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Update A Monthly Overview of Economic Trends

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Concentration of Employment

How widespread is manufacturing activity in Indiana? Are all the jobs in a few counties? Which counties are highly specialized?

Industry concentrations

Figure 1 shows that nearly one quarter of all jobs in Indiana were in the broad area of services. Slightly more than one-fifth of all jobs were in manufacturing. Retail trade accounted for one job in six. Together, these three sectors provided more than 63% of all Hoosier jobs in 1994, the last year for which complete data are available at the county level. Of the remaining ten sectors, state and local government was the largest.

There is a belief, held by Hoosiers and strangers alike, that manufacturing is highly concentrated in a few counties. To measure the concentration of an activity, we use an index where, if all activity were located in one county, the value would be 100 and if activity were evenly distributed among the 92 counties the value would be zero.¹

Figure 2 demonstrates that, of 13 employment sectors, the most concentrated employment in the state is federal civilian employment. Of 44,000 jobs in this sector, more than half are in but two counties. 18,400 are

in Marion County and 4,600 in Martin County (Crane). This yields an index value approaching 19, the highest for any employment sector.

Wholesale trade and finance, insurance, and real estate are well back as concentrated activities. As expected, retail trade and state and local government are fairly dispersed along with the population? But manufacturing employment, contrary to expectations, is more widely dispersed throughout the state than all but three other sectors. Farming, mining, and agricultural services, despite their small representation in the total employment picture (3.5% together), are the most geographically dispersed activities. This may also account for their strong political influence.

County concentrations

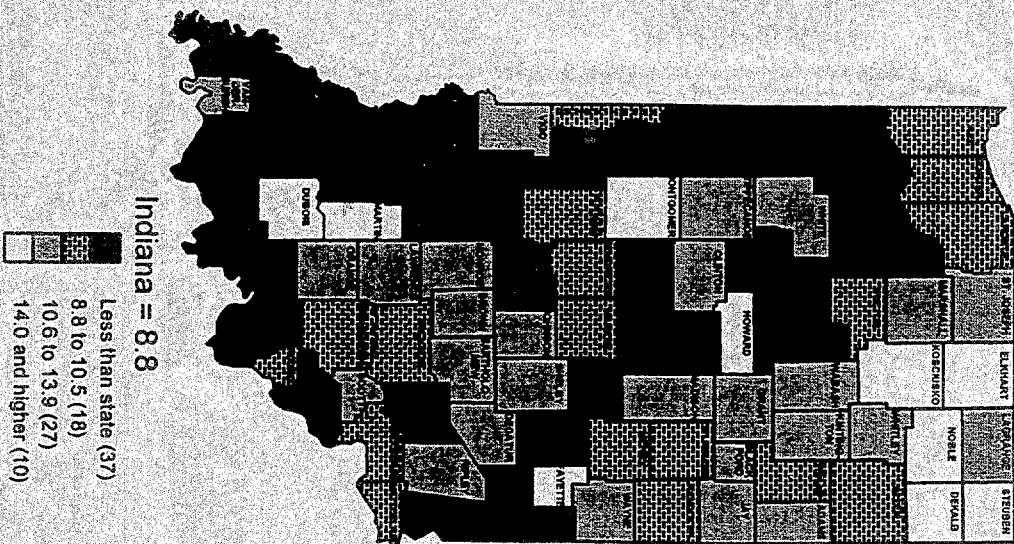
Martin County, with the Crane facility, demonstrates the most concentration of employment, generating an index value of nearly 24 for 1994. Elkhart County is second at nearly 21. Northeastern Indiana counties (Noble, De Kalb, and Steuben) hold three of the next four positions.

The state has a concentration index score of 8.8. Marion and Henry counties are just above that number and Cass and Jennings just below. The least specialized counties are Daviess, Pike, Tipton, and Sullivan with scores below 6.

We are a long way from declaring that concentration or diversification is most closely allied with economic growth. Many communities, however, seem to have opinions on the subject and a desire to be something other than what they are.

-- mjm

Figure 1. Concentration of Employment By County, Indiana 1994



¹ This is a Herfindahl index adjusted for the number of observations. For each industry, we take the percent of its employment found in each county, square that figure and sum to a state total. Then this raw index number is adjusted for the number of counties (92) according to the following formula

$$\text{The Herfindahl index } H = \sum p_i^2 \text{ where } p = \text{the percent of industry } i \text{ found in county } j$$

The adjusted index $H = (H - \text{Min}) / \text{Max}$ where the Minimum = 1/n, the Maximum = 1/(1/n) and n = the number of observations, here 92.

² The adjusted index value for population in 1994 was 3.04, a more complete discussion of the concentration of population follows in the next Update.

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