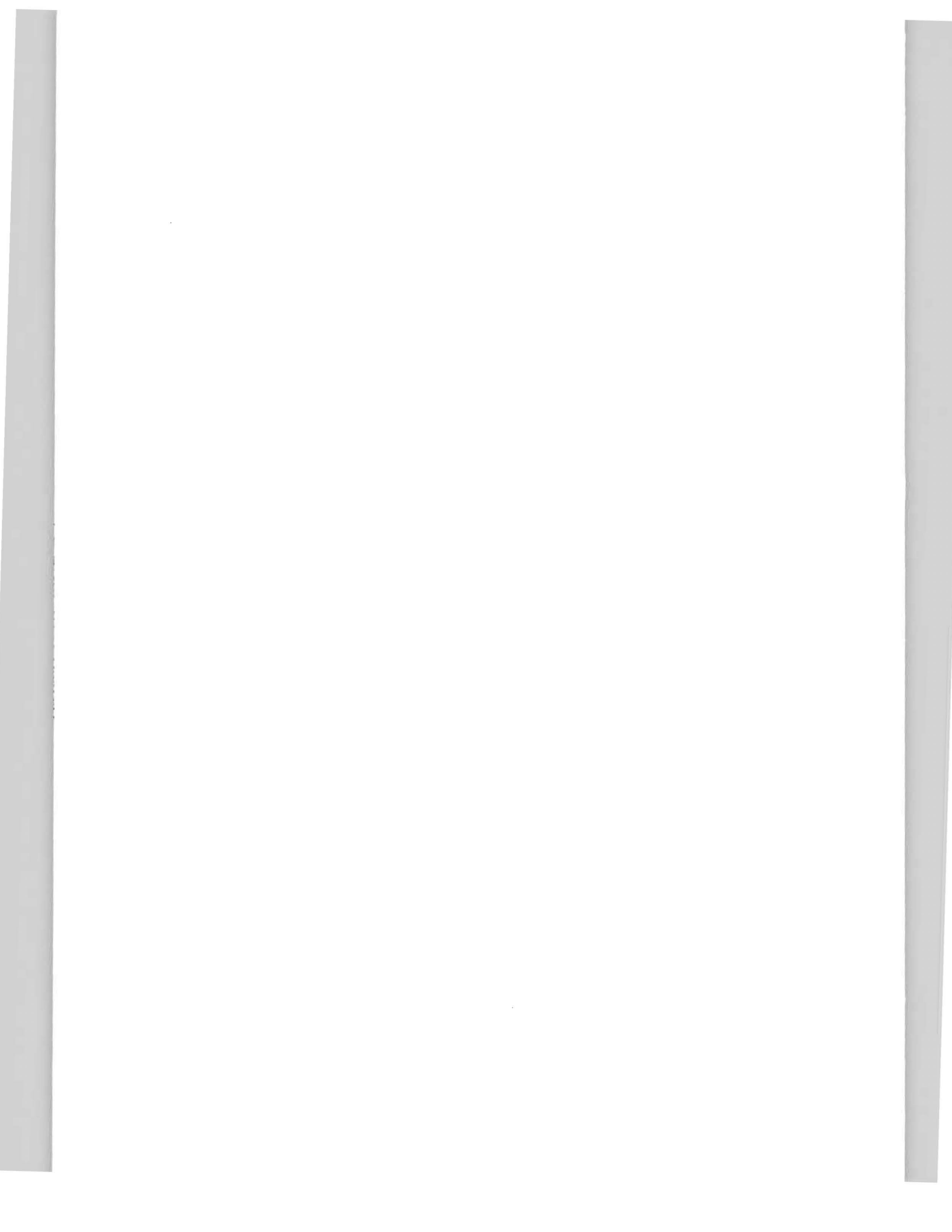
FOOD PROCESSING  
10 COUNTIES ACCOUNT FOR  
67% OF FOOD EMPLOYMENT



LUMBERING  
40 COUNTIES ACCOUNT FOR  
62% OF LUMBERING EMPLOYMENT



SOURCE: Georgia Department of Labor



III

HOW DO GEORGIA'S GAINS COMPARE?

## How Do Georgia's Gains Compare?

How has Georgia fared in the increasing competition for new manufacturing payrolls? Have we kept up reasonably well? Have we fallen behind?

A disturbing partial answer to these questions appears on the facing page. Georgia has one lone electronics plant with 100 or more employees, while every other state in the Southeast has at least one plant in the 1,000 and over category. North Carolina's and Florida's gains are particularly striking.

A similar lag in the synthetic fiber field -- which typifies our lag in chemicals generally -- is shown on the map immediately following. Georgia has one "old-type" (rayon acetate) fiber plant, but none of the newer synthetics -- orlon, dacron, nylon. Every other state in the area has at least two.

A different picture appears in the pulp and paper industry. Here we are more than holding our own, with two plants in the 1,000 and over category -- including the largest plant of its kind in the world. In transportation equipment also we have done exceedingly well, despite recent declines.

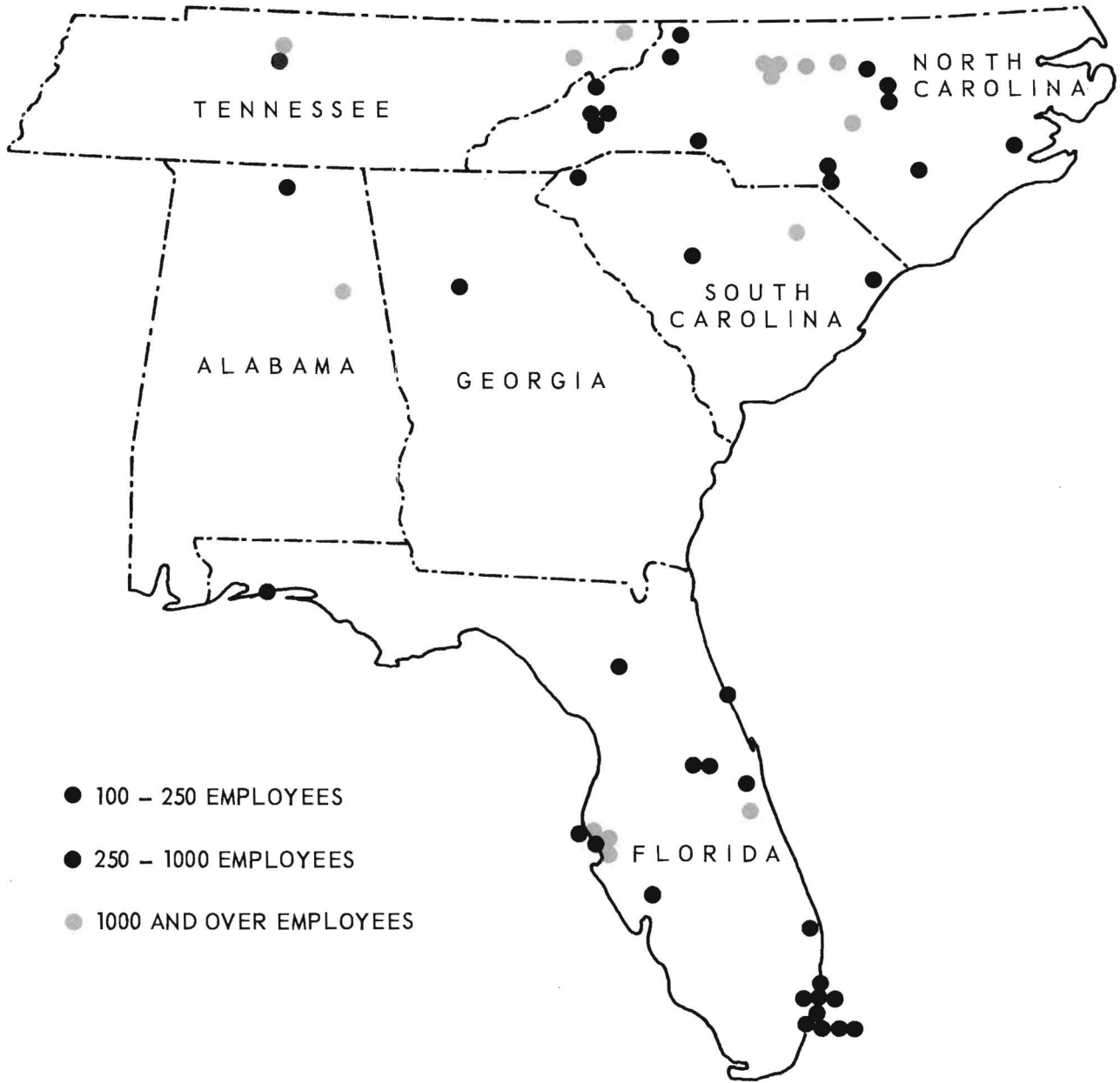
But why has Georgia lagged in fields like electronics and chemicals where we should be doing well?

One major deterrent in the chemical field is Georgia's 3% use tax on imported equipment and materials going into new manufacturing plants. No other state in the Southeast retains what amounts to a high-priced license for manufacturers to do business.

A specific deterrent to the development of an electronics industry has been the uncertainties surrounding Georgia's school situation. Not of particular concern to some industries, the question of open schools is a primary one in fields like electronics, where scientists and engineers place a high premium on the availability of high quality schools.

For a variety of such divergent reasons, we simply have not kept up with our competition in important areas.

ELECTRONICS EMPLOYMENT IN THE SOUTHEAST  
1960



SOURCE: Industrial Development Branch

SYNTHETIC FIBER PLANTS IN THE SOUTHEAST  
1960

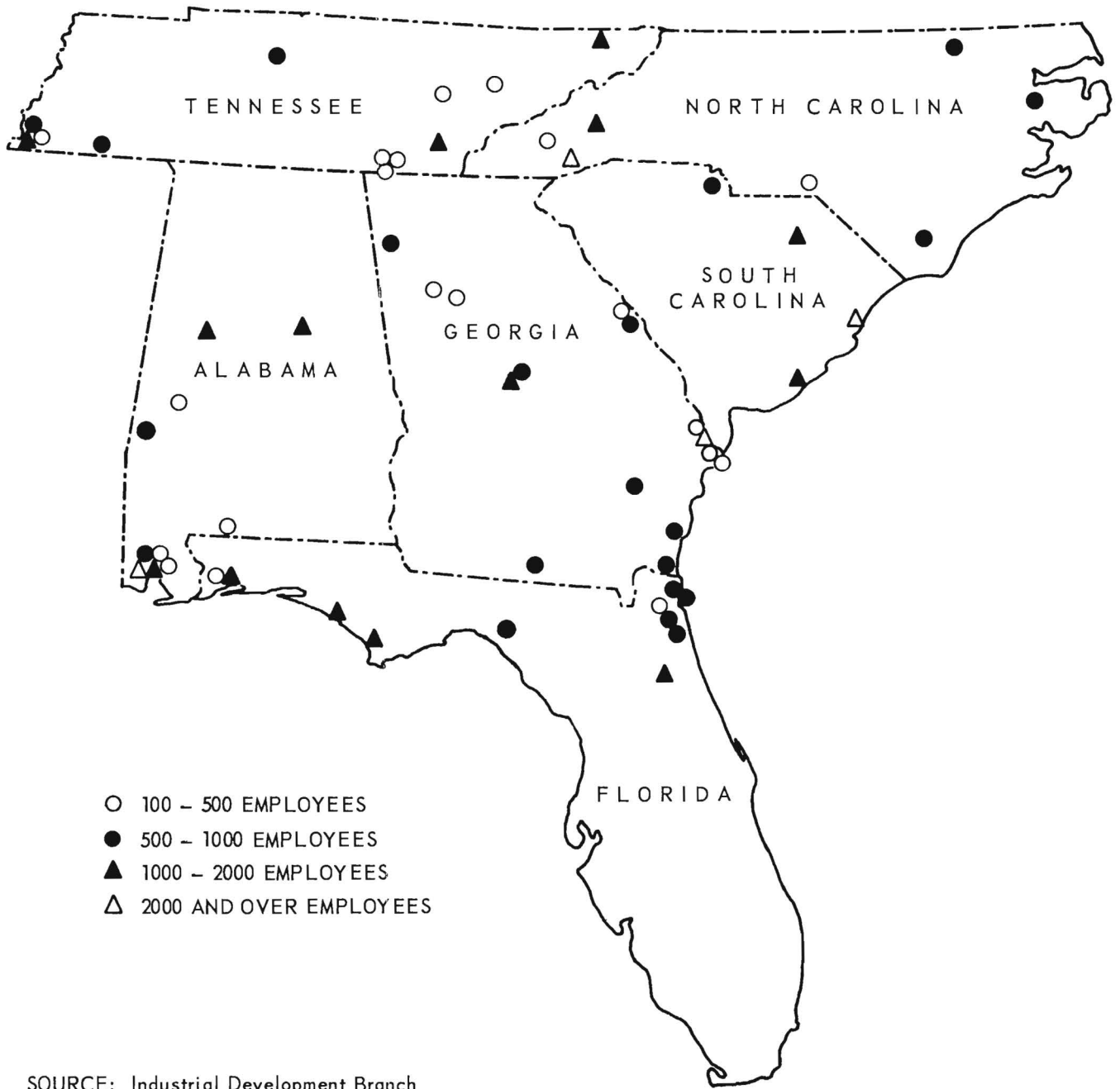


- du PONT de NEMOURS & CO.
- ▲ AMERICAN CYANAMID CO.
- △ TENNESSEE EASTMAN CORP.
- CHEMSTRAND CORP.
- CELANESE CORP.
- OTHERS

SOURCE: Industrial Development Branch



PULP AND PAPER MILLS  
IN THE SOUTHEAST  
1960



Net Manufacturing Employment Gains  
in Selected States, 1947-1958

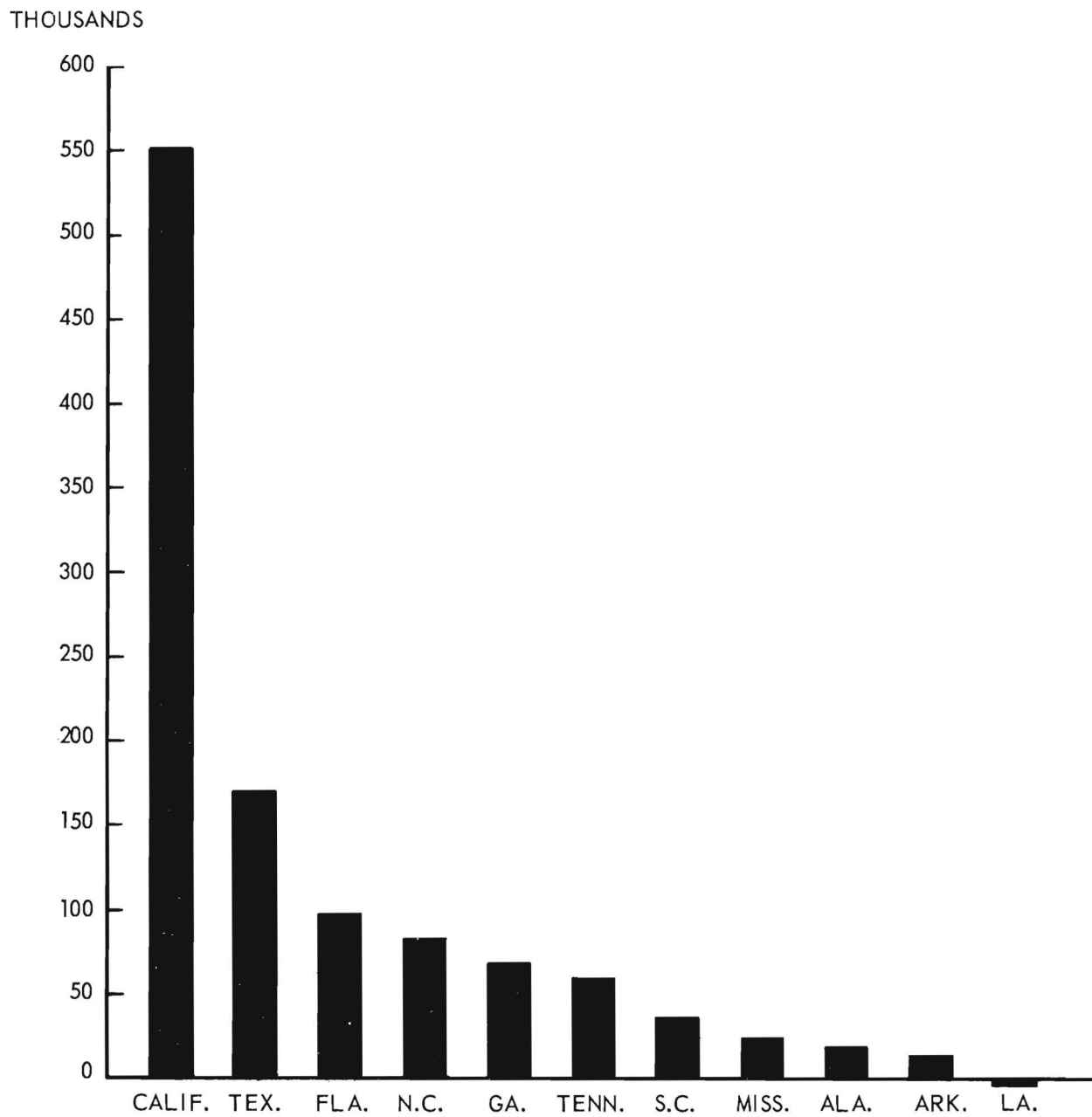
Georgia outranked all southeastern states except Florida and North Carolina in net manufacturing employment gains from 1947 to 1958, as the accompanying bar chart shows. The comparative figures for the three states were:

Florida	95,514
North Carolina	82,243
Georgia	65,645

The pages immediately following present a more detailed comparison of the gains, including giving a breakdown of the employment increases by industry type. Here it becomes clear that in important ways Georgia's gains have not approached those of Florida or North Carolina as closely as the facing chart would indicate. Both states have a better distribution of gains among the various types of industries than does Georgia. They also have larger gains among the higher wage types of manufacturing.

An important fact masked by the chart showing overall gains is that during the latter part of the 11-year study period Georgia dropped sharply behind her chief competitors. This and other significant details are discussed on page 38.

NET MANUFACTURING EMPLOYMENT GAINS IN SELECTED STATES  
1947 - 1958



SOURCE: Census of Manufactures

Net Manufacturing Employment Gains  
in Selected States, 1947-1954 and 1954-1958

A vitally important fact masked by the preceding bar chart shows up distinctly in the two charts on page 39: Georgia's relatively high gains during the first seven years dropped off by more than 50% during the period from 1954-1958.

From a net increase of 7,600 per year during 1947-1954 Georgia dropped to only 3,100 a year. Preliminary but not completely comparable figures for 1959 and 1960 indicate that we have fared no better since 1958.

During the first seven years Georgia actually led both North Carolina and Florida, netting 51,332 jobs as compared with North Carolina's 48,563 and Florida's 45,933.

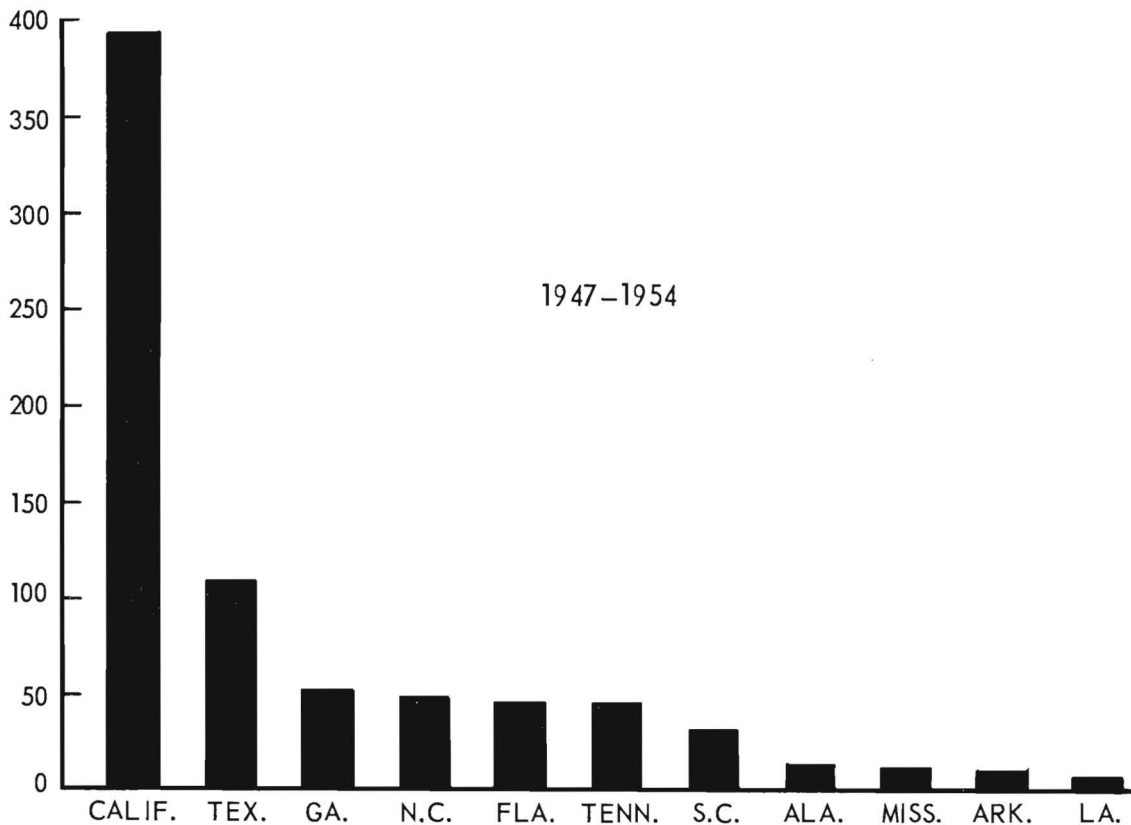
Georgia's drop to a total of only 12,325 jobs between 1954 and 1958 left the state far behind Florida's 49,581 and North Carolina's 33,680, however. Florida actually quadrupled Georgia's increase during the four years, while North Carolina gained almost three times Georgia's total.

Available time has not permitted a detailed analysis of the reasons for Georgia's sudden decline. However, it is worth noting that it was during the latter period that Georgia was left as the only state in the Southeast with a full 3% use tax on new manufacturing plants. Every other state in the area either abolished its tax completely or reduced it to a token amount.

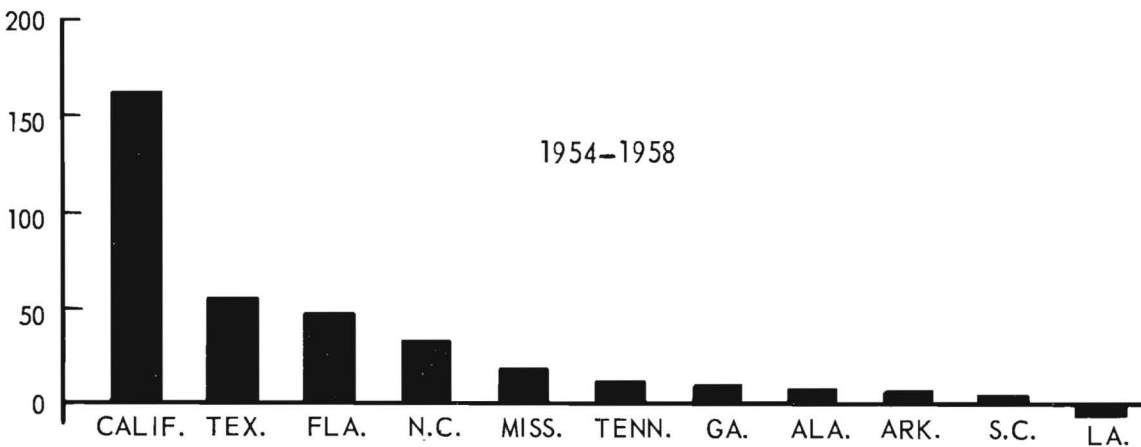
While difficult to measure, there is no doubt that Georgia's unsettled school conditions also contributed to the decline. A planned revision of this report will attempt to pinpoint specific explanations for the change in Georgia's position.

## MANUFACTURING EMPLOYMENT NET GAINS BY STATE

THOUSANDS



THOUSANDS



SOURCE: Census of Manufactures

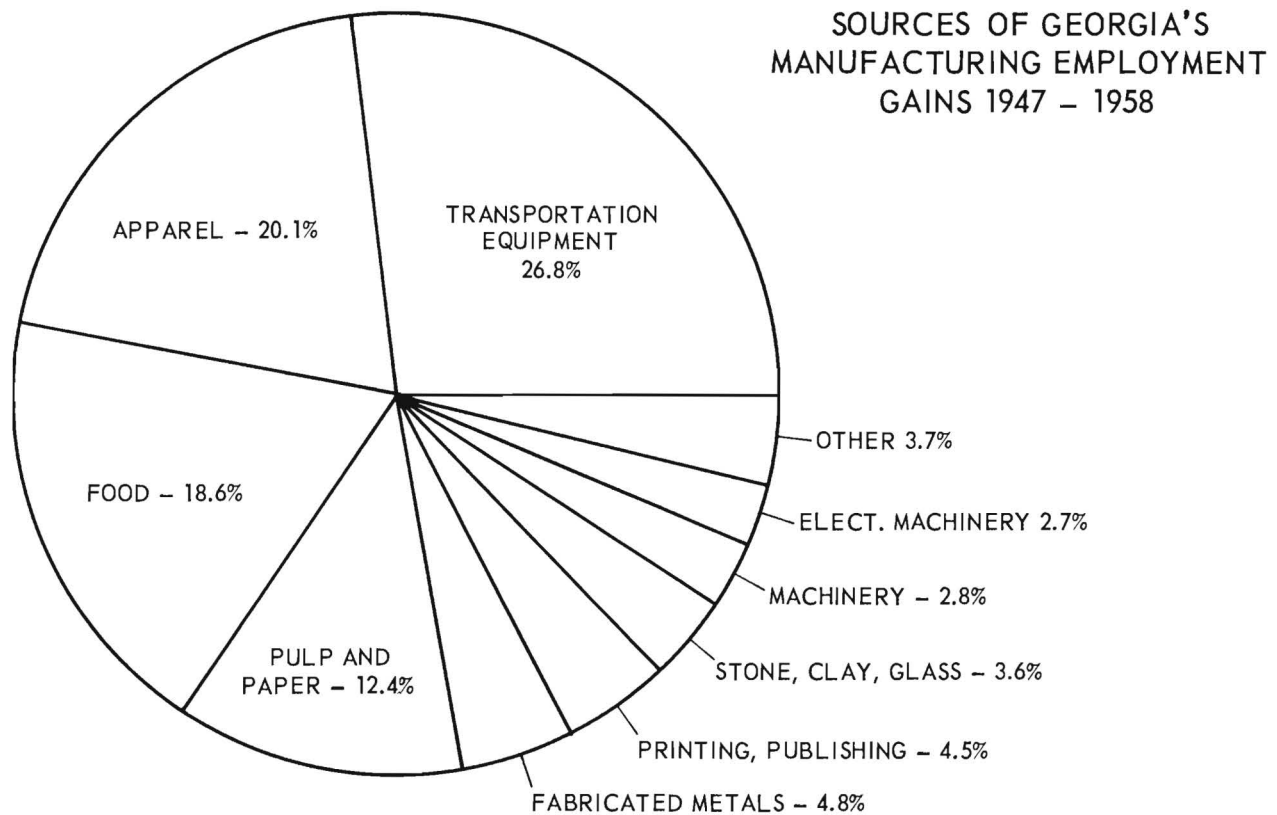
Comparison of Manufacturing Employment Gains  
in Georgia, Florida and North Carolina, 1947-1958

Wide differences in the main sources of manufacturing employment gains are evident from the three "pies" showing increases in the three states for the overall study period.

Most of the transportation equipment gains were concentrated in Georgia. This industry in turn dominated Georgia's increases, accounting for more than one fourth of the state's total. And the Atlanta area was the focal point of the industry's growth.

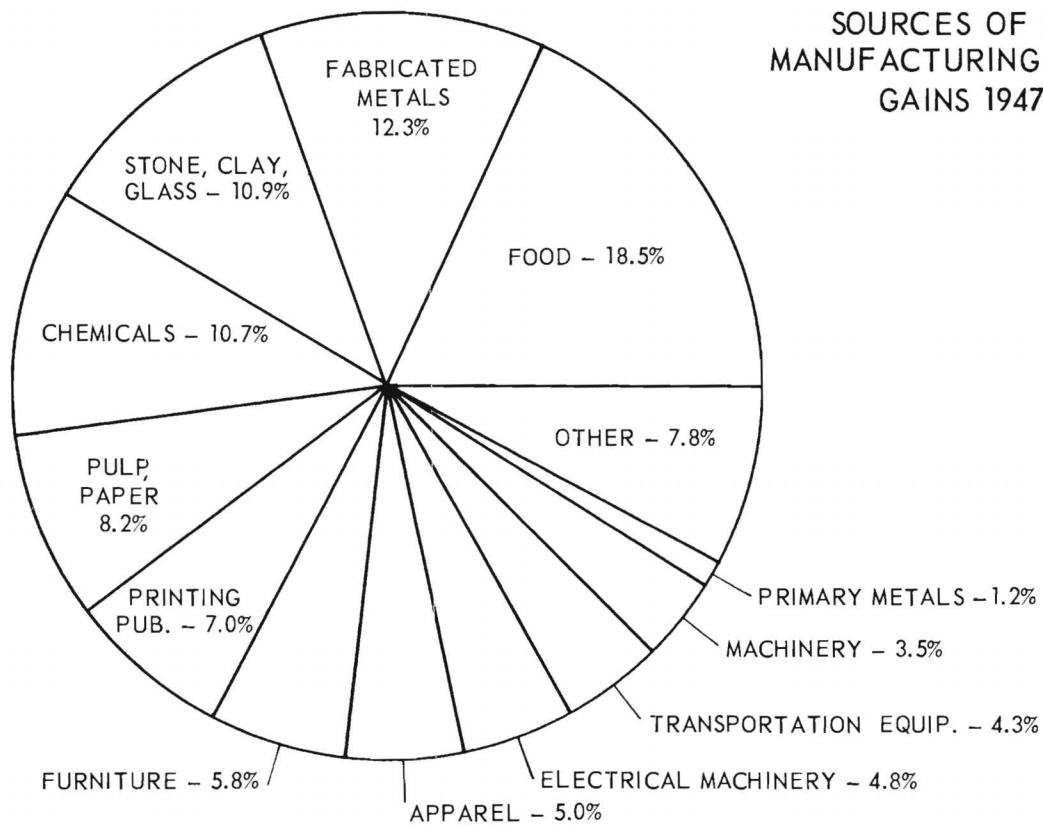
Florida attracted the major portion of the fabricated metals, the stone, clay and glass, and the chemicals plants, while North Carolina gained the lion's share of the electrical machinery (including electronics) and furniture jobs.

Florida's superior balance is evident. Not only are the bulk of its gains distributed over a larger number of industries, but it has the highest proportion of its gains in relatively high wage types of manufacturing. The small percentage of Florida's gain in apparel is also noteworthy.

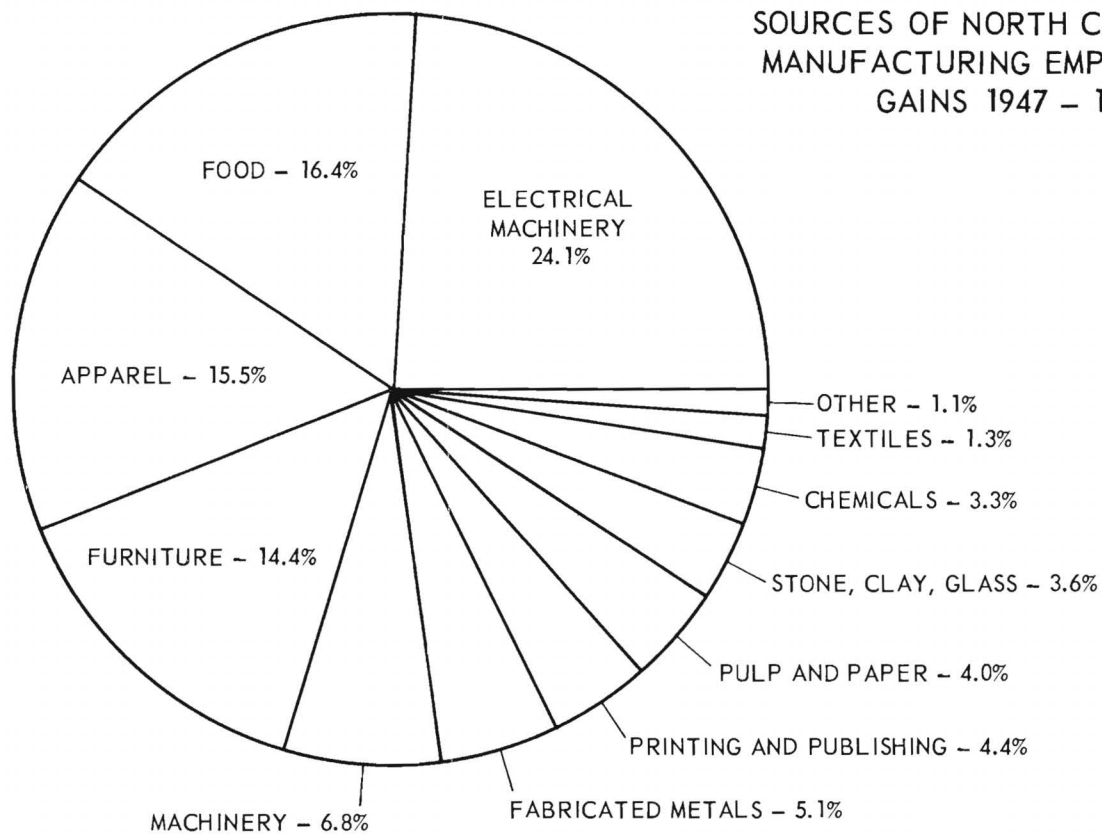


SOURCE: Census of Manufactures

SOURCES OF FLORIDA'S  
MANUFACTURING EMPLOYMENT  
GAINS 1947 - 1958



SOURCES OF NORTH CAROLINA'S  
MANUFACTURING EMPLOYMENT  
GAINS 1947 - 1958



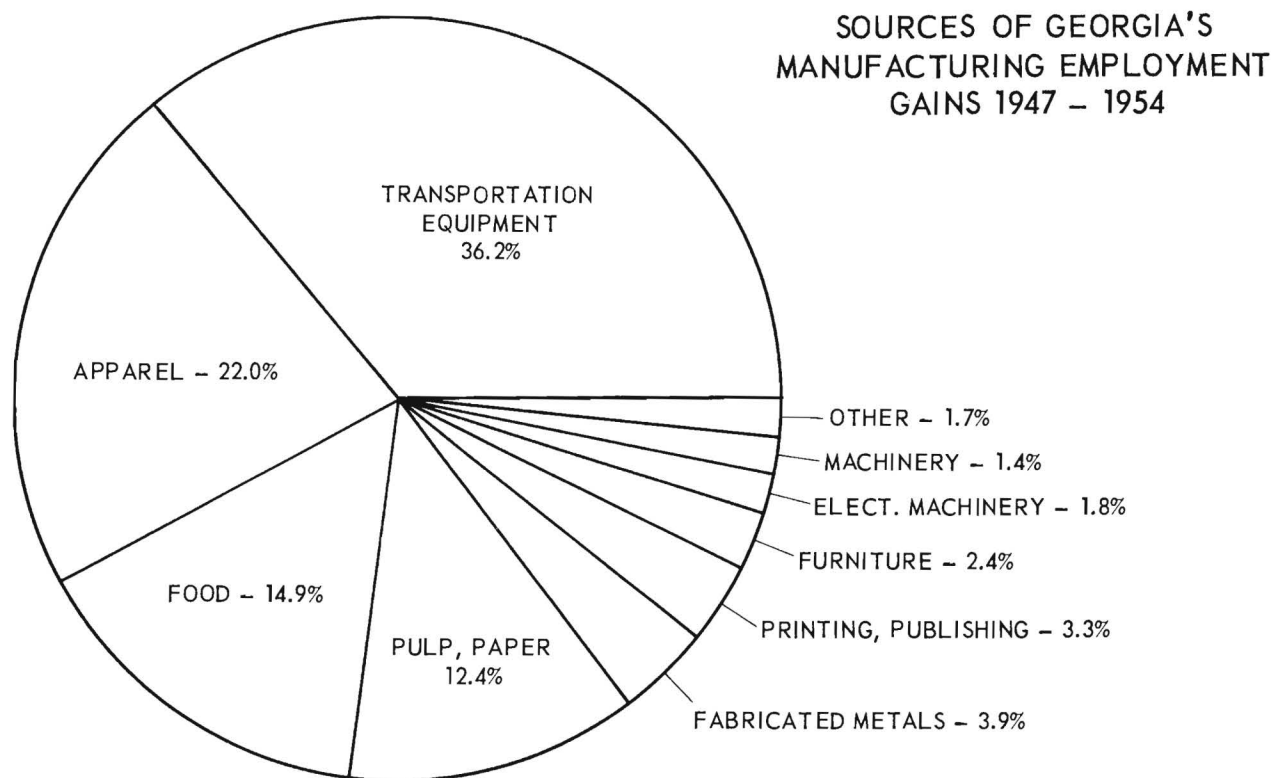
SOURCE: Census of Manufactures

Comparison of Manufacturing Employment Gains  
in Georgia, Florida and North Carolina, 1947-1954

Georgia's heavy dependence on the transportation equipment industry -- notably Lockheed Aircraft Corporation and the automotive assembly plants -- for its manufacturing gains appears even more clearly when the 1947-1954 gains are separated from the overall totals.

Also crystal clear is the fact that Georgia's big post-World War II industrial expansion was almost completely dependent on only four industries. Transportation, apparel, food, and pulp and paper supplied over 85% of the new jobs during the seven year period.

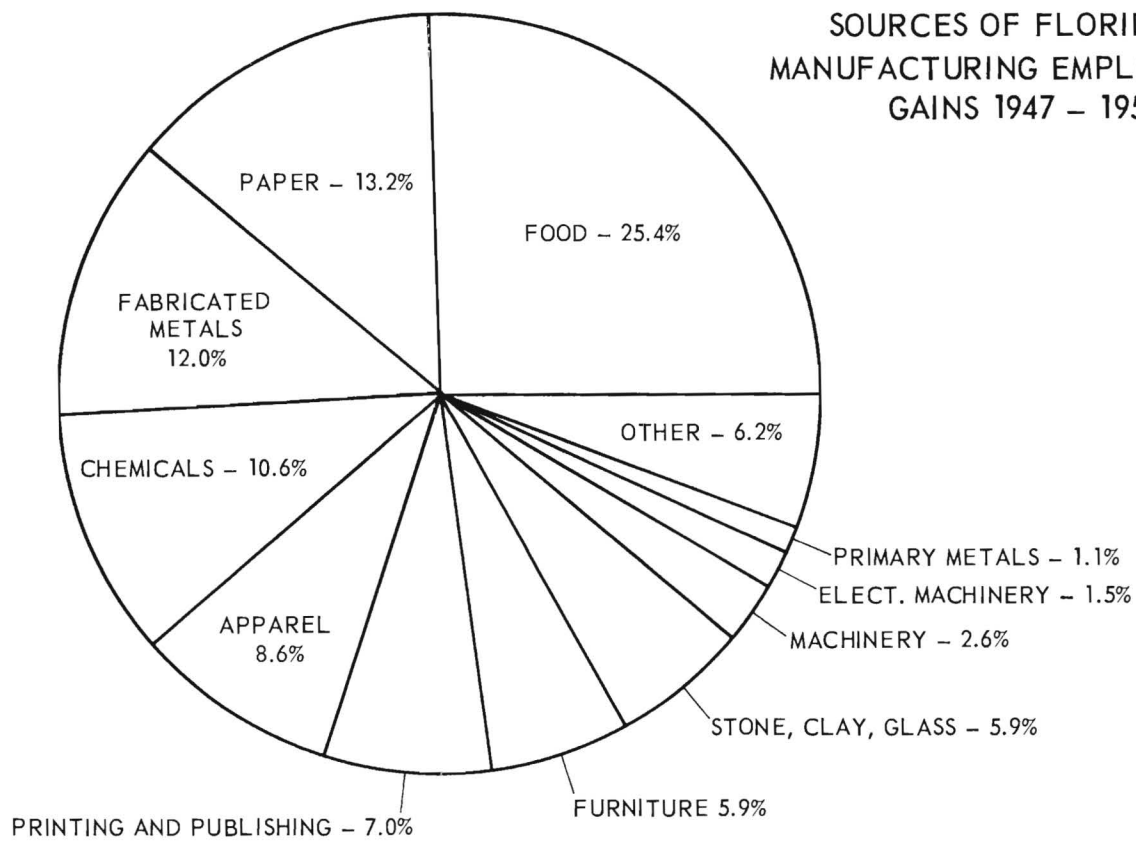
Florida's superior balance remains evident. And two things stand out about North Carolina's gains: First, its heavy dependence on the three low wage industries of textiles, food and kindred products, and furniture; second, its strong showing in the electrical machinery (electronics) field.



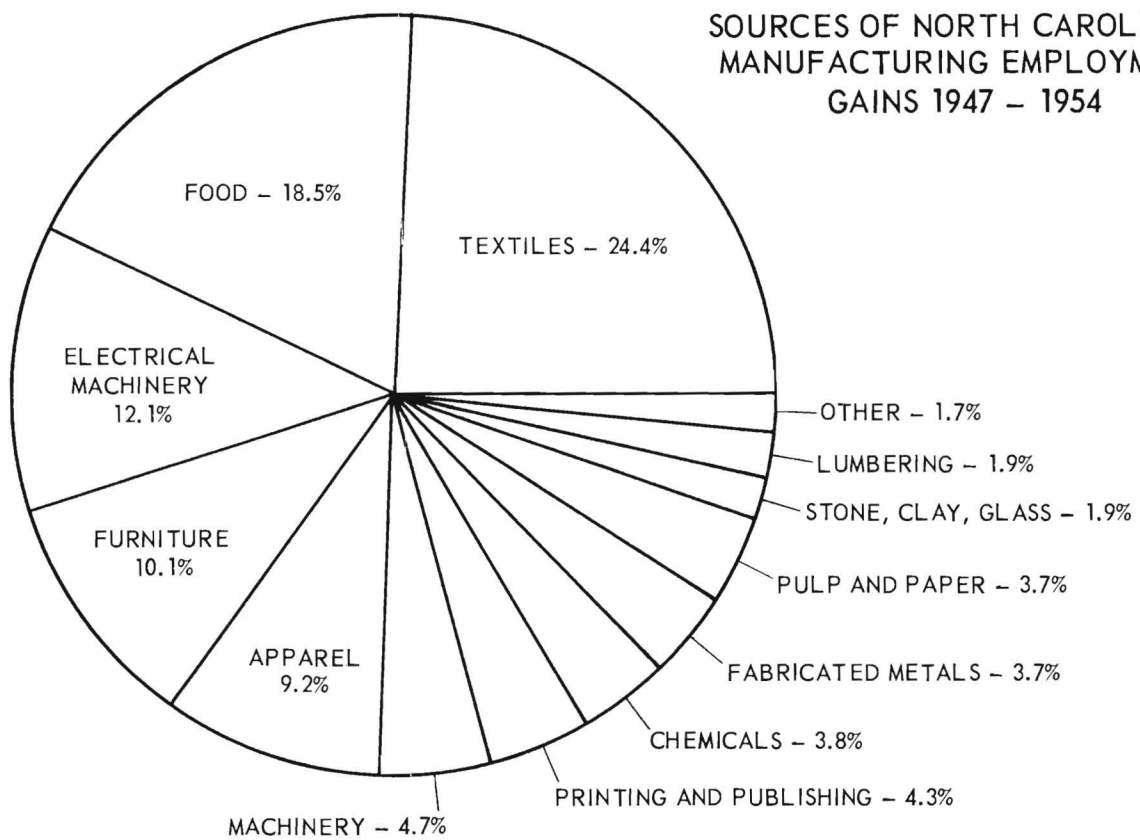
SOURCE: Census of Manufactures



SOURCES OF FLORIDA'S  
MANUFACTURING EMPLOYMENT  
GAINS 1947 - 1954



SOURCES OF NORTH CAROLINA'S  
MANUFACTURING EMPLOYMENT  
GAINS 1947 - 1954



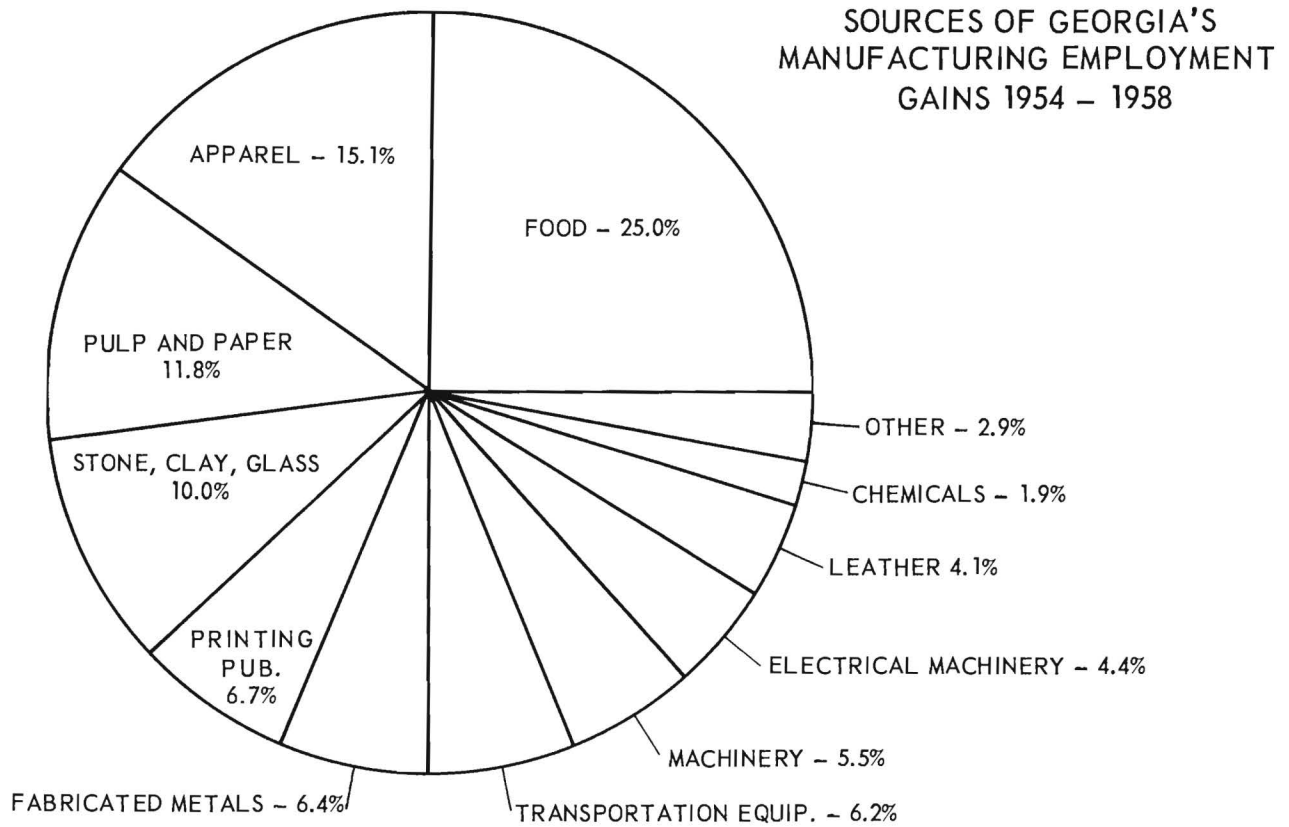
SOURCE: Census of Manufactures

Comparison of Manufacturing Employment Gains  
in Georgia, Florida and North Carolina, 1954-1958

The drastic decline in the growth of the transportation equipment industry in Georgia after 1954 can be seen in the breakdown of Georgia's gains from 1954 to 1958. The contraction of Lockheed Aircraft Corporation's growth obviously has had a great deal to do with Georgia's recent decline -- just as it had a major role in Georgia's large gains at the start of the study period.

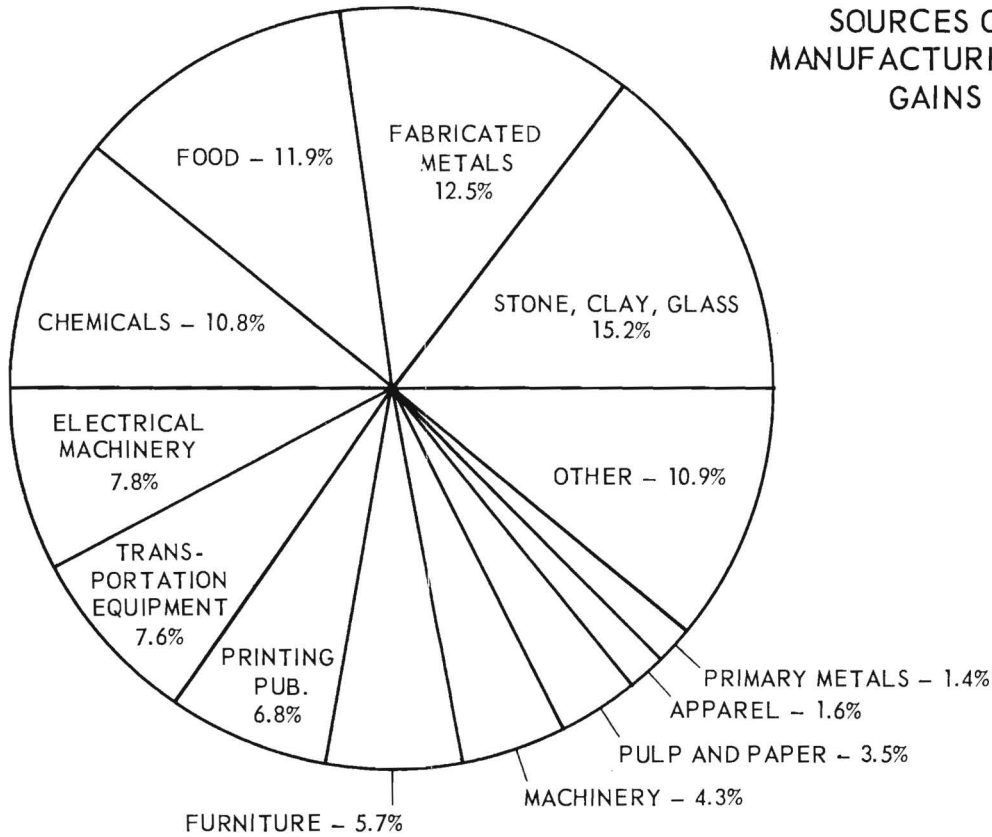
Florida's strong showing in stone, clay and glass, as well as in fabricated metals, chemicals and electrical machinery stands out in its 1954-1958 gains. Its lack of dependence on any one industry continues to stand out.

The most startling shift during the four-year period, however, occurred in North Carolina, where more than one out of every five new manufacturing jobs added came in electrical machinery (electronics). Except for this shift, North Carolina continued to share Georgia's heavy dependence on low wage industries for the bulk of its gains.

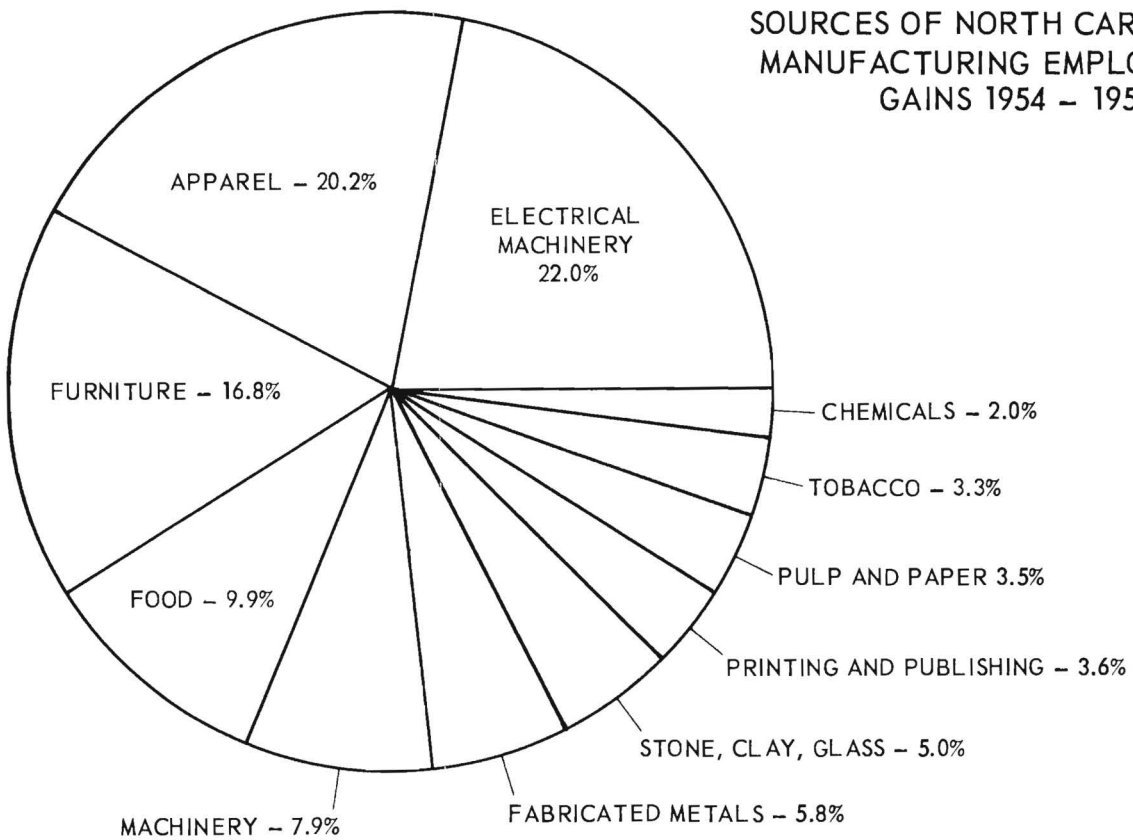


SOURCE: Census of Manufactures

SOURCES OF FLORIDA'S  
MANUFACTURING EMPLOYMENT  
GAINS 1954 - 1958



SOURCES OF NORTH CAROLINA'S  
MANUFACTURING EMPLOYMENT  
GAINS 1954 - 1958



SOURCE: Census of Manufactures

## Annual Job Needs

The 1960 census merely corroborates what has been known all along -- that each year thousands of young Georgians leave the state because jobs are not available at home. Over the years, approximately 15,500 jobs of all kinds have been provided annually for an estimated 27,000 new entrants into the work force.<sup>1/</sup>

Therefore, each year, on the average, 11,500 more people have been left without jobs.

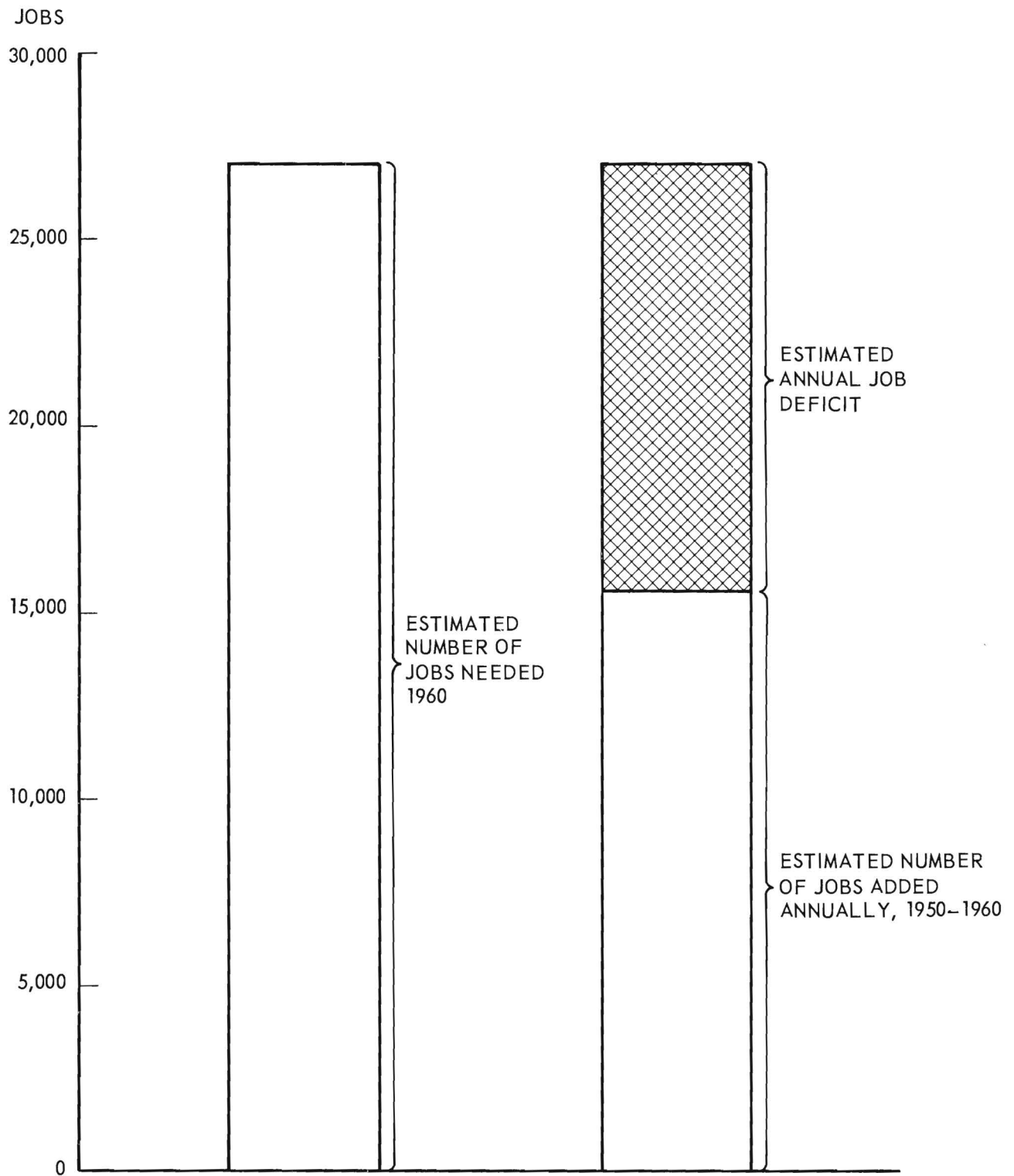
Some of these people join the under-employed, that large group in Georgia who are employed only to a very limited degree. Most of them join their families in attempting to work farms that could easily be operated efficiently with fewer people. Many more leave the state for good.

A new record high needs to be reached each year if Georgia is to experience even a moderate gain. To provide suitable employment for the thousands of under-employed, many additional jobs must be created. To close the income gap, thousands more will be required.

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<sup>1/</sup> This is a net figure. The number of people leaving the work force because of death, retirement, etc. have been subtracted from the gross figure.

# ANNUAL JOB DEFICIT



## Georgia's Gains Compared with the U.S.

Five distinct differences appear in the accompanying graph showing comparative gains made by Georgia and the U.S. In three instances Georgia lagged sharply behind the average gains made throughout the country. In the other two, we had substantially larger increases.

Georgia's strong gains in the pulp and paper field are shown in the fact that 15.5% of the state's net manufacturing employment gains from 1947 to 1958 came in this industry. Some 10,500 workers were involved.

The continued importance of the apparel industry is also shown. More than one fourth the state's increase -- 25.1% -- came in apparel.\* In the nation as a whole the industry accounted for only 8.4% of the new manufacturing jobs, clearly indicating that Georgia got more than her share.

The electronics lag discussed earlier appears in the gains shown in the electrical machinery category, which includes electronics. This growth industry accounted for 17.9% of the national increase, while in Georgia it accounted for only 3.4%.

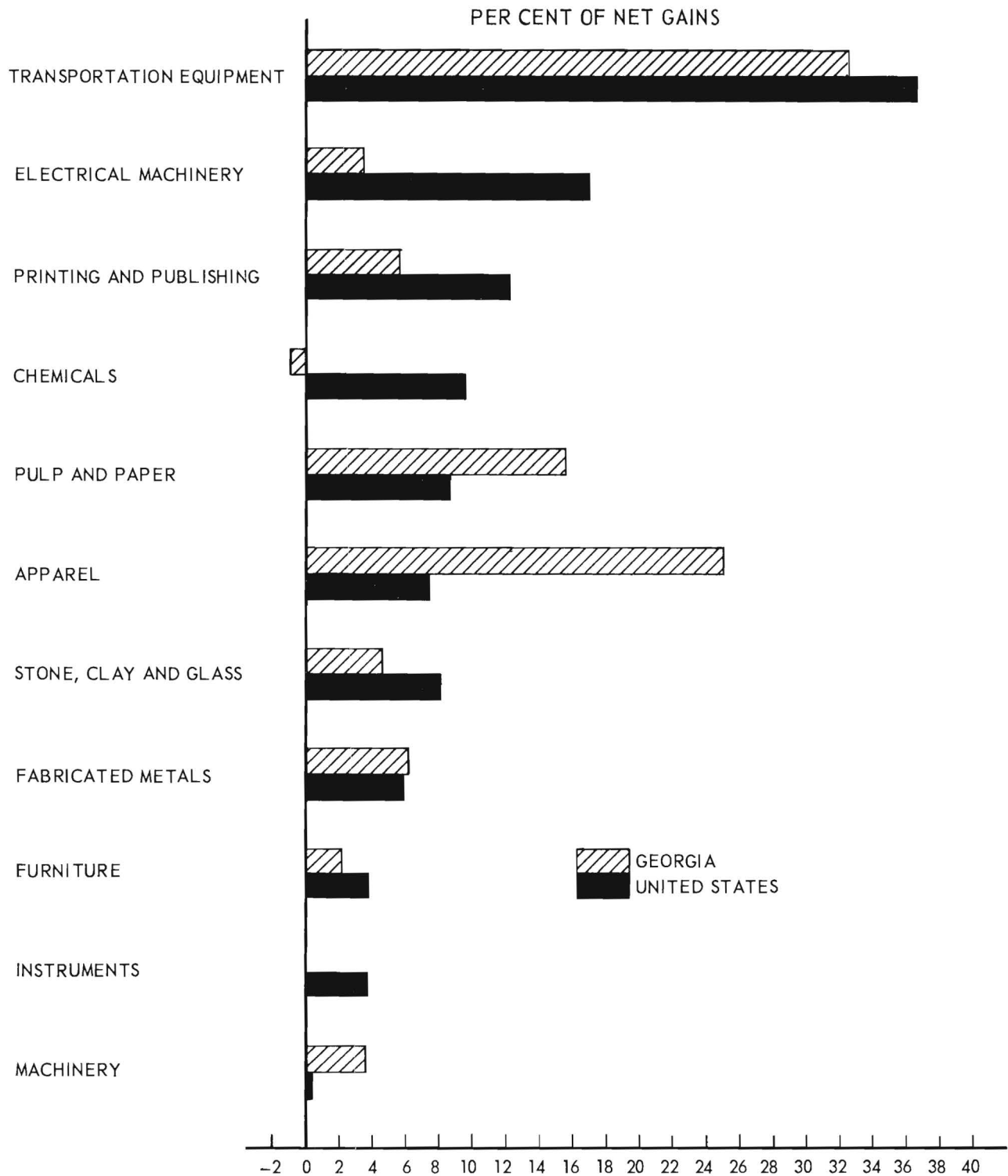
A second important weak point in Georgia's gains occurred in chemicals. In this instance Georgia actually suffered a net loss, while in the U.S. chemicals accounted for 9.5% of the gain. In printing and publishing Georgia also experienced only a fraction of the percent increase found in the U.S. -- 5.7 as compared with 12.1.

The other large disparity is found in the instruments field, where Georgia had no gain at all, while a 3.7% gain was reported nationally.

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\*Differences in percentages here and on page 40 are due to the necessity of using different sources and slightly different coverage.

## GAINS IN MANUFACTURING EMPLOYMENT IN SELECTED INDUSTRIES GEORGIA AND U. S. 1947 - 1958



SOURCE: Census of Manufactures

Percentages of Total Manufacturing Employment  
in Selected Industries in Georgia and U.S., 1958

The relatively even distribution of employment in the U.S. among the 16 major industries shown in the accompanying chart contrasts sharply with the imbalance which still exists in Georgia. More than 60% of Georgia's manufacturing employment remains concentrated in only four industries.

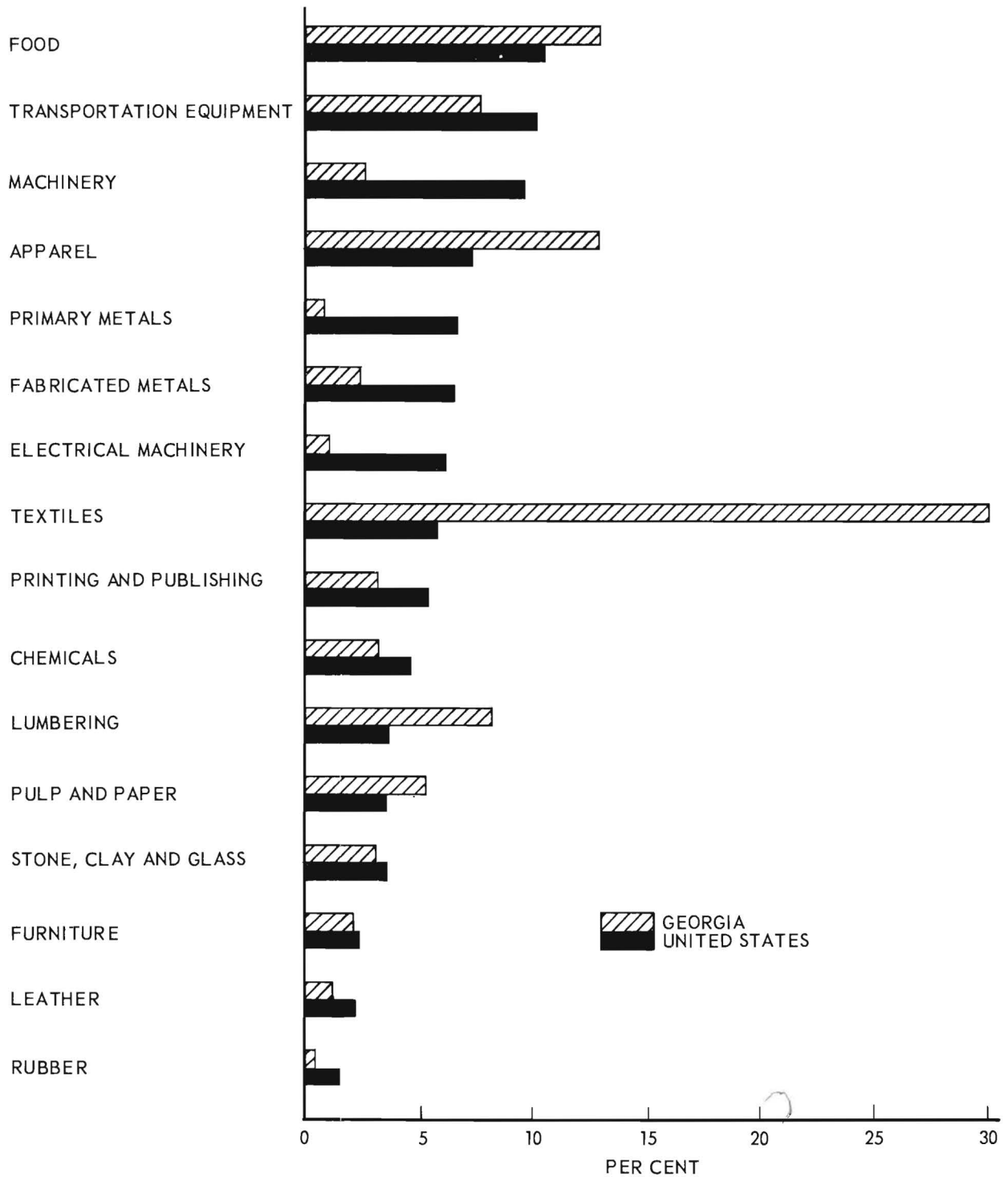
One of Georgia's most important development problems remains the double imbalance which exists in manufacturing. The sharp differences in the bars showing the percentage of manufacturing employment in each of the 16 industries listed contrasts markedly with the relatively even distribution in the U.S. as a whole. For the U.S. the range is only from 1.4% to 10.5%. For Georgia it extends from 0.3% to 30.0%.

A concerted effort is needed to develop in Georgia those industries which will help balance out these percentages. Strong potentials exist for the addition of manufacturing plants in electrical machinery (including electronics), fabricated metals, and chemicals, in particular. Studies completed by the Industrial Development Branch during the last three years have focused on electronics, synthetic liquid detergents, paint, eight types of plastic products, plastic hose, tin cans, room air conditioners, light metal castings, and die castings as products which offer excellent manufacturing opportunities for the state. (See Appendix D for report list.)

Four plants have already been established on the basis of these studies, with a fifth large plant expected to be announced shortly. But the progress needed in these fields has scarcely begun. Additional specific analyses in process will present findings on electric motors, petrochemicals, formulations, plastic containers, plastic foam, building hardware, sheet metal products, screw machine products, insulators and refractories. The addition of plants producing these and many other items will be needed to provide the desired balance.



MANUFACTURING EMPLOYMENT IN SELECTED INDUSTRIES  
 GEORGIA AND U.S., 1958



SOURCE: Census of Manufactures

Growth in Per Capita Income, 1930-1960  
Georgia, U.S. and California

The use of percentages or rates of gain in per capita income does not mask the fact that the dollar gap between Georgia and the U.S. has remained steady for 30 years and more. The most recent data actually show a widening of the gap again.

If we assume that closing the gap is a desirable goal, the percentage gains Georgia has registered offer little comfort. It is perfectly correct to state that Georgia has increased from only 50% of the U.S. average in 1930 to approximately 70% today. But we could continue to make such a percentage gain indefinitely and never catch up.

An appropriate if homely analogy can be cited in the form of a foot race. A boy who is two laps behind at the end of four laps has gone only 50% as far as his opponent. If he maintains his relative pace he will have gone 75% as far at the end of eight laps -- that is, he will then have traveled six laps. But he will still be two laps behind, despite his fine percentage increase! If he wants to win the race, he obviously will not consider that his percentage gain amounts to much.

California is shown on the graph simply to illustrate how far above the U.S. average some of the top ranking states are. Like Georgia, it has roughly maintained its relative position -- except that it is above the U.S., while we are below.

It is interesting to note that Georgia's closest advance to the U.S. average occurred in 1933, at the depths of the depression. At that point the dollar gap had closed from approximately \$547 in 1930 to only \$382. After 1933 the gap opened up again, to \$432 in 1935, then to \$546 in 1949 to \$608 in 1959.

## GROWTH IN PER CAPITA INCOME, GEORGIA, U. S. AND CALIFORNIA 1930 - 1960



SOURCE: Survey of Current Business

## Disposable Per Capita Income by County, 1958

Compared with U.S.

The same major disparities found in the distribution of manufacturing employment and in other important factors exist also in the income field. The three maps immediately following provide a comparison of per capita disposable income -- the only county income figures available for 1958 -- between Georgia counties and with the U.S. average.

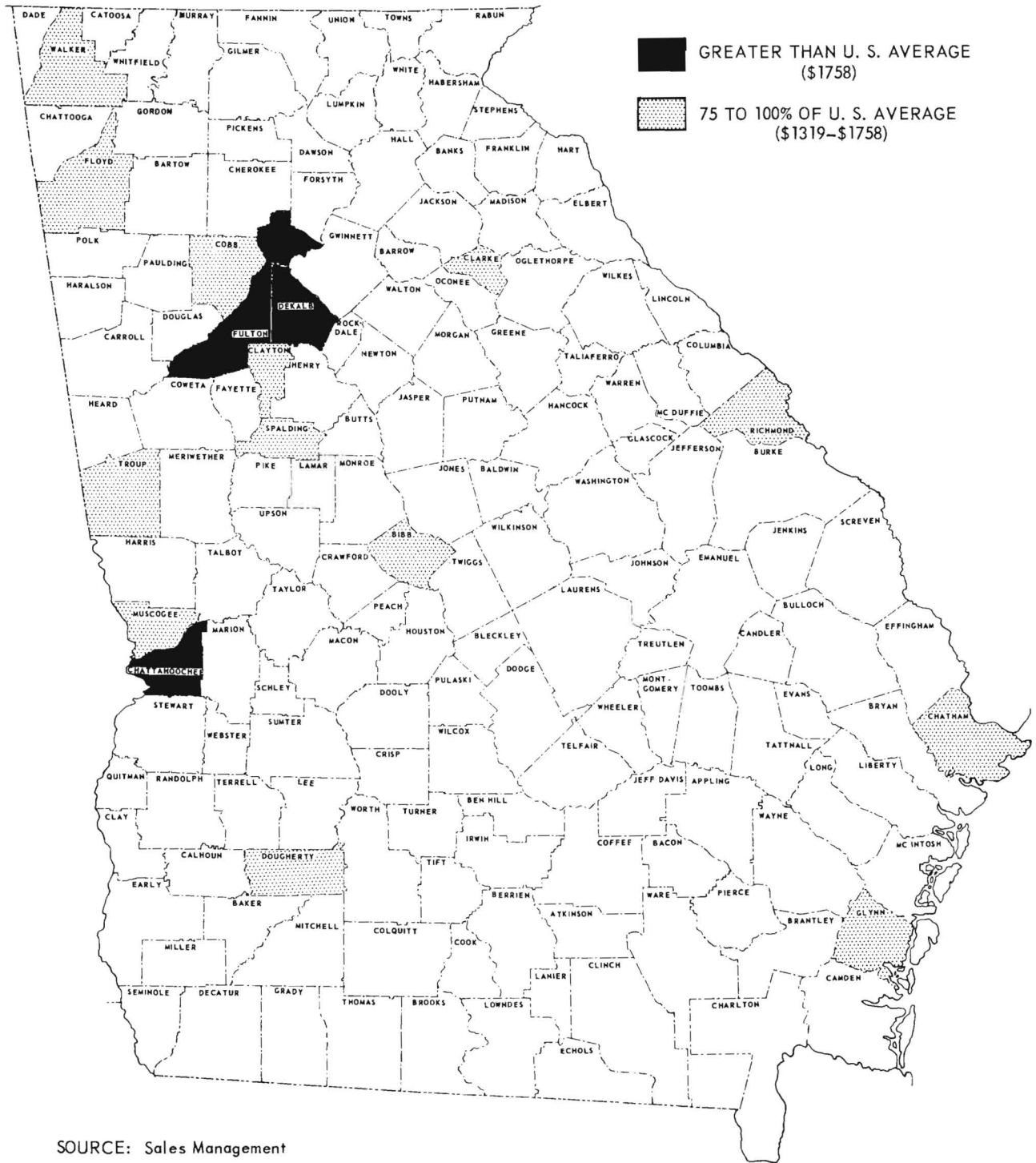
Just three counties had per capita disposable income greater than the U.S. average of \$1,758 in 1958. They were DeKalb, Chattahoochee, and Fulton, in that order. Chattahoochee's surprisingly high \$1,921 is attributable primarily to the presence of Fort Benning.

Dropping to 75% of the U.S. average, we find that 13 additional counties fall into the \$1,319 to \$1,758 bracket. (See Appendix B for a listing of specific figures for each county.) Almost without exception these are the state's most populous and most highly industrialized counties. Proximity to Columbus, Atlanta and Chattanooga explains the high status of the others.

The heavy concentration of counties in the 50 to 75% of U.S. bracket underscores the importance of assisting the state's less populous counties in their efforts to secure new payrolls. Far too many counties lie near the lower end of this bracket -- a mere \$879. Not until many of the counties in this category can be raised will Georgia be able to compete successfully in many economic fields.

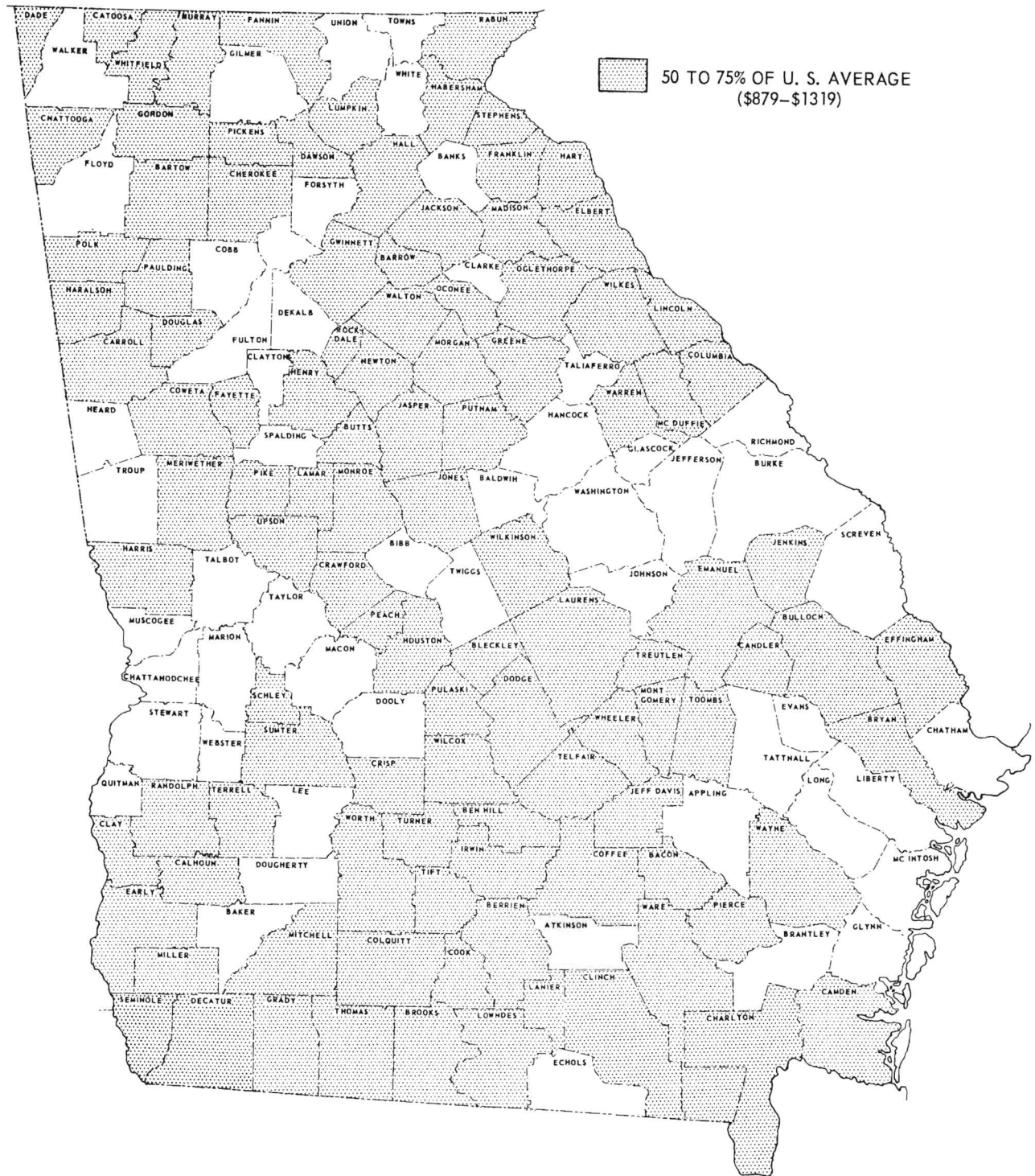
The 39 counties which fall below 50% of the U.S. average are in the most critical straits of all. A number of these counties have reached a point where they may find it impossible to rebuild their economies. Whether or not they can do so will depend on several things, including the amount of technical assistance they may be able to secure from outside agencies. But in large measure their futures depend on the attitudes of local citizens. Without unusual determination and effort on their part, outside efforts can be expected to accomplish little.

# DISPOSABLE PER CAPITA INCOME 1958



SOURCE: Sales Management

# DISPOSABLE PER CAPITA INCOME 1958





Average Manufacturing Wages in Georgia by County, 1959,  
Compared with U.S. and Georgia Averages

Just two of Georgia's 159 counties had average manufacturing wages which exceed the U.S. average of \$83.50. Cobb County's high average is explained by the presence of the Lockheed Aircraft Corporation, which has provided not only a high average but the largest single industrial payroll in the state as well.

Camden County's high average is also explained by the fact that most of its manufacturing employment is concentrated in the pulp and paper industry. In this case, however, the number of workers is relatively small.

Above the Georgia average of \$60.45 but below the U.S. average are 18 counties. Many of these duplicate the 13 whose disposable per capita income fell just below the national average.

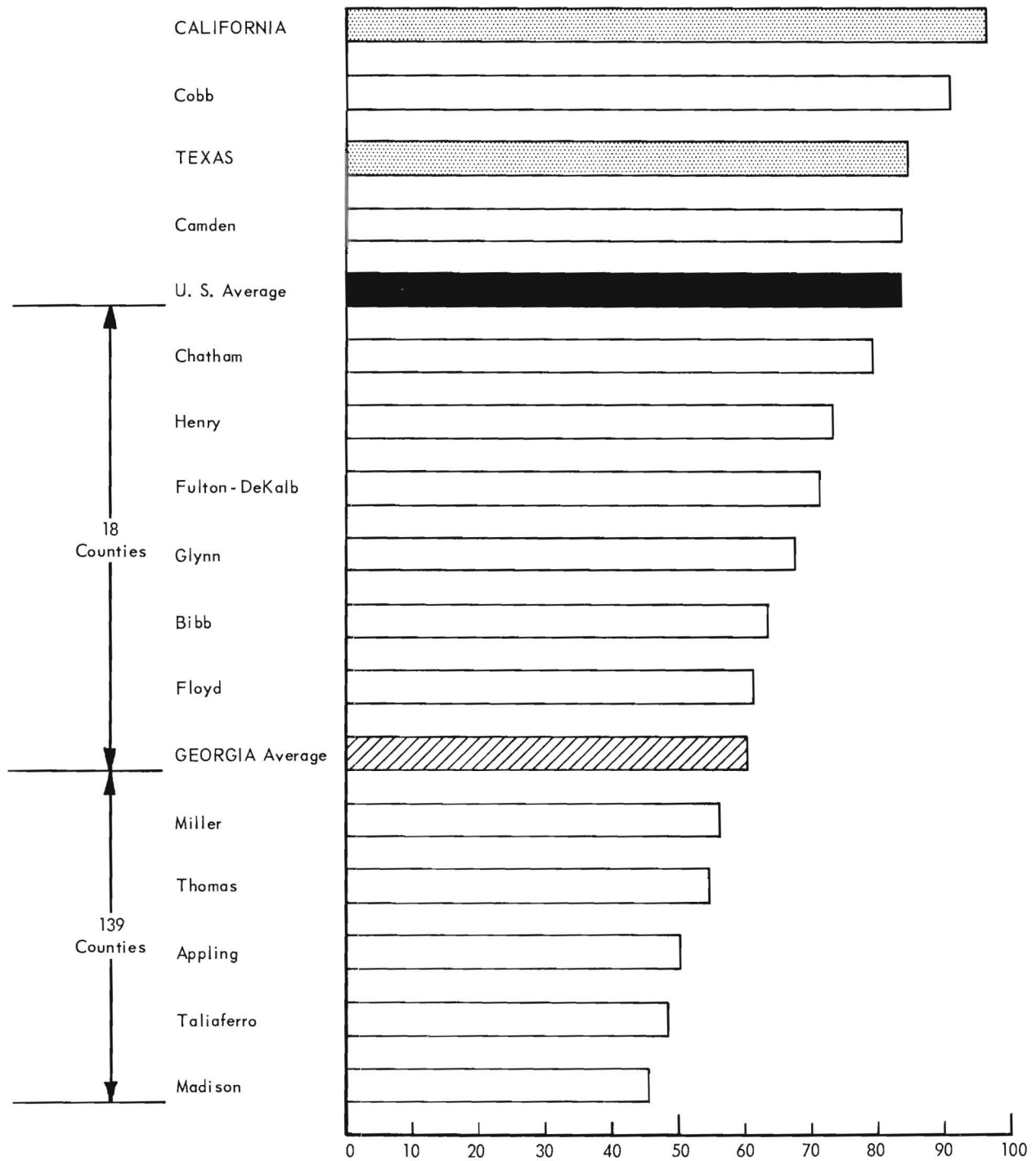
Barely one county in 13 surpasses the state average. Only a heavy concentration of high wage employment in these few counties brings the state average up to its present level. Many additional jobs in the types of industries discussed earlier -- electronics, chemicals, metalworking -- are needed not only to balance the state's economy but also to lift its wage level.

It is true that present relatively low average wages attract some industries. Much more important, however -- especially to the types of industries and companies Georgia most needs to attract -- are the attitudes and productivity of our labor. To put it another way, the unit production cost is the key factor, not the hourly wage rate. Highly productive, high wage employees produce more profit than do relatively unproductive low wage workers.

The types of industries Georgia needs cannot be attracted without suitable labor. In this regard, the relative lack of skilled workers in Georgia makes it extremely important that industrial arts and industrial vocational training programs be strengthened as rapidly as possible.



# AVERAGE WEEKLY MANUFACTURING WAGES SELECTED COUNTIES COMPARED WITH GEORGIA AND U.S. AVERAGES AND SELECTED STATES, 1958



SOURCES: Georgia Department of Labor, Employment Security Agency  
U.S. Department of Labor, Bureau of Labor Statistics

## Manufacturing Wages by Industry Type, 1958

### Showing Employment Concentration

The heavy concentration of Georgia's employment in a few industries can be readily seen in the accompanying chart. At the same time, the relationships that exist between type of industry, the percent of the work force in each industry, and the wage level are shown.

Transportation equipment, printing and publishing, pulp and paper, and electrical machinery are the four industries in the state which pay average weekly wages at or above the U.S. average. Between them they account for 17.2% of the state's total employment.\*

A little more than one fourth -- 26.4% -- of the total falls between the U.S. and Georgia averages. Primary metals, fabricated metals, chemicals, machinery (non-electrical), stone, clay and glass, food and kindred products and furniture make up this category. The actual dollar amounts range widely, from \$60.52 per week in furniture, to \$78.21 in primary metals. The bulk of the employment falls toward the lower end of the bracket, as the chart indicates.

The heaviest concentration occurs in the lowest bracket -- over half of the state's total employment. Textiles, with over 31%, dominates the entire manufacturing picture. Apparel, at the bottom of the scale with an average wage of \$45.88, ranks next. Only food and kindred products of the state's four largest employers pays more than the state average, and it barely exceeds it.

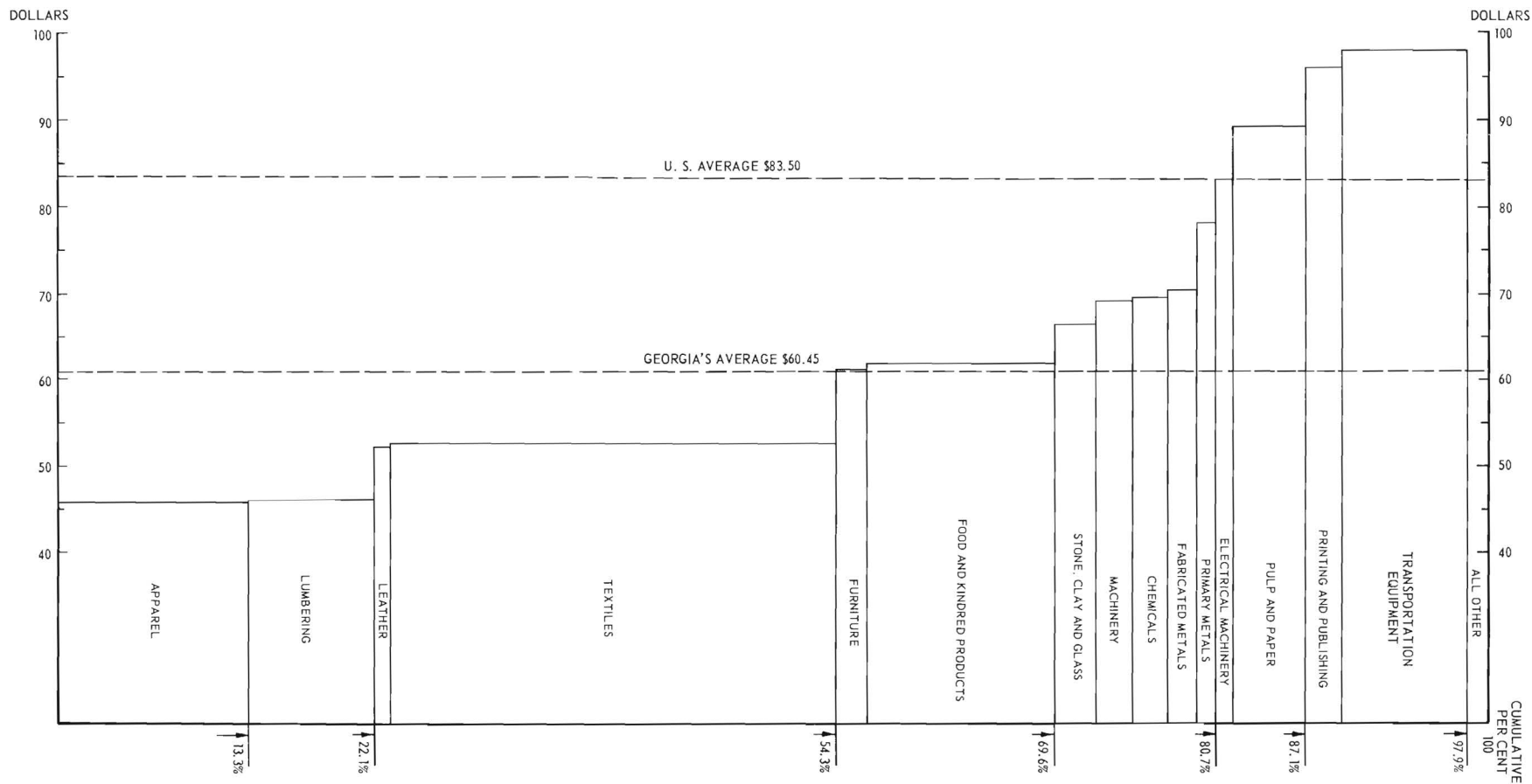
Expansion of the industries in the middle bracket would have a salutary effect on the state's economy. Increased research and development efforts aimed at the expansion of industries like those in this range is important if Georgia is to advance rapidly in the years ahead.

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\*The differences in percentages shown here and on pages 24 and 25 are due to the necessity of using both Census of Manufactures and Georgia Department of Labor figures, which differ because of definitions and coverage.

# MANUFACTURING WAGES OF GEORGIA INDUSTRIES COMPARED WITH GEORGIA AND U.S. AVERAGE WEEKLY WAGES SHOWING CONCENTRATION OF MANUFACTURING EMPLOYMENT 1958

- 61 -



SOURCES: Georgia Department of Labor, Employment Security Agency  
U.S. Department of Labor, Bureau of Labor Statistics



IV  
CONCLUSIONS

## Conclusions

Georgia faces an exacting challenge in its industrial development program: to expand its present efforts sufficiently to make full use of the state's extensive natural and human resources.

If the steps set forth in the first section are taken, it should be possible to steadily close the income gap which remains between Georgia and the U.S. average. But the rate of progress necessary to achieve the goals set forth cannot possibly be achieved unless a bold new program is initiated.

Basically, only four steps are involved:

1. It is essential that liabilities and problems which presently restrict and limit the state's industrial progress be eliminated.
2. The state's industrial resources and potentials must be audited and analyzed to determine the best payroll possibilities for each section of the state.
3. Technical assistance must be provided local development groups and small manufacturers to give them the technical aid they need to effectively use research results and to expedite their growth and diversification.
4. A competitive promotional program must be developed to effectively sell Georgia as a location for new industrial plants.

\* \* \*

Each of these points necessarily covers a number of important topics, most of which can only be noted in passing. Among the liabilities which must be eliminated, for example, is the 3% use tax on equipment and materials going into new manufacturing facilities already referred to. Local tax structures which penalize the manufacturer by their high millages and low evaluations are a serious deterrent to new payrolls in many counties. At the same time, weak local tax structures prevent many counties from undertaking improvements in water and waste disposal systems or in other facilities they must have before their communities will be attractive to industry.

Our poor highways are another liability. The many speed traps which plague the state are still another. Until these and other symptoms of a

poor "business climate" can be eliminated, we will find it difficult to attract many of the types of plants we most desire.

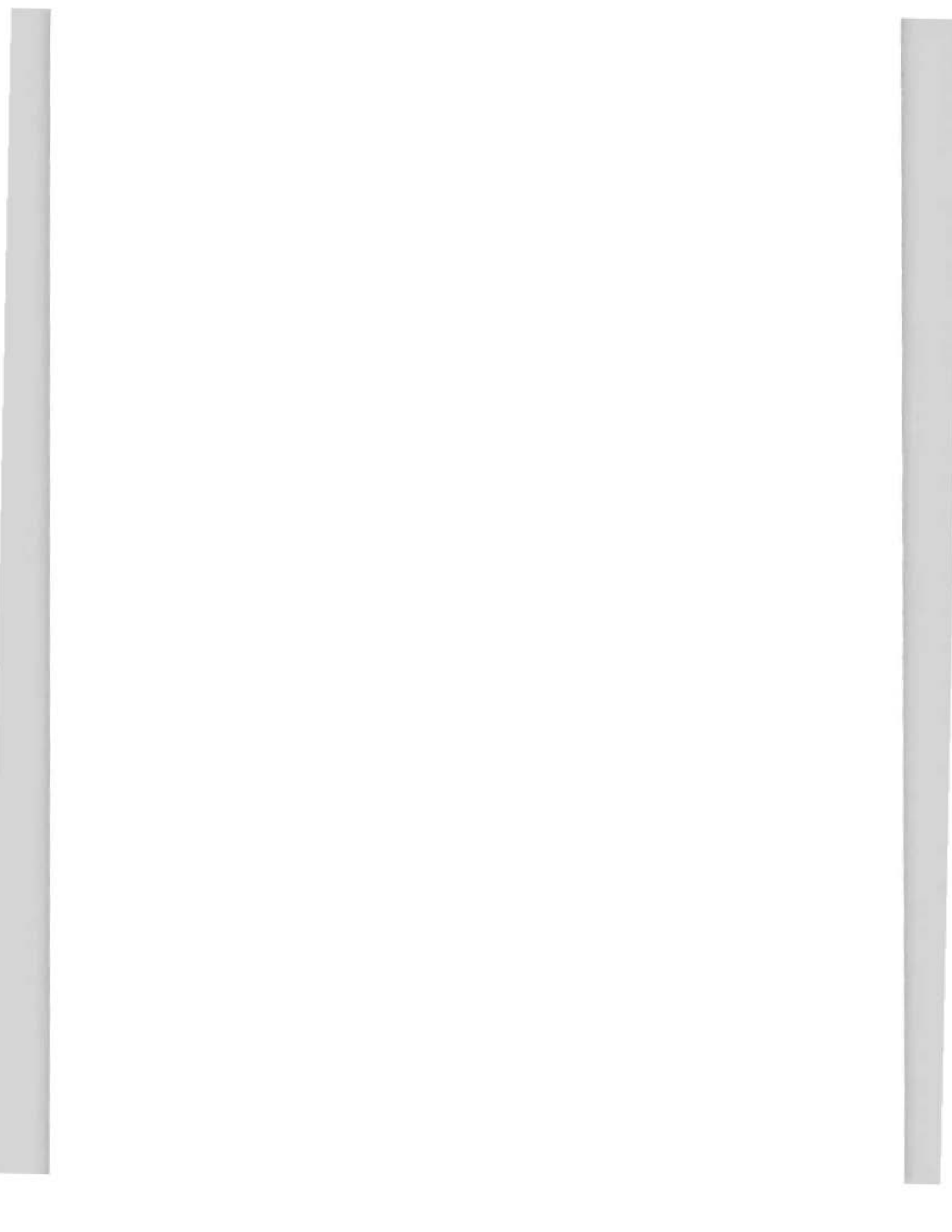
A lack of skilled labor continues to plague most sections of the state. Inadequate industrial arts and industrial vocational training programs make it impossible to take the basic steps needed to solve this manpower problem.

\* \* \*

These and other negative factors are at least beginning to be counter-balanced by a growing realization of the need for putting industrial development on a business basis. Tax problems are under discussion. Research capabilities are being evolved. A limited technical assistance program does exist. Our promotional efforts are gaining strength.

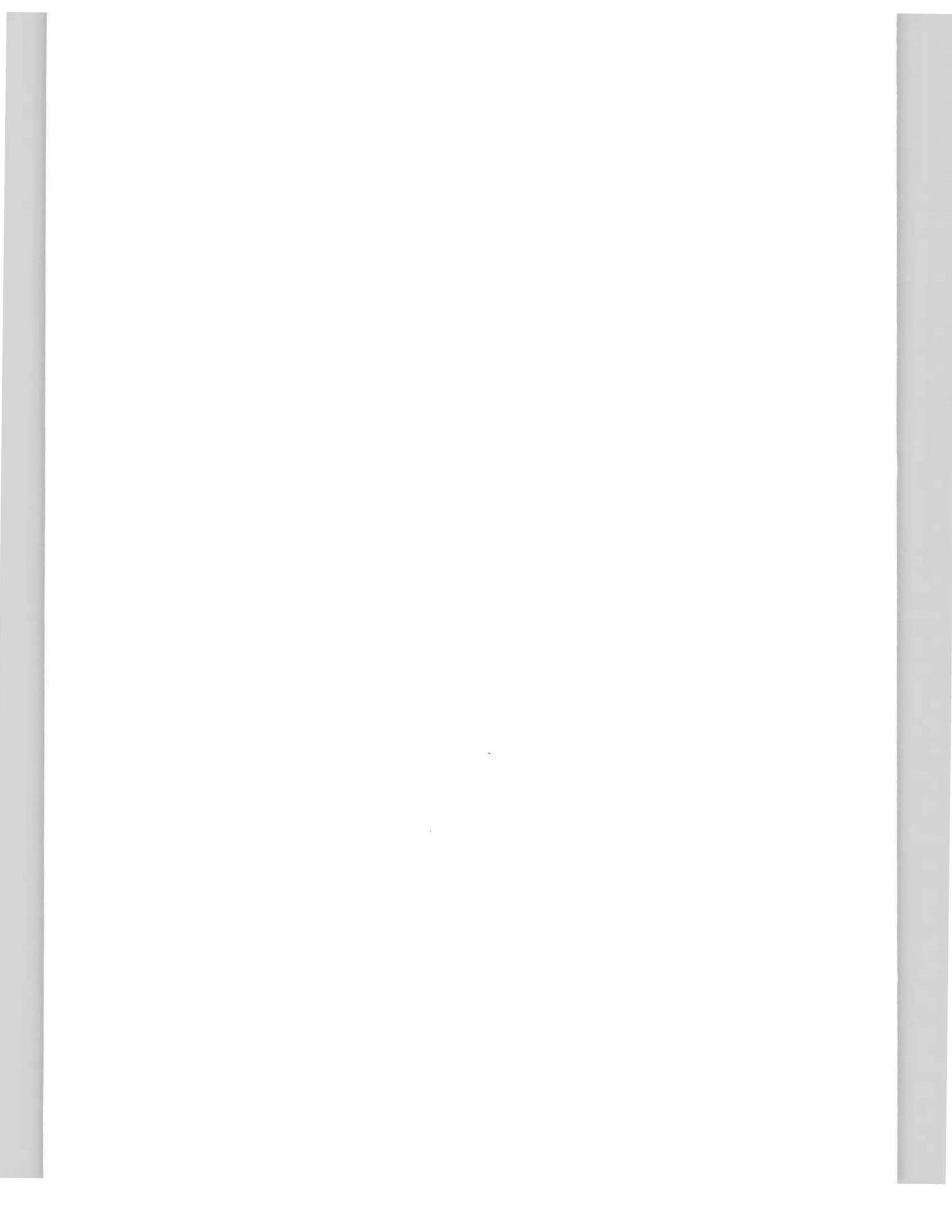
Whether we progress rapidly enough into the full scale programs needed will determine whether the goals discussed in the first section of the report can be met.

Whether our young people will remain Georgians or must go elsewhere to make a living is one of the many important questions whose answer lies in the balance.





APPENDICES



## Appendix A

### METHODOLOGY

In any study of this kind the problems encountered in locating comparable data are, at times, insoluble. The Census of Manufactures, source for most of the state and national data on manufacturing employment, is taken only periodically. The 1947, 1954 and 1958 editions provided the base points for this study. Other sources had to be used for a year-by-year analysis of manufacturing employment trends. The Georgia Department of Labor has filled this need in an excellent manner. The problem remains, however, of resolving the dissimilarities in the data due to different methods employed in the data collection.

The Employment Security Agency of the Georgia Department of Labor provided the data on manufacturing employment for most of the detailed county analyses. Although these data include, in general, only those establishments employing four or more workers, and, as a result, are not strictly comparable in the aggregate with Census of Manufactures figures, it was necessary to use them because of the flexibility offered by the punched cards on which the data appear.

While conscientious efforts have been made to locate minor discrepancies in the data due to the use of different sources, and to explain the nature of these inconsistencies in the text, it is possible that some have been overlooked. The variance is seldom as great as one per cent and does not affect any conclusions. Each source is closely identified to make it easy for anyone interested in doing so to check the original data.

The population element of projected Georgia income (see chart on page 9) is based on the Series II-2 population projections of the Bureau of the Census 1/. These data reflect a somewhat higher growth rate for the U.S. than for Georgia to 1985.

The per capita income projections to 1985 for South Georgia and the U.S. were obtained by fitting trend lines to the respective per capita incomes since 1930, plotted in terms of constant 1958 dollars (see page 7).

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1/ Bureau of the Census, Current Population Reports, Series P-25, No. 208.



Appendix B  
COUNTY DATA

<u>County</u>	<u>Average Manufacturing Employment 1958*</u>	<u>Average Weekly Manufacturing Wages 1958</u>	<u>Per Capita Disposable Income 1958</u>	<u>Population 1960</u>
Appling	358	\$50.88	\$ 834	13,246
Atkinson	123	47.12	838	6,188
Bacon	125	58.18	941	8,359
Baker	21	45.90	777	4,543
Baldwin	2,049	57.72	713	34,064
Banks	176	47.47	822	6,497
Barrow	2,145	48.54	1,070	14,485
Bartow	2,430	54.73	1,096	28,267
Ben Hill	925	51.48	1,021	13,633
Berrien	220	58.66	973	12,038
Bibb	10,807	63.54	1,472	141,249
Bleckley	760	46.32	905	9,642
Brantley	134	53.18	793	5,891
Brooks	266	54.59	1,213	15,292
Bryan	84	48.32	920	6,226
Bulloch	682	66.50	963	24,263
Burke	830	51.53	831	20,596
Butts	691	50.30	983	8,976
Calhoun	200	55.12	907	7,341
Camden	1,362	83.69	1,135	9,975
Candler	216	47.42	1,005	6,672
Carroll	4,574	54.30	1,078	36,451
Catoosa	574	56.02	1,217	21,101
Charlton	147	45.90	1,065	5,313
Chatham	14,400	79.38	1,471	188,299
Chattahoochee	20	45.90	1,921	13,011
Chattooga	4,153	53.57	1,205	19,954
Cherokee	2,094	54.44	1,052	23,001
Clarke	4,771	62.00	1,465	45,363
Clay	70	58.41	904	4,551
Clayton	432	65.53	1,491	46,365
Clinch	312	51.65	1,124	6,545
Cobb	17,621	91.04	1,411	114,174
Coffee	1,052	52.43	942	21,953
Colquitt	1,812	56.81	1,073	34,048
Columbia	422	55.61	1,023	13,423
Cook	667	58.23	946	11,822
Coweta	4,642	60.07	997	28,893
Crawford	176	46.96	929	5,816
Crisp	962	54.70	994	17,768

\*Employment insured by the Georgia Employment Security Law only. This includes, in general, only those establishments employing four or more workers.

## Appendix B (Continued)

## COUNTY DATA

<u>County</u>	<u>Average Manufacturing Employment 1958</u>	<u>Average Weekly Manufacturing Wages 1958</u>	<u>Per Capita Disposable Income 1958</u>	<u>Population 1960</u>
Dade	123	\$48.87	\$ 884	8,666
Dawson	18	47.26	879	3,590
Decatur	1,160	50.74	1,037	25,203
DeKalb-			2,045	256,782
Fulton	61,543	71.28	1,789	556,326
Dodge	759	52.19	931	16,483
Dooly	140	60.54	849	11,474
Dougherty	3,272	59.37	1,422	75,680
Douglas	225	66.19	972	16,741
Early	245	50.10	911	13,151
Echols	101	45.90	876	1,876
Effingham	131	45.90	947	10,144
Elbert	1,919	57.95	1,075	17,835
Emanuel	1,218	52.30	941	17,815
Evans	308	50.81	832	6,952
Fannin	195	50.92	1,046	13,620
Fayette	156	51.10	1,075	8,199
Floyd	9,916	61.04	1,336	69,130
Forsyth	677	55.26	823	12,170
Franklin	1,128	49.51	929	13,274
Fulton	(See DeKalb)			
Gilmer	794	49.00	772	8,922
Glascock	108	50.97	754	2,672
Glynn	4,496	67.77	1,358	41,954
Gordon	2,430	53.75	936	19,228
Grady	992	63.04	960	18,015
Greene	1,133	50.47	883	11,193
Gwinnett	2,665	54.68	1,109	43,541
Habersham	2,739	52.05	1,035	18,116
Hall	7,189	55.77	1,194	49,739
Hancock	358	49.31	725	9,979
Haralson	2,726	46.84	1,088	14,543
Harris	490	54.06	911	11,167
Hart	1,181	61.46	987	15,229
Heard	185	46.67	874	5,333
Henry	848	73.37	882	17,619
Houston	578	55.77	1,305	39,154
Irwin	163	49.54	921	9,211
Jackson	2,389	53.13	993	18,499
Jasper	173	53.25	936	6,135
Jeff Davis	937	48.14	886	8,914

## Appendix B (Continued)

## COUNTY DATA

County	Average Manufacturing Employment 1958	Average Weekly Manufacturing Wages 1958	Per Capita Disposable Income 1958	Population 1960
Jefferson	1,140	\$47.90	\$ 858	17,468
Jenkins	628	48.91	916	9,148
Johnson	493	46.20	859	8,048
Jones	394	56.39	935	8,468
Lamar	1,278	53.75	1,228	10,240
Lanier	42	45.90	905	5,097
Laurens	1,953	51.88	920	32,313
Lee	8	45.90	783	6,204
Liberty	207	47.86	789	14,487
Lincoln	425	45.89	950	5,906
Long	12	45.90	878	3,874
Lowndes	3,054	64.19	1,138	49,270
Lumpkin	388	52.20	1,006	7,241
Macon	658	51.15	865	13,170
Madison	367	45.88	948	11,246
Marion	224	51.49	734	5,477
McDuffie	1,638	47.68	1,065	12,627
McIntosh	194	53.32	860	6,364
Meriwether	1,864	54.08	1,022	19,756
Miller	102	56.35	949	6,908
Mitchell	1,165	54.71	933	19,652
Monroe	911	51.03	1,132	10,495
Montgomery	329	45.88	810	6,284
Morgan	392	54.47	906	10,280
Murray	514	52.83	924	10,447
Muscogee	15,739	57.34	1,649	158,623
Newton	3,001	52.97	1,162	20,999
Oconee	147	51.99	887	6,304
Oglethorpe	303	56.57	924	7,926
Paulding	476	52.58	898	13,101
Peach	858	80.74	1,127	13,846
Pickens	447	60.27	970	8,903
Pierce	389	54.22	913	9,678
Pike	149	59.34	909	7,138
Polk	3,164	57.42	1,064	28,015
Pulaski	322	52.41	1,013	8,204
Putnam	777	59.12	974	7,798
Quitman	95	45.90	776	2,432
Rabun	814	50.23	896	7,456
Randolph	543	46.88	943	11,078

## Appendix B (Continued)

## COUNTY DATA

<u>County</u>	<u>Average Manufacturing Employment 1958</u>	<u>Average Weekly Manufacturing Wages 1958</u>	<u>Per Capita Disposable Income 1958</u>	<u>Population 1960</u>
Richmond	8,591	\$61.25	\$1,502	135,601
Rockdale	1,191	58.94	1,036	10,572
Schley	64	49.73	907	3,256
Screven	584	49.33	774	14,919
Seminole	87	55.19	969	6,802
Spalding	7,010	54.38	1,372	35,404
Stephens	3,434	59.05	1,176	18,391
Stewart	275	47.38	828	7,371
Sumter	1,582	55.49	1,064	24,652
Talbot	382	50.09	819	7,127
Taliaferro	219	48.90	852	3,370
Tattnall	97	47.99	830	15,837
Taylor	135	52.90	877	8,311
Telfair	594	50.53	975	11,715
Terrell	375	58.10	935	12,742
Thomas	2,286	54.94	1,093	34,319
Tift	1,133	58.35	1,074	23,487
Toombs	1,407	49.71	970	16,837
Towns	53	45.89	863	4,538
Treutlen	174	47.32	871	5,874
Troup	8,823	53.17	1,327	47,189
Turner	161	48.41	973	8,439
Twiggs	393	61.57	844	7,935
Union	42	45.90	806	6,510
Upson	4,748	52.84	1,191	23,800
Walker	5,988	52.97	1,335	45,264
Walton	3,007	52.37	1,007	20,481
Ware	2,757	60.38	1,264	34,219
Warren	166	59.97	881	7,360
Washington	929	50.26	832	18,903
Wayne	1,879	60.11	961	17,921
Webster	175	46.85	698	3,247
Wheeler	152	45.82	872	5,342
White	584	50.62	806	6,935
Whitfield	8,424	52.55	1,230	42,109
Wilcox	308	46.97	907	7,905
Wilkes	953	46.83	941	10,961
Wilkinson	430	46.99	1,034	9,250
Worth	480	49.37	903	16,682

Source: Georgia Department of Labor, Employment Security Agency; U. S. Department of Commerce, Bureau of the Census; Sales Management



Appendix C

MANUFACTURING EMPLOYMENT GAINS IN SELECTED STATES,  
1947-1954, 1954-1958, AND 1947-1958

ALABAMA

S. I. C.		<u>1947-1954</u>		<u>1954-1958</u>		<u>1947-1958</u>	
		<u>Change</u>	<u>Per Cent of Total Gain</u>	<u>Change</u>	<u>Per Cent of Total Gain</u>	<u>Change</u>	<u>Per Cent of Total Gain</u>
20	Food	4,852	17.8	3,267	14.8	8,119	17.3
21	Tobacco	-	-	-	-	-	-
22	Textiles	-5,703	-	-6,904	-	-12,607	-
23	Apparel	10,161	37.4	4,130	18.7	14,291	30.4
24	Lumber	-9,045	-	-5,099	-	-14,144	-
25	Furniture	423	1.6	1,080	4.9	1,503	3.2
26	Paper	2,968	10.9	1,297	5.9	4,265	9.1
27	Printing, Publishing	1,027	3.8	445	2.0	1,472	3.1
28	Chemicals	-794	-	1,190	5.4	396	.8
29	Petroleum	-1,952	-	-60	-	-2,012	-
30	Rubber	-	-	-	-	-	-
31	Leather	-	-	-	-	-	-
32	Stone, Clay, Glass	1,020	3.7	984	4.5	2,004	4.3
33	Primary Metals	623	2.3	-2,508	-	-1,885	-
34	Fabricated Metals	1,352	5.0	1,897	8.6	3,249	6.9
35	Machinery	-973	-	882	4.0	-91	-
36	Electrical Machinery	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
37	Transportation	3,100	11.4	6,200	28.1	9,300	19.8
38	Instruments	-45	-	-	-	-45	-
39	Miscellaneous	1,672	6.1	708	3.2	2,380	5.1
	Total Gain	27,198		22,080		46,979	
	Net Gain	8,686		7,509		16,195	

## Appendix C (Continued)

MANUFACTURING EMPLOYMENT GAINS IN SELECTED STATES,  
1947-1954, 1954-1958, AND 1947-1958

## ARKANSAS

S.I.C.		1947-1954		1954-1958		1947-1958	
		Change	Per Cent of Total Gain	Change	Per Cent of Total Gain	Change	Per Cent of Total Gain
20	Food	3,800	25.7	1,502	14.2	5,302	21.7
21	Tobacco	-	-	-	-	-	-
22	Textiles	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
23	Apparel	2,768	18.7	2,572	24.4	5,340	21.8
24	Lumber	-6,981	-	-608	-	-7,589	-
25	Furniture	1,678	11.3	2,051	19.5	3,729	15.2
26	Paper	806	5.5	1,225	11.6	2,031	8.3
27	Printing, Publishing	530	3.6	205	1.9	735	3.0
28	Chemicals	1,046	7.1	-885	-	164	0.7
29	Petroleum	237	1.6	151	1.4	388	1.6
30	Rubber	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
31	Leather	2,283	15.4	321	3.0	2,604	10.7
32	Stone, Clay, Glass	202	1.4	725	6.9	927	3.8
33	Primary Metals	-300	-	-309	-	-609	-
34	Fabricated Metals	1,127	7.6	506	4.8	1,633	6.7
35	Machinery	157	1.1	729	6.9	886	3.6
36	Electrical Machinery	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
37	Transportation	152	1.0	556	5.3	708	2.9
38	Instruments	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
39	Miscellaneous	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
	Total Gain	14,786		10,543		24,447	
	Net Gain	7,505		8,744		16,249	

## Appendix C (Continued)

MANUFACTURING EMPLOYMENT GAINS IN SELECTED STATES,  
1947-1954, 1954-1958, AND 1947-1958

## CALIFORNIA

S.I.C.	<u>1947-1954</u>		<u>1954-1958</u>		<u>1947-1958</u>		
	<u>Change</u>	<u>Per Cent of Total Gain</u>	<u>Change</u>	<u>Per Cent of Total Gain</u>	<u>Change</u>	<u>Per Cent of Total Gain</u>	
20	Food	28,002	7.5	12,343	7.7	40,345	7.7
21	Tobacco	-	-	-	-	-	-
22	Textiles	42	-	345	.2	387	.1
23	Apparel	12,337	3.3	2,418	1.5	14,755	2.8
24	Lumber	17,251	4.6	-3,792	-	13,459	2.6
25	Furniture	3,957	1.1	5,493	3.4	9,450	1.8
26	Paper	8,575	2.3	3,836	2.4	12,411	2.4
27	Printing, Publishing	10,768	2.9	10,891	6.8	21,659	4.1
28	Chemicals	4,229	1.1	4,227	2.6	8,456	1.6
29	Petroleum	-1,317	-	490	.3	-827	-
30	Rubber	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
31	Leather	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
32	Stone, Clay, Glass	5,823	1.6	8,496	5.3	14,319	2.7
33	Primary Metals	9,512	2.6	842	.5	10,354	2.0
34	Fabricated Metals	20,196	5.4	15,833	9.9	36,029	6.8
35	Machinery	15,959	4.3	16,133	10.1	32,092	6.1
36	Electrical Machinery	35,105	9.5	28,394	17.7	63,499	12.1
37	Transportation	160,613	43.3	35,993	22.4	196,606	37.3
38	Instruments	6,605	1.8	4,985	3.1	11,590	2.2
39	Miscellaneous	32,068	8.6	9,653	6.0	41,721	7.9
	Total Gain	371,042		160,372		527,132	
	Net Gain	369,725		156,580		526,305	

Appendix C (Continued)

MANUFACTURING EMPLOYMENT GAINS IN SELECTED STATES,  
1947-1954, 1954-1958, AND 1947-1958

FLORIDA

<u>S. I. C.</u>		<u>1947-1954</u>		<u>1954-1958</u>		<u>1947-1958</u>	
		<u>Change</u>	<u>Per Cent of Total Gain</u>	<u>Change</u>	<u>Per Cent of Total Gain</u>	<u>Change</u>	<u>Per Cent of Total Gain</u>
20	Food	11,391	25.4	5,857	11.9	17,248	18.5
21	Tobacco	236	.5	-1,291	-	-1,055	-
22	Textiles	368	.8	436	.9	804	.9
23	Apparel	3,829	8.6	805	1.6	4,634	5.0
24	Lumber	307	.7	-2,350	-	-2,043	-
25	Furniture	2,650	5.9	2,791	5.7	5,441	5.8
26	Paper	5,926	13.2	1,720	3.5	7,646	8.2
27	Printing, Publishing	3,132	7.0	3,350	6.8	6,482	7.0
28	Chemicals	4,725	10.6	5,292	10.8	10,017	10.7
29	Petroleum	251	.6	417	.9	668	.7
30	Rubber	-	-	-	-	-	-
31	Leather	350	.8	384	.8	734	.8
32	Stone, Clay, Glass	2,650	5.9	7,466	15.2	10,116	10.9
33	Primary Metals	482	1.1	662	1.4	1,144	1.2
34	Fabricated Metals	5,352	12.0	6,108	12.5	11,460	12.3
35	Machinery	1,183	2.6	2,085	4.3	3,268	3.5
36	Electrical Machinery	670	1.5	3,844	7.8	4,514	4.8
37	Transportation	303	.7	3,714	7.6	4,017	4.3
38	Instruments	-	-	-	-	-	-
39	Miscellaneous	963	2.2	4,107	8.4	5,070	5.4
	Total Gain	44,768		49,038		93,263	
	Net Gain	44,768		45,397		90,165	

Appendix C (Continued)  
 MANUFACTURING EMPLOYMENT GAINS IN SELECTED STATES,  
 1947-1954, 1954-1958, AND 1947-1958

GEORGIA

<u>S.I.C.</u>		<u>1947-1954</u>		<u>1954-1958</u>		<u>1947-1958</u>	
		<u>Change</u>	<u>Per Cent of Total Gain</u>	<u>Change</u>	<u>Per Cent of Total Gain</u>	<u>Change</u>	<u>Per Cent of Total Gain</u>
20	Food	7,821	14.9	6,421	24.8	14,242	18.6
21	Tobacco	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
22	Textiles	544	1.0	-8,419	-	-7,875	-
23	Apparel	11,511	22.0	3,893	15.1	15,404	20.1
24	Lumber	-1,650	-	6,100	-	-7,750	-
25	Furniture	1,267	2.4	23	.1	1,290	1.7
26	Paper	6,484	12.4	3,038	11.7	9,522	12.4
27	Printing, Publishing	1,734	3.3	1,725	6.7	3,459	4.5
28	Chemicals	-1,035	-	488	1.9	-547	-
29	Petroleum	28	.05	129	.5	157	.2
30	Rubber	N.A.	N.A.	323	1.3	N.A.	N.A.
31	Leather	50	.1	1,041	4.1	1,091	1.4
32	Stone, Clay, Glass	221	.4	2,575	10.0	2,796	3.6
33	Primary Metals	-97	-	287	1.1	190	.3
34	Fabricated Metals	2,048	3.9	1,635	6.4	3,683	4.8
35	Machinery	754	1.4	1,415	5.5	2,169	2.8
36	Electrical Machinery	960	1.8	1,121	4.4	2,081	2.7
37	Transportation	18,992	36.2	1,589	6.2	20,581	26.8
38	Instruments	-	-	-	-	-	-
39	Miscellaneous	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
	Total Change	52,414		+25,703		76,665	
	Net Change	49,632		+11,184		60,493	

## Appendix C (Continued)

MANUFACTURING EMPLOYMENT GAINS IN SELECTED STATES,  
1947-1954, 1954-1958, AND 1947-1958

## LOUISIANA

S.I.C.		1947-1954		1954-1958		1947-1958	
		Change	Per Cent of Total Gain	Change	Per Cent of Total Gain	Change	Per Cent of Total Gain
20	Food	2,586	13.7	-918	-	1,668	8.0
21	Tobacco	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
22	Textiles	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
23	Apparel	-14	-	-607	-	-621	-
24	Lumber	-9,603	-	-2,449	-	-12,052	-
25	Furniture	29	.1	33	.9	62	.3
26	Paper	2,943	15.6	-210	-	2,733	13.1
27	Printing, Publishing	763	4.0	578	14.9	1,341	6.4
28	Chemicals	4,627	24.5	-346	-	4,281	20.5
29	Petroleum	1,386	7.3	237	6.1	1,623	7.8
30	Rubber	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
31	Leather	-	-	-	-	-	-
32	Stone, Clay, Glass	1,432	7.6	1,500	38.8	2,932	14.0
33	Primary Metals	3,081	16.3	-357	-	2,724	13.0
34	Fabricated Metals	1,126	6.0	931	24.1	2,057	9.8
35	Machinery	885	4.7	589	15.2	1,474	7.1
36	Electrical Machinery	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
37	Transportation	-21	-	-2,502	-	-2,523	-
38	Instruments	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
39	Miscellaneous	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
	Total Gain	18,858		3,868		20,895	
	Net Gain*	9,220		-3,521		5,699	

\*The comparative chart on page 37 includes those industries indicated above as "N.A.," while these total figures do not. Hence the disparity between this table's total figures and the bar chart.

## Appendix C (Continued)

MANUFACTURING EMPLOYMENT GAINS IN SELECTED STATES,  
1947-1954, 1954-1958, AND 1947-1958

## MISSISSIPPI

S. I. C.	<u>1947-1954</u>		<u>1954-1958</u>		<u>1947-1958</u>	
	<u>Change</u>	<u>Per Cent of Total Gain</u>	<u>Change</u>	<u>Per Cent of Total Gain</u>	<u>Change</u>	<u>Per Cent of Total Gain</u>
20	Food	-	-	-	-	-
21	Tobacco	-	-	-	-	-
22	Textiles	-53	-	-162	-	-215
23	Apparel	8,187	50.1	4,159	43.1	12,346
24	Lumber	-	-	-	-	-
25	Furniture	1,615	9.9	2,212	22.9	3,827
26	Paper	3,267	20.0	-5	-	3,262
27	Printing, Publishing	398	2.4	227	2.4	625
28	Chemicals	591	3.6	-266	-	325
29	Petroleum	-	-	-	-	-
30	Rubber	-	-	-	-	-
31	Leather	-	-	-	-	-
32	Stone, Clay, Glass	-	-	-	-	-
33	Primary Metals	-113	-	336	3.5	223
34	Fabricated Metals	1,431	8.8	1,676	17.4	3,107
35	Machinery	624	3.8	431	4.5	1,055
36	Electrical Machinery	-	-	-	-	-
37	Transportation	-	-	-	-	-
38	Instruments	-	-	-	-	-
39	Miscellaneous	232	1.4	595	6.2	827
	Total Gain	16,345		9,636		25,597
	Net Gain	16,179		9,203		25,382

## Appendix C (Continued)

MANUFACTURING EMPLOYMENT GAINS IN SELECTED STATES,  
1947-1954, 1954-1958, AND 1947-1958

## NORTH CAROLINA

S.I.C.		<u>1947-1954</u>		<u>1954-1958</u>		<u>1947-1958</u>	
		<u>Change</u>	<u>Per Cent of Total Gain</u>	<u>Change</u>	<u>Per Cent of Total Gain</u>	<u>Change</u>	<u>Per Cent of Total Gain</u>
20	Food	9,436	18.5	3,884	9.9	13,320	17.4
21	Tobacco	-6,305	-	1,275	3.3	-5,030	-
22	Textiles	12,501	24.4	-11,453	-	1,048	1.4
23	Apparel	4,720	9.2	7,909	20.2	12,629	16.5
24	Lumber	984	1.9	-697	-	287	.4
25	Furniture	5,169	10.1	6,556	16.8	11,725	15.3
26	Paper	1,872	3.7	1,375	3.5	3,247	4.2
27	Printing, Publishing	2,192	4.3	1,416	3.6	3,608	4.7
28	Chemicals	1,924	3.8	782	2.0	2,706	3.5
29	Petroleum	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
30	Rubber	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
31	Leather	-240	-	-76	-	-316	-
32	Stone, Clay, Glass	981	1.9	1,941	5.0	2,922	3.8
33	Primary Metals	140	0.3	-84	-	56	.1
34	Fabricated Metals	1,888	3.7	2,265	5.8	4,153	5.4
35	Machinery	2,400	4.7	3,094	7.9	5,494	7.2
36	Electrical Machinery	6,165	12.1	8,599	22.0	14,764	19.3
37	Transportation	-	-	-	-	-	-
38	Instruments	736	1.4	-181	-	555	.7
39	Miscellaneous	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
	Total Gain	51,108		39,096		76,514	
	Net Gain	44,563		26,605		71,168	



## Appendix C (Continued)

MANUFACTURING EMPLOYMENT GAINS IN SELECTED STATES,  
1947-1954, 1954-1958, AND 1947-1958

## SOUTH CAROLINA

S. I. C.		<u>1947-1954</u>		<u>1954-1958</u>		<u>1947-1958</u>	
		<u>Change</u>	<u>Per Cent of Total Gain</u>	<u>Change</u>	<u>Per Cent of Total Gain</u>	<u>Change</u>	<u>Per Cent of Total Gain</u>
20	Food	-	-	-	-	-	-
21	Tobacco	-402	-	-243	-	-645	-
22	Textiles	4,532	13.8	-2,545	-	1,987	5.6
23	Apparel	8,953	27.3	5,506	53.0	14,459	40.8
24	Lumber	-	-	-	-	-	-
25	Furniture	-6	-	931	9.0	925	2.6
26	Paper	367	1.1	913	8.8	1,280	3.6
27	Printing, Publishing	846	2.6	261	2.5	1,107	3.1
28	Chemicals	15,627	47.7	-4,965	-	10,662	30.1
29	Petroleum	-	-	-	-	-	-
30	Rubber	-	-	-	-	-	-
31	Leather	-	-	-	-	-	-
32	Stone, Clay, Glass	1,026	3.1	1,151	11.1	2,177	6.1
33	Primary Metals	-217	-	132	1.3	-85	-
34	Fabricated Metals	-	-	-	-	-	-
35	Machinery	1,393	4.3	1,417	13.6	2,810	7.9
36	Electrical Machinery	-	-	-	-	-	-
37	Transportation	-522	-	73	.7	-449	-
38	Instruments	-	-	-	-	-	-
39	Miscellaneous	-	-	-	-	-	-
	Total Gain	32,744		10,384		35,407	
	Net Gain	31,597		2,631		34,228	

## Appendix C (Continued)

MANUFACTURING EMPLOYMENT GAINS IN SELECTED STATES,  
1947-1954, 1954-1958, AND 1947-1958

## TENNESSEE

S.I.C.		<u>1947-1954</u>		<u>1954-1958</u>		<u>1947-1958</u>	
		<u>Change</u>	<u>Per Cent of Total Gain</u>	<u>Change</u>	<u>Per Cent of Total Gain</u>	<u>Change</u>	<u>Per Cent of Total Gain</u>
20	Food	6,407	14.4	1,976	7.0	8,383	12.1
21	Tobacco	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
22	Textiles	-3,331	-	-3,049	-	-6,380	-
23	Apparel	8,286	18.6	10,099	35.7	18,385	26.5
24	Lumber	-2,165	-	-413	-	-2,578	-
25	Furniture	2,119	4.7	2,374	8.4	4,493	6.5
26	Paper	3,108	7.0	1,216	4.3	4,324	6.2
27	Printing, Publishing	754	1.7	2,176	7.7	2,930	4.2
28	Chemicals	14,681	32.9	-3,054	-	11,627	16.7
29	Petroleum	-258	-	118	.4	-140	-
30	Rubber	-882	-	-1,148	-	-2,030	-
31	Leather	378	.8	1,017	3.6	1,395	2.0
32	Stone, Clay, Glass	368	.8	2,233	7.9	2,601	3.7
33	Primary Metals	-3,454	-	-1,159	-	-4,613	-
34	Fabricated Metals	1,745	3.9	2,367	8.4	4,112	5.9
35	Machinery	2,889	6.5	2,998	10.6	5,887	8.5
36	Electrical Machinery	2,743	6.1	1,429	5.0	4,172	6.0
37	Transportation	668	1.5	-325	-	343	.5
38	Instruments	496	1.1	317	1.1	813	1.2
39	Miscellaneous	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
	Total Gain	44,642		28,320		69,465	
	Net Gain	34,552		19,172		53,724	

Appendix C (Continued)

MANUFACTURING EMPLOYMENT GAINS IN SELECTED STATES,  
1947-1954, 1954-1958, AND 1947-1958

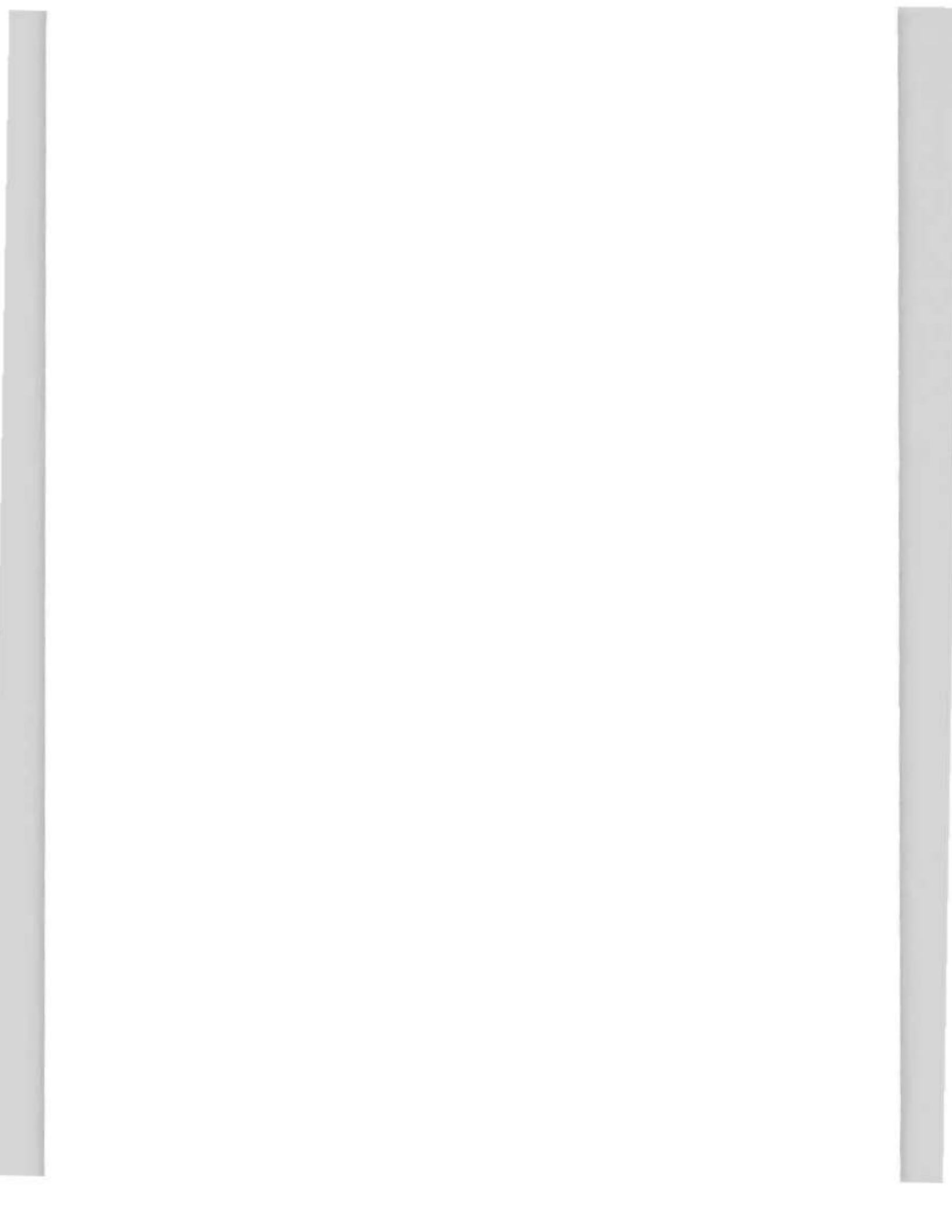
TEXAS

S.I.C.		1947-1954		1954-1958		1947-1958	
		Change	Per Cent of Total Gain	Change	Per Cent of Total Gain	Change	Per Cent of Total Gain
20	Food	12,267	9.8	4,834	7.5	17,101	9.2
21	Tobacco	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
22	Textiles	198	.2	62	.1	260	.1
23	Apparel	6,800	5.5	3,677	5.7	10,477	5.6
24	Lumber	-9,955	-	-3,683	-	-13,638	-
25	Furniture	4,000	3.2	989	1.5	4,989	2.7
26	Paper	3,452	2.8	1,687	2.6	5,139	2.8
27	Printing, Publishing	4,781	3.8	3,942	6.1	8,723	4.7
28	Chemicals	13,424	10.8	5,190	8.1	18,614	10.0
29	Petroleum	3,262	2.6	2,980	4.6	6,242	3.4
30	Rubber	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
31	Leather	1,720	1.4	-527	-	1,193	.6
32	Stone, Clay, Glass	3,100	2.5	7,962	12.4	11,062	6.0
33	Primary Metals	11,017	8.8	1,106	1.7	12,123	6.5
34	Fabricated Metals	5,638	4.5	5,630	8.7	11,268	6.1
35	Machinery	9,028	7.2	10,125	15.7	19,153	10.3
36	Electrical Machinery	2,969	2.4	5,156	8.0	8,125	4.4
37	Transportation	34,691	27.8	9,046	14.0	43,737	23.6
38	Instruments	1,185	1.0	2,068	3.2	3,253	1.8
39	Miscellaneous	7,162	5.7	-2,962	-	4,200	2.3
	Total Gain	124,694		64,454		185,659	
	Net Gain	114,739		57,282		172,021	

Note: Detailed figures may not add to totals due to rounding.

1947 data not strictly comparable with later data due to differences in coverage of loggers and fluid milk distributors.

Total figures do not include data for industry groups withheld from publication, as indicated by "N.A."



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