

## IN the Spotlight:

### Indiana Exports, Third Quarter 2000

Indiana exports reached \$3.98 billion in the third quarter of 2000. That represents a 14.8% increase when compared to the third quarter of 1999. Over the first three quarters of 2000 Indiana exports totaled \$12.3 billion, about \$2 billion more than sales during the same period in 1999. If this pace continues in the final quarter, Indiana exports would exceed \$16 billion for the year — the highest year on record.

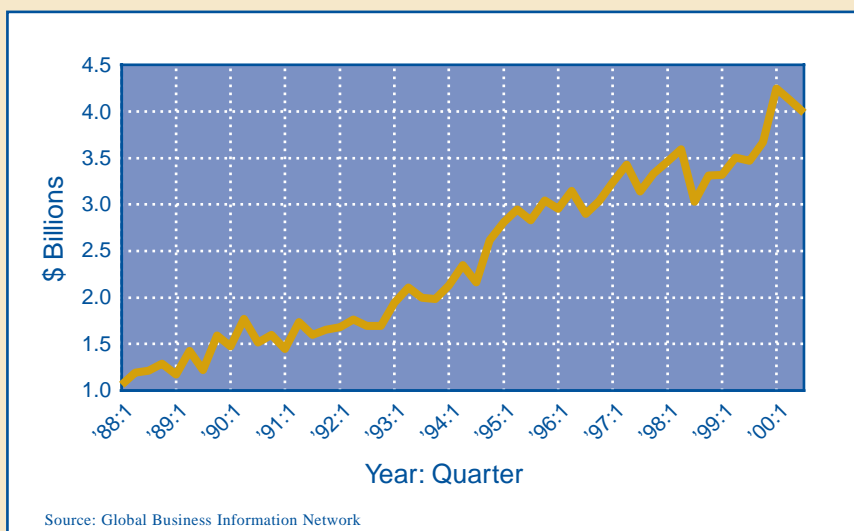
Strong world economic growth in 2000 has been good for Indiana exports. Despite a high and rising value of the dollar, Indiana exports are well on their way to exceeding the \$14 billion export sales of 1999. It is expected that year-end 2000 exports

will be 10% to 15% above year-end 1999.

Much of Indiana's success derived from export sales gains to Mexico, the Netherlands, France, Germany and Singapore. Exports to Canada dropped in the third quarter compared to the same quarter in 1999, but that destination remains Indiana's top export destination. Industries with strong, double-digit export sales growth during the first three quarters of 2000 included Industrial Machinery & Computer Equipment, Food Products, Primary Metals, and Chemicals.

Mexico in particular is vital to this performance. Indiana has enjoyed phenomenal growth in exports to that  
*(continued on page 2)*

Figure 1: Indiana Exports, 1988:1 to 2000:3



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**Indiana  
Unemployment  
Rate for  
March 2001:  
3.5%**

**IN the Spotlight**

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destination. Vicente Fox, the new president, promises to be a strong advocate for increased trade with the United States. Should his new government continue along the path of reform and progress, Hoosier companies should find even more receptivity with our neighbors to the south.

**Non-adjusted Indiana exports declined by an annualized 12.5% from the second to third quarter of 2000. When seasonally adjusted, this becomes a 19.7% increase.**

A special note about the third quarter: Many economic time series with pronounced seasonal variability are routinely “seasonally-adjusted” by the government. For example, most reported estimates of Gross Domestic Product have regular seasonal patterns “removed” before publication. Despite the fact that Indiana exports are highly seasonal — declining in every third quarter since 1989 — the government

does not seasonally-adjust these figures. When seasonal-adjustments are made, however, they provide interesting insights. For example, non-adjusted Indiana exports *declined* by an annualized 12.5% from the second to the third quarter of 2000. When seasonally adjusted, this becomes a 19.7% *increase*. Seasonally-adjusted Indiana exports to Canada and exports of Transportation Equipment also show striking results. Table 1 vividly shows that Indiana exports, while declining from the second to the third quarter, declined much less than usual.

Indiana exports to the world declined by \$129 million in each of the past two quarters, yet remain \$314

million above the value reached at the end of 1999 (see Figure 1 on page 1).

At the end of 1999, Canada’s share of Indiana exports was 52%. Through the third quarter of 2000 it averaged 47%. Mexico had the largest increase in export share, going from 7% in 1999:4 to averaging 14% over the first three quarters of 2000. Mexico bought more Indiana goods than Japan, the UK and Germany combined in 2000:3 (see Figure 2).

*Excerpted from the Indiana Export Report, Third Quarter 2000  
Global Business Information Network,  
Kelley School of Business*

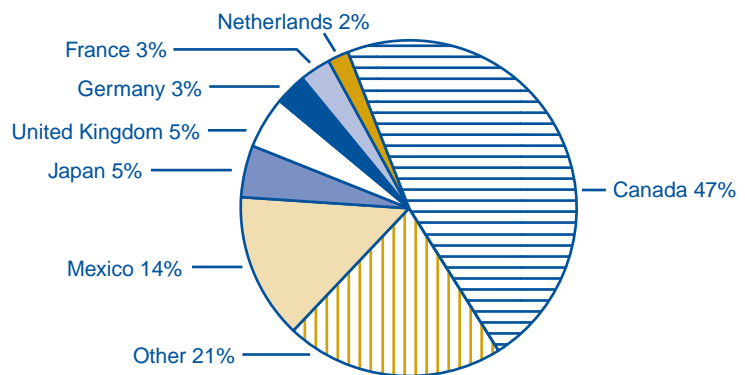
**Table 1: Indiana Exports, Percent Change from 2000:2 to 2000:3**

Indiana Exports	Percent Change	
	Non-adjusted	Adjusted
Indiana Exports to the World, All Industries	-12.5	19.7
Indiana Exports to Canada, All Industries	-57.0	13.4
Indiana Transportation Equipment Exports to the World	-67.2	10.4

Source: Global Business Information Network

**Figure 2: Export Shares of Top Seven Indiana Export Destinations**

Year-to-date 2000:3 (percent)



Source: Global Business Information Network

## Innies and Outies: Commuting to Work in Indiana

**H**oosiers work where they live. That is, the majority of Indiana residents work in their home county. But that statewide fact masks the commuting that is common among state-border counties and counties that are job magnets or residence magnets.

Results from Census 2000 (when available in 2002) will provide the most precise and accurate portrait of travel to work. Why? Because the questions on the census long form were tested and constructed to glean accurate commuting data. However, annual data collected from Indiana's state individual income tax returns can provide a useful interim picture of commuting trends. These data are available in aggregated form on *STATS*

*Indiana* ([www.stats.indiana.edu](http://www.stats.indiana.edu)). To understand the information provided, we will dissect the St. Joseph County commuting data as an example. It is a state-border county and also a job magnet in its region.

Based on the 1999 state tax returns, more than 165,000 St. Joseph County residents worked, and of those, 147,000 worked in St. Joseph. The remaining 17,000 St. Joseph County residents commuted out of the county for work, while more than 17,000 residents of other counties (or states) commuted into St. Joseph County to work.

Those county totals can be more finely divided by the actual counties (or states) receiving or sending workers. The majority (16,565) of

people commuting into St. Joseph for work lived in four counties adjacent to St. Joseph and the state of Michigan (see Figure 1). Conversely, 17,954 St. Joe residents worked outside that county. More than 14,000 went to Michigan or an adjacent Indiana county.

### Caveat Emptor

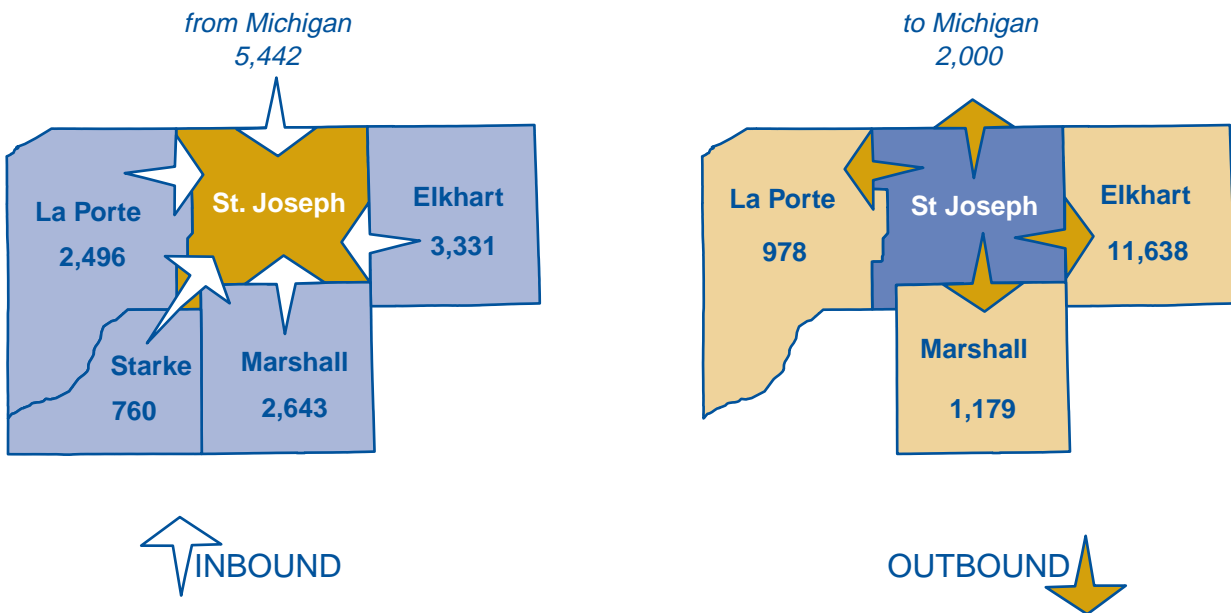
Four caveats come to mind when using these data:

1. Not everyone files a state income tax return, so the number of workers shouldn't be used as an exact number of those employed in Indiana.
2. Those filing state tax returns (IT-40) are instructed to enter the county *code*, not the *name* of their residence and

(continued on back cover)

**Figure 1: St. Joseph County Commuting Patterns, Based on 1999 State Tax Returns**

Workers indicate county of residence and county of work



Source: STATS Indiana and Indiana Department of Revenue

## Auto Sales in Recovery

In 2000, sales of automobiles and light trucks in the United States exceeded 17 million units (see Figure 1). This once unimagined level might be reached again in 2001, if lower interest rates and higher consumer expectations take hold for the rest of the year. Despite much talk to the contrary, auto and light truck sales in 2001 have been running at near-record rates, not far below last year's sales explosion.

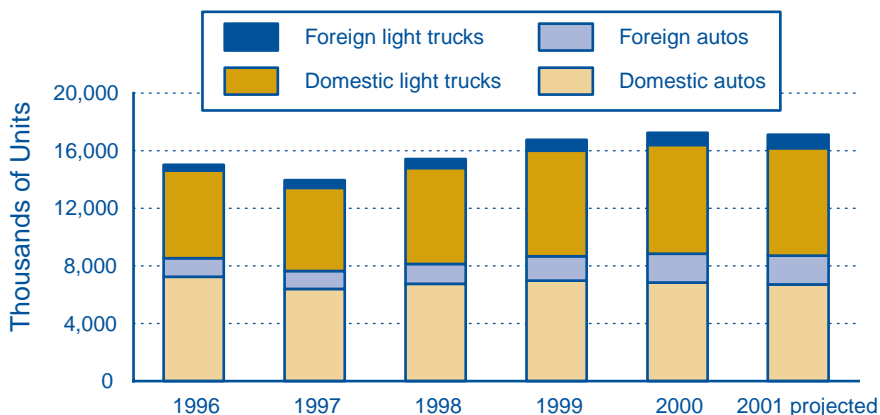
**Despite much talk to the contrary, auto and light truck sales in 2001 have been running at near-record rates, not far below last year's sales explosion.**

Through the first quarter of 2001, the sales rate has been 17.1 million units (seasonally adjusted at annual rates). This is down slightly from last year's 18.2 million pace, but 2001 is well ahead of the 16.2 million rate in the first quarter of 1999.

What has been the "problem" in the auto market? It was a decline in sales that bottomed out in December 2000 (see Figure 2). Domestic light trucks faltered, declining by 13% from December 1999, to their lowest level

**Figure 1: Vehicle Sales in the U.S.: Autos and Light Trucks**

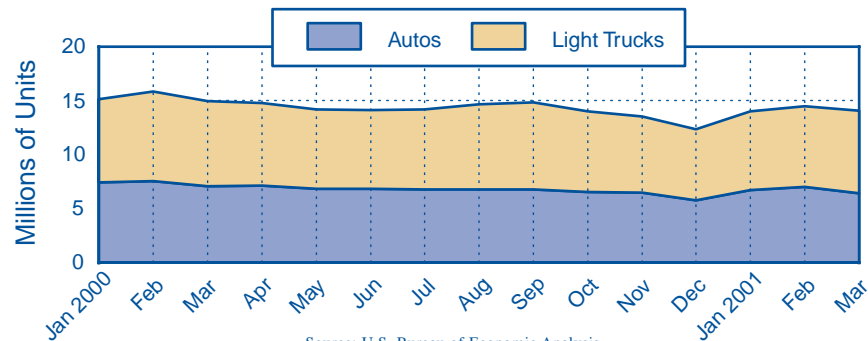
Sales still strong in 2001 first quarter



Source: U.S. Bureau of Economic Analysis

**Figure 2: Domestic Vehicle Sales**

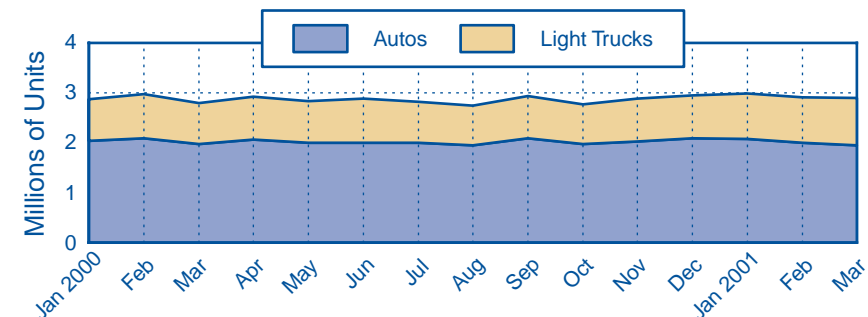
Sales have recovered since low point in December



Source: U.S. Bureau of Economic Analysis

**Figure 3: Foreign Vehicle Sales in the U.S.**

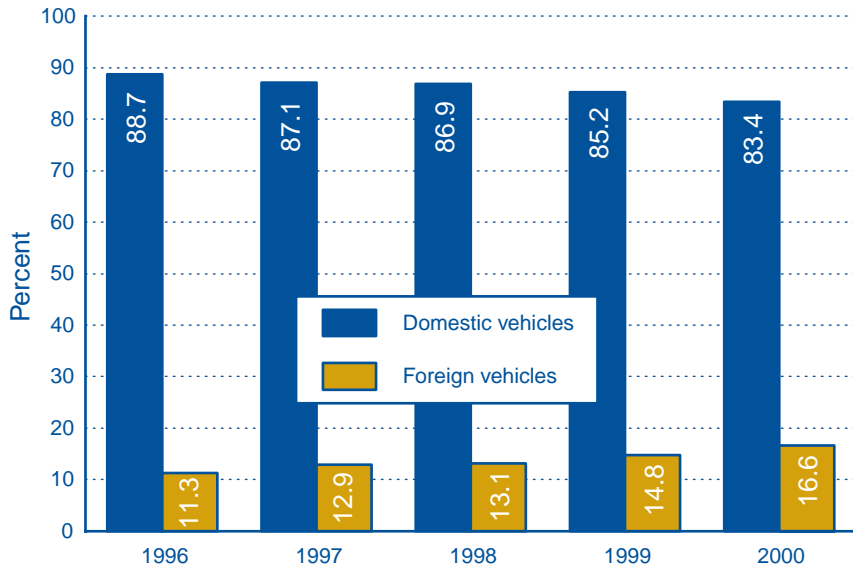
Sales by non-U.S. automakers have not declined



Source: U.S. Bureau of Economic Analysis

**Figure 4: Market Shares of Domestic and Foreign Vehicles**

Foreign units continue to be a rising share of U.S. market



Source: U.S. Bureau of Economic Analysis

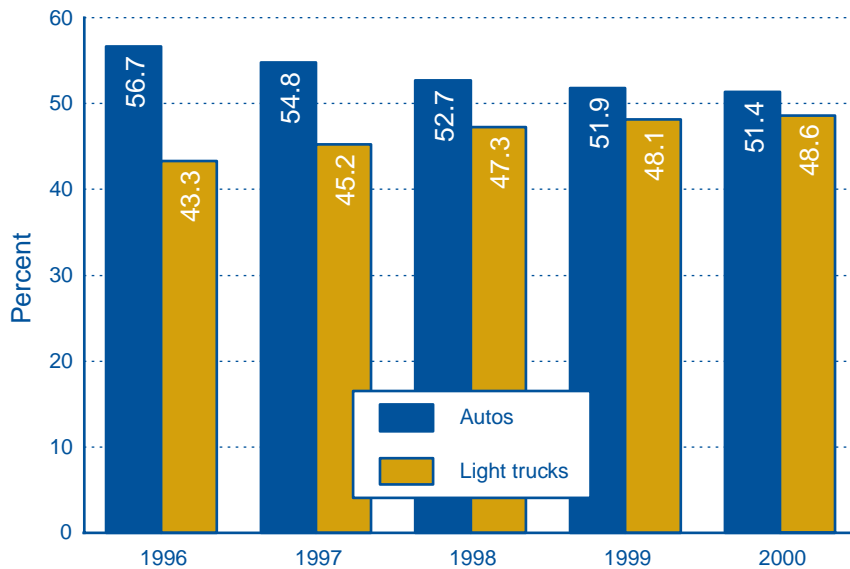
since September 1998. Domestic autos also weakened in December 2000, falling 19% from year-earlier levels. But both have recovered through March 2001.

Foreign units, however, did not show any similar decline in sales (see Figure 3). Foreign units (those built outside North America) have been increasing slowly as part of the U.S. market (see Figure 4). That growth has

**The growth of light trucks as part of the market for motor vehicles has been impressive.**

**Figure 5: Market Share by Vehicle Type**

Light trucks continue to be a rising share of U.S. vehicle market



Source: U.S. Bureau of Economic Analysis

been most evident in foreign light trucks, which grew by 95% in sales, while autos advanced by 58% in the past five years. In comparison, domestic light trucks grew by 24% and domestic autos declined by 6% in unit volume from 1996 to 2000.

“Domestic” is defined by the industry as vehicles assembled in the United States, Canada or Mexico. The light trucks built by Toyota in Princeton, Ind., are domestic vehicles.

The growth of light trucks as part of the market for motor vehicles has been impressive (see Figure 5). SUVs, mini-vans and small pickup trucks moved from 43% to 49% of the market between 1996 and 2000. Thus far in 2001, light trucks continue to increase market share and could top autos by the close of 2002, if not sooner.

## Measuring Growth Momentum, Part II: Total Wages

Last month, we introduced a new measure of employment growth for Indiana industries that we called growth momentum (*IN Context* Vol. 2, Issue 5, May 2001). To calculate employment growth momentum for an industry during a specific time period, multiply the change in employment during the period (similar to mass) by the growth rate for that industry (similar to velocity). For industry sectors experiencing decline in employment the momentum is multiplied by negative one, resulting in negative momentum values for these sectors.

The result is a simple employment growth momentum measure that incorporates both numeric change and percent change.

Let's apply the idea to total wages instead of employment. Now we are trying to identify high wage growth industries in the state: those that have experienced the largest growth in total wages paid between first quarter 1995 and first quarter 2000.

Table 1 illustrates total nominal wages for first quarter 2000, change and percent change in nominal wages between 1995 and 2000, and the growth momentum measure for a

**Table 1: Wage Growth Measures, Covered Employment and Wage Data, 1995:1 to 2000:1**

SIC	INDUSTRY • <b>Bold: Top 10 in Numeric Change</b> • <i>Italicized: Top 10 in Percent Change</i>	Total Wages 2000:1	Numeric Change 1995 to 2000	Percent Change 1995 to 2000	Growth Momentum
799	<i>Misc. Amusement, Recreation Services</i>	135,289,546	102,049,246	307.0	31,329,586,704
<b>737</b>	<b>Computer and Data Processing Services</b>	<b>248,813,207</b>	<b>139,499,389</b>	<b>127.6</b>	<b>17,802,030,784</b>
<b>283</b>	<b>Drugs</b>	<b>515,544,891</b>	<b>223,575,442</b>	<b>76.6</b>	<b>17,120,276,946</b>
451	<i>Air Transportation, Scheduled</i>	140,256,455	90,126,982	179.8	16,203,786,712
621	<i>Security Brokers and Dealers</i>	139,959,815	88,789,935	173.5	15,406,822,446
<b>371</b>	<b>Motor Vehicles and Equipment</b>	<b>1,498,784,255</b>	<b>403,468,041</b>	<b>36.8</b>	<b>14,862,051,527</b>
794	<i>Commercial Sports</i>	80,211,384	55,468,965	224.2	12,435,348,695
<b>736</b>	<b>Personnel Supply Services</b>	<b>289,792,381</b>	<b>137,201,341</b>	<b>89.9</b>	<b>12,336,378,317</b>
671	<i>Holding Offices</i>	39,825,928	30,509,693	327.5	9,991,604,623
<b>821</b>	<b>Elementary and Secondary Schools</b>	<b>1,226,036,540</b>	<b>267,947,902</b>	<b>28.0</b>	<b>7,493,678,073</b>
<b>822</b>	<b>Colleges and Universities</b>	<b>610,619,378</b>	<b>151,653,812</b>	<b>33.0</b>	<b>5,011,024,878</b>
<b>581</b>	<b>Eating and Drinking Places</b>	<b>512,363,668</b>	<b>135,196,834</b>	<b>35.8</b>	<b>4,846,180,066</b>
<b>806</b>	<b>Hospitals</b>	<b>945,996,111</b>	<b>183,108,608</b>	<b>24.0</b>	<b>4,394,981,199</b>
<b>801</b>	<b>Offices &amp; Clinics of Medical Doctors</b>	<b>500,801,527</b>	<b>122,053,627</b>	<b>32.2</b>	<b>3,933,246,327</b>
<b>919</b>	<b>General Government, NEC</b>	<b>458,158,895</b>	<b>113,415,211</b>	<b>32.9</b>	<b>3,731,180,782</b>
011	<i>Cash Grains</i>	15,047,126	11,293,754	300.9	3,398,247,747
961	<i>Admin. of General Economic Programs</i>	27,638,709	17,878,263	183.2	3,274,771,336
482	<i>Telegraph &amp; Other Communications</i>	737,768	656,289	805.5	528,621,180
024	<i>Dairy Farms</i>	2,844,041	1,945,765	216.6	421,474,183
421	<i>Trucking &amp; Courier Services, Except Air</i>	458,503,533	39,087,384	9.3	364,273,906
622	<i>Commodity Contracts Brokers, Dealers</i>	759,541	509,853	204.2	104,109,962
331	<i>Blast Furnace and Basic Steel Products</i>	481,576,282	17,895,480	3.9	69,066,522

Source: Indiana Business Research Center and Indiana Department of Workforce Development

subset of industry sectors. The subset of sectors includes any industry that ranks in the top 10 in total wages, change in wages between 1995 and 2000, percent change in wages or growth momentum for wages.

Table 2 contains the rankings for each growth measure for these industries. The industry sectors are listed in descending order of momentum in both tables.

The top 10 sectors in terms of wage growth momentum have numeric wage growth figures that range from \$30 million (holding offices) to \$400 million (motor vehicles and

equipment). Total wage growth rates range from 28% (elementary and secondary schools) to more than 300% (holding offices and misc. amusement and recreation services). Examples of the types of establishments found in each of the top 10 wage growth momentum sectors can be found in Table 3 on page 8.

Using the same analogy as last month, each sector can be pictured as a snowball, growing as it rolls down a hill. The sectors that are experiencing the largest amounts of numeric growth in total wages paid are the ones that are adding the most snow. The sectors

with the highest growth rates are moving the fastest.

Figure 1 on page 8 shows numeric growth and percent change in nominal wages between 1995 and 2000 for each of the top 10 wage growth momentum sectors. There appears to be an inverse relationship between change in wages and percent change in wages for these top 10 industries. The snowballs that are moving the fastest are not the ones that are adding the most snow.

Fastest-moving sectors are holding offices, misc. amusement and recreation services, and commercial *(continued on page 8)*

**Table 2: Ranks of Wage Growth Measures, Covered Employment and Wage Data, 1995:1 to 2000:1**

SIC	INDUSTRY • <b>Bold: Top 10 in Numeric Change</b> • <i>Italicized: Top 10 in Percent Change</i>	Total Wages 2000:1	Numeric Change 1995 to 2000	Percent Change 1995 to 2000	Growth Momentum
799	<i>Misc. Amusement, Recreation Services</i>	15	11	3	1
<b>737</b>	<b>Computer and Data Processing Services</b>	<b>12</b>	<b>6</b>	<b>11</b>	<b>2</b>
<b>283</b>	<b>Drugs</b>	<b>5</b>	<b>3</b>	<b>13</b>	<b>3</b>
451	<i>Air Transportation, Scheduled</i>	13	12	9	4
621	<i>Security Brokers and Dealers</i>	14	13	10	5
<b>371</b>	<b>Motor Vehicles and Equipment</b>	<b>1</b>	<b>1</b>	<b>14</b>	<b>6</b>
794	<i>Commercial Sports</i>	16	14	5	7
<b>736</b>	<b>Personnel Supply Services</b>	<b>11</b>	<b>7</b>	<b>12</b>	<b>8</b>
671	<i>Holding Offices</i>	17	16	2	9
<b>821</b>	<b>Elementary and Secondary Schools</b>	<b>2</b>	<b>2</b>	<b>19</b>	<b>10</b>
<b>822</b>	<b>Colleges and Universities</b>	<b>4</b>	<b>5</b>	<b>16</b>	<b>11</b>
<b>581</b>	<b>Eating and Drinking Places</b>	<b>6</b>	<b>8</b>	<b>15</b>	<b>12</b>
<b>806</b>	<b>Hospitals</b>	<b>3</b>	<b>4</b>	<b>20</b>	<b>13</b>
<b>801</b>	<b>Offices &amp; Clinics of Medical Doctors</b>	<b>7</b>	<b>9</b>	<b>18</b>	<b>14</b>
<b>919</b>	<b>General Government, NEC</b>	<b>10</b>	<b>10</b>	<b>17</b>	<b>15</b>
011	<i>Cash Grains</i>	19	19	4	16
961	<i>Admin. of General Economic Programs</i>	18	18	8	17
482	<i>Telegraph &amp; Other Communications</i>	22	21	1	18
024	<i>Dairy Farms</i>	20	20	6	19
421	<i>Trucking &amp; Courier Services, Except Air</i>	9	15	21	20
622	<i>Commodity Contracts Brokers, Dealers</i>	21	22	7	21
331	<i>Blast Furnace and Basic Steel Products</i>	8	17	22	22

Source: Indiana Business Research Center and Indiana Department of Workforce Development



**IN Business**

(continued from page 7)

sports. These sectors are smaller snowballs that are rolling quickly (total wage growth rates over 200%) but not adding the largest amounts of snow.

Sectors in the next group are not moving as quickly as those above, but are still experiencing total wage growth rates between 90% and 180%. These fast-moving intermediate size

snowballs are scheduled air transportation, security brokers and dealers, computer and data processing services, and personnel supply services.

Large snowballs that are adding the most snow but moving more slowly are elementary and secondary schools, motor vehicles and equipment, and drugs. Each of these industries added at least \$223 million to its payroll between 1995 and 2000. Growth rates

are more moderate for these industries, between 28% and 77%, compared with 33% for the overall state average during the same time period.

Next month, we will conclude this three-part series with a look at top momentum industries with respect to both employment and wages. In other words, we will identify industries that have experienced high growth in both employment and total wages.

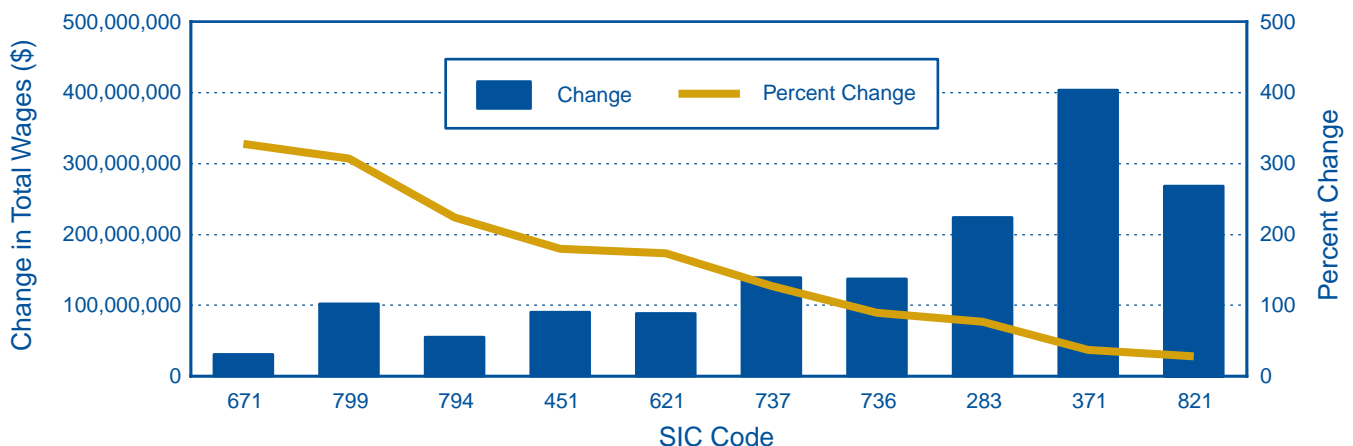
**Table 3: Top 10 Sectors in Wage Growth Momentum**

SIC	Sector	Examples of Types of Establishments
799	Misc. Amusement, Recreation Services	Riverboat casinos, amusement parks, public golf courses
737	Computer and Data Processing Services	Programming, design and development of software, systems
283	Drugs	Medicinal chemicals, pharmaceutical preparations
451	Air Transportation, Scheduled	Air passenger and cargo carriers, courier services
621	Security Brokers and Dealers	Investment bankers, security brokers and dealers
371	Motor Vehicles and Equipment	Motor vehicles, car, truck and bus bodies, parts and accessories
794	Commercial Sports	Professional sports clubs and promoters, racing
736	Personnel Supply Services	Employment agencies, temporary and office help
671	Holding Offices	Bank holding companies, other holding companies
821	Elementary and Secondary Schools	Schools, academies, boarding schools

Source: Standard Industrial Classification Manual, 1987

**Figure 1: Total Wage Growth Momentum: Top 10 Industries**

Change and percent change in wages, 1995 to 2000



Source: Indiana Business Research Center and Indiana Department of Workforce Development

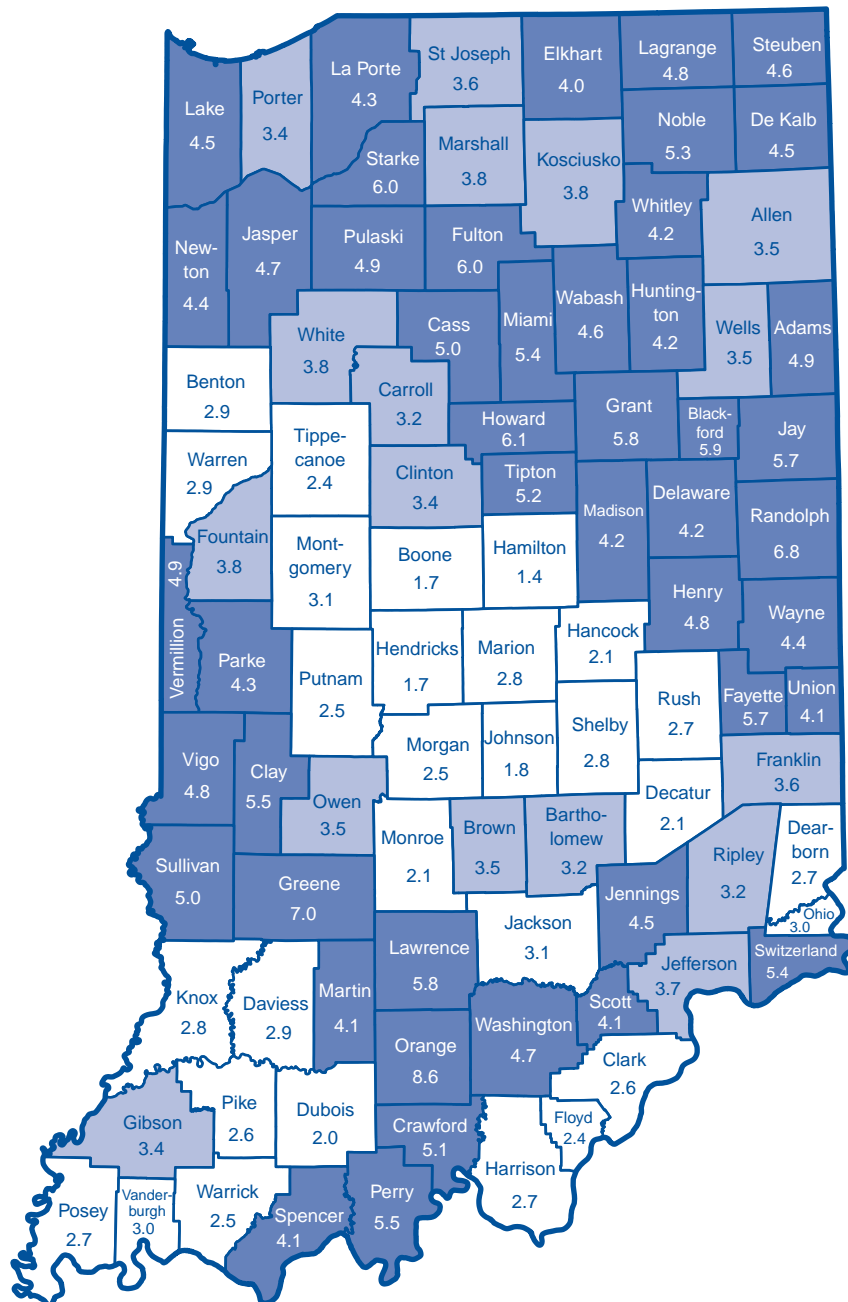


# Indiana Unemployment Snapshot

**Figure 1: March 2001 Unemployment Rates by County**

The national unemployment rate for March 2001 was 4.6%

State Unemployment Rate = 3.5%  
 ■ Above State Rate (46 counties)  
 ■ Approx. Equal to State Rate (+/- 0.3) (17 counties)  
 □ Below State Rate (29 counties)



Source: Indiana Department of Workforce Development

## State Unemployment Rate Declined:

- This year (March 2001): 3.5%
- Last year (March 2000): 3.9%

## Number of Employed People Increased:

- This year (March 2001): 2,971,391
- Last year (March 2000): 2,934,858

## County Unemployment Rates 2001:

### LARGEST DECLINE OCCURRED IN SWITZERLAND COUNTY

- This year (March 2001): 5.4%
- Last year (March 2000): 12.8%

### LARGEST INCREASE OCCURRED IN HOWARD COUNTY

- This year (March 2001): 6.1%
- Last year (March 2000): 3.3%

## Most of Indiana's 92 County Unemployment Rates Are Better than the U.S. Average:

### U.S. AVERAGE

- This year (March 2001): 4.6%
- Last year (March 2000): 4.3%

### NUMBER OF COUNTIES WITH UNEMPLOYMENT RATES BELOW THE U.S. AVERAGE:

- This year (March 2001): 63
- Last year (March 2000): 52

## Occupational Data: Where Do All These Numbers Come From?

It has not been a good day. You are the owner of an architectural firm, and your landscape architect just quit. Then this morning at the breakfast table, your teen-age son announced that he was skipping college to become a DJ. What are you going to do?

Let's look at finding a new landscape architect first. The employee who just quit was earning \$19 an hour, just slightly below the estimated mean hourly wage for Indiana. There are only about 300 landscape architects employed in Indiana. So it could be a little tough finding one in the neighborhood. However, the national mean hourly wage is \$21.40. It could also get expensive if you go out of Indiana to find one. Maybe you could do with less experience than before and be willing to hire a recent graduate. This could get the rate down to maybe \$13 or \$14 an hour.

Now about your son, the promising DJ — what are you going to tell him? The employment demand for announcers in Indiana is not so good. There were approximately 1,120 employed in 1998, but this is expected

to decline to 1,090 by 2008. That does not seem like too big a drop, but the 1999 estimate was already down to 1,020. Prospects for future employment will require considerably more study.

What about wages? The mean hourly wage for announcers in Indiana is \$10.41. In the bigger markets, like Chicago, the mean hourly rate is \$19.49, but it costs more to live in Chicago. Anyway, your son would probably start in one of the smaller markets, like Lafayette, where the mean is \$9.41. Of course, the starting wage will not be much more than minimum wage. These wages are a long way from what your son could make after graduating and entering the family business. Looks like some career counseling would be helpful (see Table 1).

Indiana occupational employment and wage data: Where do all these numbers come from? The backbone of all occupational information in Indiana is the Occupational Employment Statistics (OES) survey. This is an annual mail survey conducted in Indiana by five labor market analysts

employed by the Indiana Department of Workforce Development. These analysts contact more than 10,000 establishments each year to count employment and collect wage data for Hoosiers employed in more than 700 occupations in nonfarm establishments. The survey is actually a three-year endeavor, with one-third of the sample collected each year. This means the sample is really more than 30,000 establishments.

It is the sheer size of this survey that provides reliability to the data. Each single-year sample represents a one-third sample of both the certainty and non-certainty strata for the full three-year-sample plan. While estimates can be made from a single year of data, the OES survey is designed to produce estimates using the full three years of data. This allows production of estimates at fine levels of geography, industry and occupational detail, while also providing for significant sampling error reductions.

Combining multiple years of data has both statistical advantages and limitations. Significant reductions in sampling error can be achieved by

**Table 1: Long-term Indiana Statewide Occupational Projections: 1998–2008**

Occupational Title	1998	2008	Growth	Percent Change	Replacements	Total Openings
<i>Total, All Occupations</i>	3,109,420	3,496,960	387,539	12.46	744,373	1,131,912
Executive, Administrative & Managerial	182,660	206,590	23,936	13.10	32,428	56,364
Professional Specialty	530,380	640,700	110,327	20.80	105,116	215,443
Marketing & Sales	376,880	429,820	52,943	14.05	108,403	161,346
Administrative Support, Clerical	447,180	482,220	35,034	7.83	93,648	128,682
Service	468,650	517,390	48,741	10.40	153,700	202,441
Agriculture, Forestry, Fishing	92,440	93,900	1,460	1.58	18,045	19,505
Precision Production, Craft & Repair	391,680	433,900	42,215	10.78	92,005	134,220

Source: Indiana Department of Workforce Development

taking advantage of three years of data, which cover more than 70% of employment in the nation. (All 50 states and the District of Columbia conduct this survey, making the data comparable from area to area.) This feature is particularly important in improving the reliability of estimates for small domains in the population. Starting with the 1997 estimates, the OES program has used the over-the-year fourth-quarter wage changes from the Bureau of Labor Statistics, U. S. Department of Labor’s Employment Cost Index to adjust prior-year survey data before combining them with current-year data.

The OES survey has a new look. In 1999 the survey began using the Office of Management and Budget’s new occupational classification system: the Standard Occupational Classification system. The SOC system is the first OMB-required occupational-classification system for federal agencies, which eliminates the need for crosswalks. The OES survey now uses 22 major occupational groups from the SOC to categorize workers in one of almost 770 detailed occupations (see Table 2).

The occupational employment from OES becomes the base-year employment for the industry-occupational

matrix from which occupational projections are produced. A broad spectrum of Indiana’s occupational employment data is available on the INEWS Web site ([www.in.gov/dwd/inews](http://www.in.gov/dwd/inews)) utilizing four topics: Job Wages, Job Projections, Jobs by Industry and Industry by Jobs.

So what is the downside to the OES survey? It’s a voluntary mail response survey. Although having good occupational data available makes good business sense, it is sometimes difficult to convey the importance of the survey to 30,000 employers. The task keeps those five labor market analysts busy all year long.

**Table 2: 1999 Indiana Occupational Employment and Wage Estimates**

Occupational Title	Employment	Median Hourly (\$)	Mean Hourly (\$)	Mean Annual (\$)
Management	147,040	25.77	29.00	60,310
Business and Financial Operations	82,960	17.92	19.85	41,280
Computer and Mathematical	35,590	20.83	22.03	45,830
Architecture and Engineering	55,670	21.51	22.20	46,180
Life, Physical, and Social Science	13,700	18.23	19.24	40,020
Community and Social Services	25,530	13.31	14.19	29,510
Legal	11,910	19.86	24.03	49,980
Education, Training, and Library	146,680	16.32	16.79	34,930
Arts, Design, Entertainment, Sports, and Media	26,750	11.11	12.85	26,730
Healthcare Practitioners and Technical	142,340	16.85	20.02	41,630
Healthcare Support	57,360	8.93	9.45	19,650
Protective Service	48,860	11.81	12.63	26,280
Food Preparation and Serving Related	245,190	6.70	7.22	15,020
Building and Grounds Cleaning and Maintenance	92,350	8.13	8.83	18,370
Personal Care and Service	52,570	7.71	8.86	18,430
Sales and Related	288,510	8.49	12.01	24,980
Office and Administrative Support	443,510	10.25	11.08	23,050
Farming, Fishing, and Forestry	3,200	9.39	10.30	21,410
Construction and Extraction	142,040	16.00	16.82	34,990
Installation, Maintenance, and Repair	137,850	14.82	15.56	32,360
Production	489,740	11.53	12.77	26,560
Transportation and Material Moving	259,920	11.06	12.28	25,540

Source: Indiana Department of Workforce Development

# IN CONTEXT

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### **IN the Details**

*(continued from page 3)*

work counties. The filer must refer to a section of the IT-40 booklet to find the code, increasing the possibility that mistakes will be made with those numbers.

3. The number of workers is not comparable to estimates of the labor force from the Bureau of Labor Statistics. The methods of collection are completely different, as are the purposes of the data. For example, place of work and residence for tax purposes are based on a precise date — Jan. 1. The BLS estimates are based on a monthly survey of households.

4. Data for a category described as “out of state” refers to workers commuting into or out of St. Joseph County. Yet, the “out of state” category excludes our contiguous neighbors of Ohio, Michigan, Illinois, Kentucky, Wisconsin or Pennsylvania. Detail for those six states is shown separately.

Who are these residents who work or live beyond our neighboring states? Scrutinizing the form (available on the Web, happily, for 1999 and prior tax

years) provided some answers. For example, we are instructed to use a two-digit code to indicate the county in which we lived or worked. Two-digit codes for neighboring states are supplied on page 16 of this year’s instruction booklet. And if we didn’t work or live in one of those states on Jan. 1, we are instructed to use the “other state” code of 00.

Other directives that bear on the use of the commuting data include those relating to residence. We must indicate our county of residence based on where we lived on Jan. 1, even if we moved to a different county in Indiana after that date. Also, if someone lived outside Indiana but had income from Indiana, they are required to fill out an Indiana tax return. The county of work is defined in this same instruction booklet as the county of principal employment on Jan. 1.

Even with these caveats, this work/residence data set has the advantage of being annual, providing a yearly indicator of commuting patterns among and between Hoosier counties and our neighboring states.

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