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## CENTERS OF INDUSTRIAL GROWTH IN OKLAHOMA 1919 TO 1939

HAROLD CREVELING, University of Oklahoma, Norman

A geographical analysis was made of manufacturing in Oklahoma to locate and determine the rate of growth of the larger manufacturing centers. It was carried out as follows:

A twenty-year period was studied in order that sufficient time be covered for trends of growth to establish themselves. The particular period 1919-1939 was chosen because: First, it included two outstanding decades in Oklahoma's industrial history, namely those of the "booming twenties" and the "depression thirties"; second, this period lay between wars thus avoiding abnormal war-time industrial developments; and, third, 1939 was the last year for which complete reliable data was obtainable.

Data was taken from the *United States Census of Manufacturing* for the years 1919 and 1939. The measure used was "the value added by manufac-

ture", or in other words the difference between the value of the manufactured product and the cost of its raw materials. Data was taken in terms of county units rather than city units since much of a community's manufacturing takes place beyond city limits and since it was possible to get data for metropolitan areas in only two cases.

Industrial growth was measured in terms of percentage of change in value added by manufacturing relative to the year 1939. The latter year was used as a base because we are primarily concerned with that part of our present manufacturing which was added in the previous twenty years.

Results of the analysis are shown graphically on the accompanying map (Fig. 1). The amount of value added by manufacture for each county in 1939 is indicated by the area of the circle. For the sake of simplicity only counties with over one million dollars of added value are indicated in the map.

Tulsa County was first in value added by manufacture with \$26,410,000 and was followed in order by Oklahoma, Kay, Washington, Garfield, Okmulgee, Pontotoc, and on down to Coal County which had only \$22,817.

Percentage change in value added by manufacture is indicated by the segment of the circle shown. Black represents a gain while a dotted segment shows loss. Attention is particularly drawn to percentage changes as they indicate trends of development.

In 1939, eighteen counties showed an increase and forty-one a decrease in manufacturing. Of the fourteen counties having over a million dollars of value added by manufacture that year, seven—Tulsa, Oklahoma, Kay, Washington, Garfield, Pontotoc, and Osage—were rapidly increasing. The relative amount of increase is significant. These counties showed a 31-percent increase as against a 13.9-percent increase for the State. In the face of a decrease in the majority of counties it appears that the trend was toward a concentration of manufacturing in these favorable centers. In 1919 these same counties made up 55 percent of the State's manufacturing but by 1939, this had grown to just under 70 percent.

To get a relative picture of Oklahoma's growing manufacturing centers, they may be compared to areas in nearby States for the same period. While Oklahoma County gained 44.5 percent, Garfield 44.3 percent, and Tulsa 13.8 percent, areas around cities in nearby States made the following changes. Centers gaining were Wichita, 13.3 percent; Shreveport, 35.8 percent; and Dallas, 47 percent. Those losing were Joplin, 5.5 percent; Fort Worth, 11 percent; and Little Rock, 63 percent.

The State likewise compared favorably with nearby States and with the average for the United States. Oklahoma's gain for the period was 13.9 percent as against a loss of 0.5 percent for the Nation and a loss of 37.5 percent for Kansas, 44.7 percent for Arkansas, and 22.3 percent for Louisiana. Texas on the other hand gained 34.5 percent.

Oklahoma areas showing the most rapid growth were around Oklahoma City, Enid, and Ada, all of which gained well over 40 percent. Tulsa continued to lead the State in total amount of manufacturing and showed a steady gain.

The overall picture for this period for Oklahoma indicated a steady gain for the State and showed a tendency toward concentration in favorable areas. Relatively, the State was much better than its neighbors with the one exception.