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Indiana Business Review
Update A Monthly Overview of Economic Trends
 Indiana University School of Business, Indiana Business Research Center

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.² 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

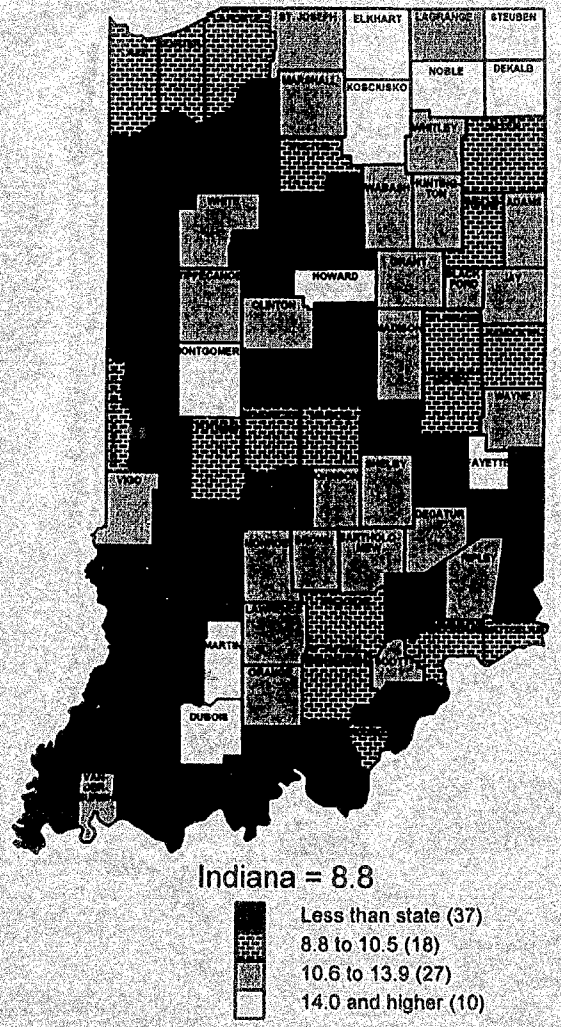
Martin County, with the Crane facility, demonstrates the most concentration of employment, generating an index value of nearly 24 for 1994. Elkhart County is second at nearly 21. Northeastern Indiana counties (Noble, De Kalb, and Steuben) hold three of the next four positions.

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 Hirsch 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

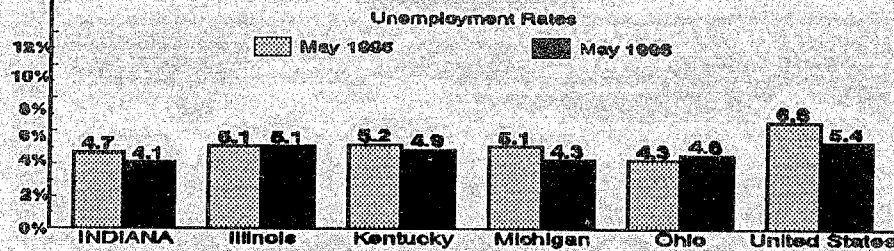
The Hirsch index $H = \sum p_i^2$ where p = the percent of industry i found in county j .

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.

The Regional Employment Situation

Total Persons Employed	May 1995	May 1996	Number Change	% Change	Rank in US
INDIANA	3,014,100	2,986,500	-27,600	-0.92%	49
Illinois	5,752,700	5,822,900	70,200	1.22%	37
Kentucky	1,773,500	1,748,600	-24,900	-1.40%	50
Michigan	4,521,100	4,637,000	115,900	2.56%	14
Ohio	5,325,000	5,457,300	132,300	2.48%	16
United States	124,554,000	126,392,000	1,838,000	1.48%	N/A



Employment - Hours - Earnings by Industry

INDIANA	Establishment Related Employment		Average Weekly Hours		Average Weekly (Real) Earnings	
	May 1996	% Chg. 95/96	May 1996	% Chg. 95/96	May 1996	% Chg. 95/96
Total Non-Ag	2,817,100	1.7%	NA	NA	NA	NA
Mining	6,500	-3.0%	44.3	-1.8%	\$740.25	-6.2%
Construction	132,400	0.4%	40.0	1.0%	\$692.40	3.4%
Manufacturing	679,300	0.0%	42.7	1.9%	\$607.19	2.3%
Durable	489,500	0.5%	43.4	2.8%	\$635.38	2.6%
Non-durable	189,800	-1.4%	40.7	-1.0%	\$527.07	0.4%
Wholesale	141,000	2.2%	37.5	1.4%	\$446.25	1.8%
Retail	543,500	3.4%	29.1	1.7%	\$221.16	2.1%
Finance, Insurance & Real Estate	134,100	2.4%	35.9	-0.3%	\$376.23	-0.1%
Services*	641,900	2.8%	32.7	2.8%	\$334.19	0.3%

Employment - Hours - Earnings

(Not seasonally adjusted)

Metropolitan Statistical Areas (MSAs) in Indiana

NON-AG WAGE & SALARIED EMPLOYMENT	May 1995	May 1996	Change	
			Number	Percent
Bloomington MSA	60,000	59,900	-100	-0.2%
Elkhart-Goshen MSA	119,400	119,900	500	0.4%
Evansville MSA	146,900	149,200	2,300	1.6%
Fort Wayne MSA	262,000	262,800	800	0.3%
Gary MSA	250,600	259,600	9,000	3.6%
Indianapolis MSA	796,100	807,800	11,700	1.5%
Kokomo MSA	52,000	55,300	3,300	6.3%
Lafayette MSA	87,900	88,200	300	0.3%
Muncie MSA	62,700	61,900	-800	-1.3%
New Albany Area*	74,100	83,300	9,200	12.4%
South Bend MSA	127,100	129,600	2,500	2.0%
Terre Haute MSA	68,600	70,200	1,600	2.3%

MANUFACTURING	May 1996	Employment	Average		
			Weekly Hours	Hourly Earnings	Weekly Earnings
Bloomington MSA		10,600	36.0	\$10.78	\$388.08
Elkhart-Goshen MSA		58,500	39.7	\$12.14	\$481.96
Evansville MSA		31,500	41.1	\$12.79	\$525.67
Fort Wayne MSA		72,900	42.1	\$14.52	\$611.29
Gary MSA		51,800	41.1	\$17.74	\$729.11
Indianapolis MSA		125,800	43.8	\$15.70	\$687.66
Kokomo MSA		22,700	55.3	\$19.52	\$1,079.46
Lafayette MSA		21,600	43.4	\$14.65	\$635.81
Muncie MSA		11,000	44.1	\$14.23	\$627.54
New Albany Area*		19,500	40.2	\$11.69	\$469.94
South Bend MSA		22,700	42.5	\$12.26	\$521.05
Terre Haute MSA		12,000	43.0	\$14.06	\$604.58

*Employment includes schools; Hours and Earnings excludes schools. *The New Albany Area (Clark, Floyd, Harrison, Scott counties) is part of the larger Louisville MSA. (Real) indicates dollars adjusted for changes in consumer prices to 1996 level. Employment and earnings data based on preliminary and revised series provided by the Indiana Department of Workforce Development.

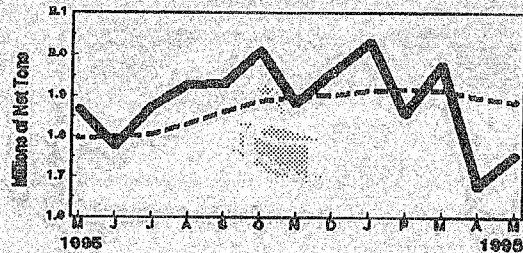
Indiana Economic Activity

Monthly Data
 12 Month Moving Average

Raw Steel Production

American Iron and Steel Institute
(Millions)

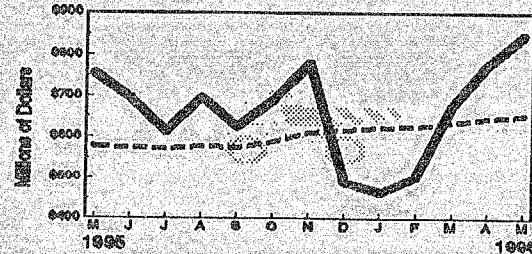
May 1994 — 1.823 May 1995 — 1.866 May 1996 — 1.752



Total Construction Activity

F. W. Dodge Construction Potentials Bulletin
(Millions)

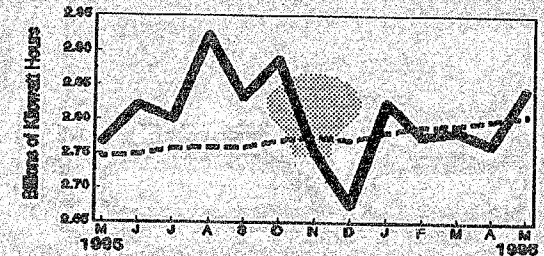
May 1994 — \$771.4 May 1995 — \$755.3 May 1996 — \$847.2



Industrial Electricity Sales

(The 5 investor owned utilities)
(Billions)

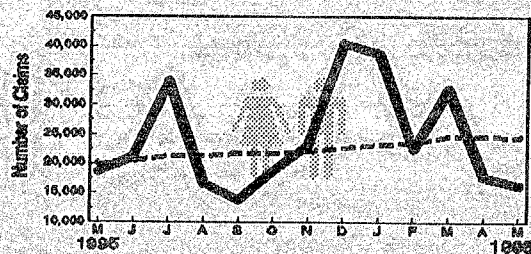
May 1994 — 2.687 May 1995 — 2.768 May 1996 — 2.844



Initial Unemployment Insurance Claims

Indiana Department of Workforce Development

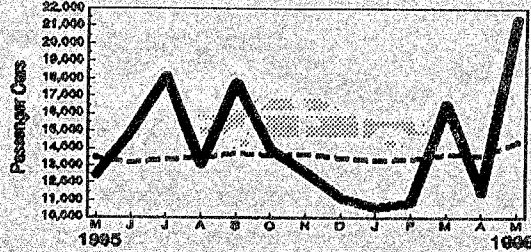
May 1994 — 13,721 May 1995 — 18,590 May 1996 — 16,338



New Car Registrations

R. L. Polk and Company

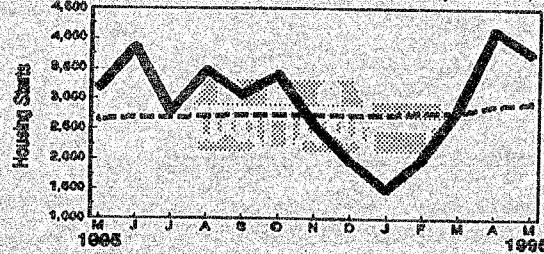
May 1994 — 13,588 May 1995 — 12,455 May 1996 — 21,386



Housing Starts

F.W. Dodge Construction Potentials Bulletin

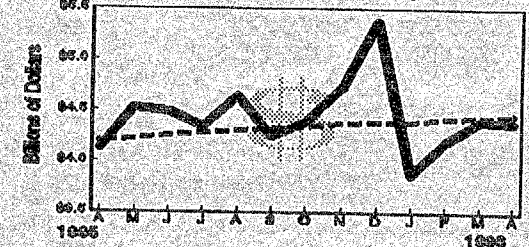
May 1994 — 3,196 May 1995 — 3,196 May 1996 — 3,761



Retail Sales

Bureau of the Census
(Billions)

Apr. 1994 — \$3.92 Apr. 1995 — \$4.13 Apr. 1996 — \$4.38



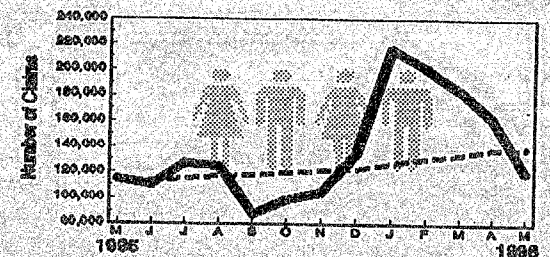
Ups or Downs... Indiana Indicators Year-to-Date
(Based on June 1995 through May 1996 and compared to same period the year before, unless otherwise noted)

- Raw steel production** fired up a total of 22.6 million tons for this 12 month period, a million tons over the past year.
- Total construction activity** erected gains of \$918.8 million over last year, building to a total of almost \$8 billion.
- Sales of electricity** surged during this 12 month period, for a total of 33.7 billion kilowatt hours, 7 million hours brighter than last year.
- New car registrations** zoomed to 172,501, passing the previous 12 month total by 10,747 vehicles.
- Housing starts** were up 3,460 over last year — with a homey total of 35,361 for this period.
- Hoosier cash registers** jingled to the tune of \$53.6 billion in **retail sales** between May '95 and April '96, 3.2 million over the past year.

Continued Unemployment Insur. Claims

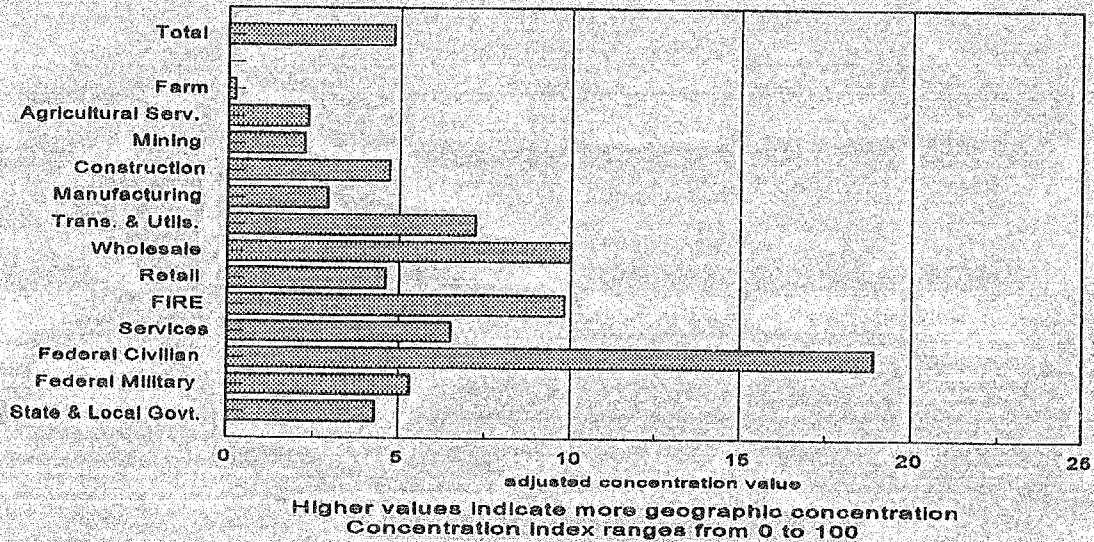
Indiana Department of Workforce Development

May 1994 — 97,569 May 1995 — 112,593 May 1996 — 120,649



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**Fig 2. Concentration of Employment by Industry
Indiana, 1994**



**Data Bytes from the 1992
Manufacturing Census...**

- There were 9,278 Indiana establishments engaged in manufacturing
- Of those, 5,402 had fewer than 20 employees
- Employment for all establishments totalled 620,300
- With payroll at nearly \$20 billion dollars for the year
- The majority of the workers were engaged in production (434,300)

- And working 885.7 million hours
- For an annual average wage per job of \$13.16
- And with a value-added, per production worker-hour of \$56.23

These data and more are available through the recently released 1992 Census of Manufacturing, available in print and on cd/rom at your nearest Indiana Data Center Program Affiliate. Contact us at 317-274-0897 for the number of the affiliate nearest you.

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■ Support for this publication provided by the Indiana Department of Commerce.
 ■ Data in this report are available from the Economic Development Information Network (EDIN) - call (812)855-5507 for details.
 ■ The Indiana Business Research Center is a partner in the Indiana Data Center Program. WEB: <http://www.bus.indiana.edu/research>
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