INCONTEXT

July / August 2004 | INDIANA'S WORKFORCE AND ECONOMY | Vol. 5, Issue 4

INSIDE *this issue:*

Unemployment for June 2004

Indiana	U.S.
4.7%	5.8%

*Not seasonally adjusted

IN the Spotlight:

Quarterly Personal Income: Comparing Performance

The total volume of personal income in Indiana grew to $184 billion in the first quarter of 2004, up from $175 billion in the first quarter of 2003. Personal income estimates for all states were released on June 29 by the U.S. Bureau of Economic Analysis. Personal income includes income from work earnings, dividends, interest, rent and transfer payments (such as welfare and unemployment compensation).

The Past Year

- Indiana had quarter-to-quarter personal income gains between 1 percent and 1.9 percent each quarter throughout 2003.
- Between first quarter 2003 and first quarter 2004, Indiana's total personal income rose by 4.8 percent (see Figure 1). Nationally, total personal income grew by 5.2 percent over that same period.
- Indiana had the second highest year-over-year percent change (after Wisconsin) among the Great Lakes states and ranked 35th nationwide (see Figure 2).

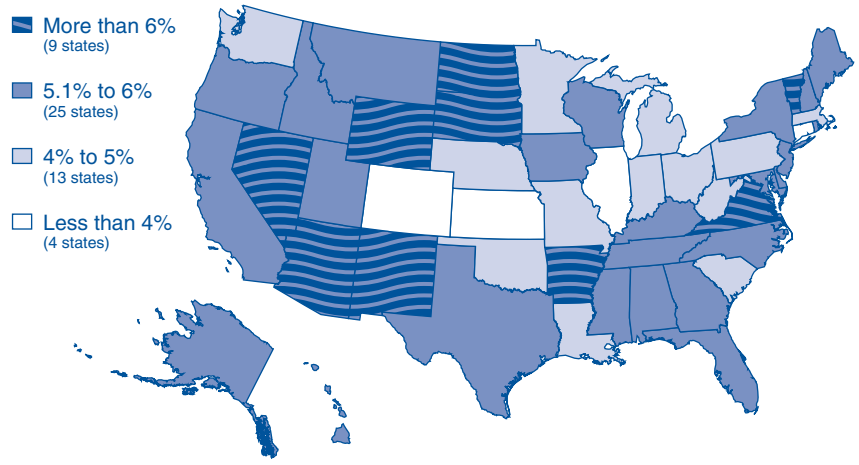
The Past Quarter

- Indiana had a modest 0.9 percent increase in personal income between the last quarter of 2003 and the first quarter of 2004 (preliminary),

(continued on page 2)

Figure 1: Change in Personal Income, 2003:1 to 2004:1

Indiana's total personal income rose 4.8%



Source: U.S. Bureau of Economic Analysis

IN the Spotlight

(continued from page 1)

matching the increases of Illinois and Michigan, but less than those for Ohio and Wisconsin.

- Durable goods earnings declined by 3.1 percent, while nondurable goods earnings increased by 2.3 percent. Indiana was alone among the Great Lakes states in posting a decline in durable goods earnings during this time period.
- Construction earnings remained strong with an increase of 4.8 percent, second only to Wisconsin among the Great Lakes states. Earnings in the financial services sector posted gains of 3.5 percent.
- There is significant fluctuation in rankings for most states' percent change for each preceding quarter (see Table 1). Caution is advised in using these quarter-to-quarter rankings because many factors play into the variability of the ranks. Rather, focusing on the short- and long-term trends among states can provide a better measure of relative progress. As with many Midwestern and Eastern states, Indiana is doing well when compared to its neighbors, but not so well when compared to states in the South and West, many of which are matching or surpassing the national average growth rate (see Figure 3).

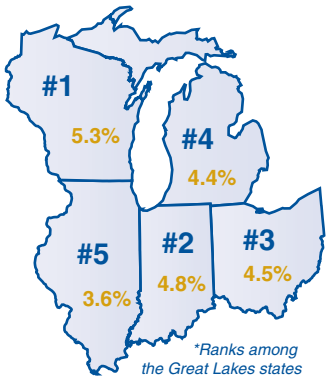
—Carol O. Rogers, Associate Director, Indiana Business Research Center, Kelley School of Business, Indiana University

These data and more can be found in abundance on STATS Indiana (www.stats.indiana.edu) and BEA.gov (www.bea.gov).

Indiana's year-over-year percent change of 4.8 percent ranked it second among the Great Lakes states and 35th nationwide.

Figure 2: Year-over-Year Change

Wisconsin led the region at 5.3%



Source: U.S. Bureau of Economic Analysis

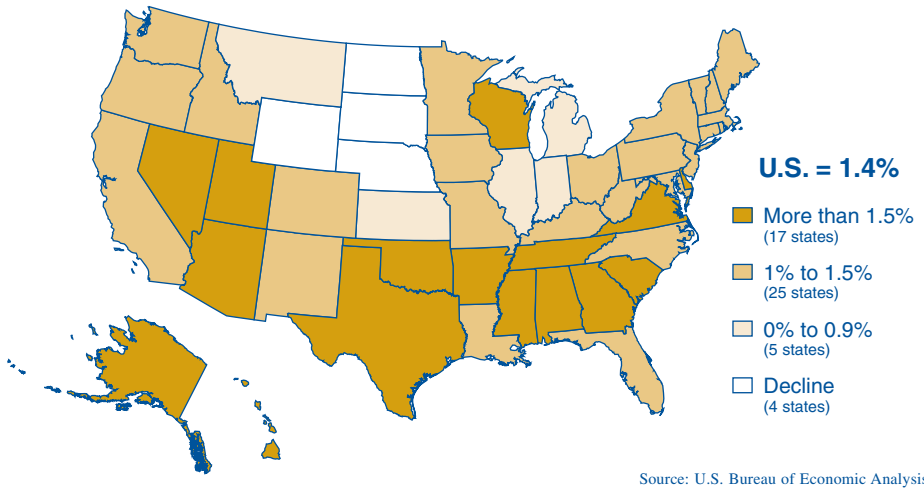
Table 1: Rankings Can Fluctuate Considerably Between Quarters

Selected States	2003:1 to 2003:2	2003:2 to 2003:3	2003:3 to 2003:4	2003:4 to 2004:1
Illinois	31	45	45	44
Indiana	27	39	12	42
Kentucky	24	31	27	30
Michigan	32	47	20	43
Minnesota	11	5	48	23
New Jersey	14	11	46	22
Ohio	43	50	13	28
Pennsylvania	30	40	28	38
Wisconsin	36	32	34	9

Source: U.S. Bureau of Economic Analysis

Figure 3: Quarterly Change in Personal Income, 2003:4 to 2004:1

Indiana grew 0.9%, matching the growth of Illinois and Michigan



Source: U.S. Bureau of Economic Analysis

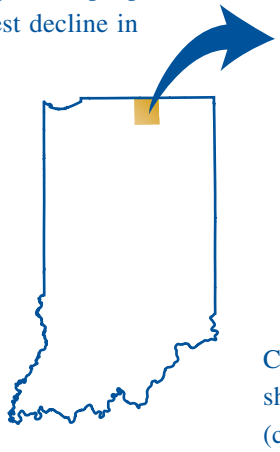
The Elkhart-Goshen Metro Area

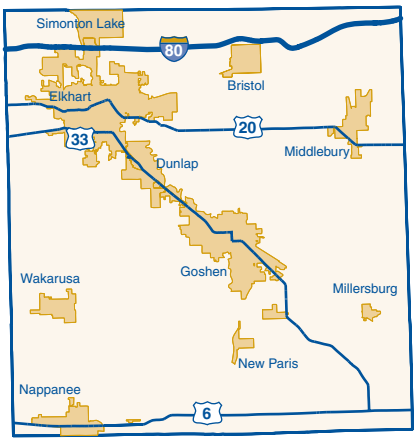
The Area

The Elkhart-Goshen Metropolitan Statistical Area (metro), comprised of just Elkhart County in northern Indiana, borders Michigan and is adjacent to the South Bend–Mishawaka metro. Elkhart and Goshen are the two population centers, while the smaller Nappanee and Middlebury are two of the larger Amish settlements in the United States.

Elkhart County grew consistently throughout the twentieth century and reached 188,779 residents by 2003 (exhibiting a 3.3 percent growth over Census 2000). Projections from the Indiana Business Research Center indicate that Elkhart's population growth will continue at rates higher than the state, particularly among those under age 45.

Between 2000 and 2003, the metro area gained nearly 6,000 residents through migration and natural increase (births minus deaths). Total net migration during that time period was 620 people. Elkhart County experienced a net influx of 3,172 international migrants, the third largest number in the state. Meanwhile, net domestic migration declined by 2,552 people, the state's sixth largest decline in domestic migration.





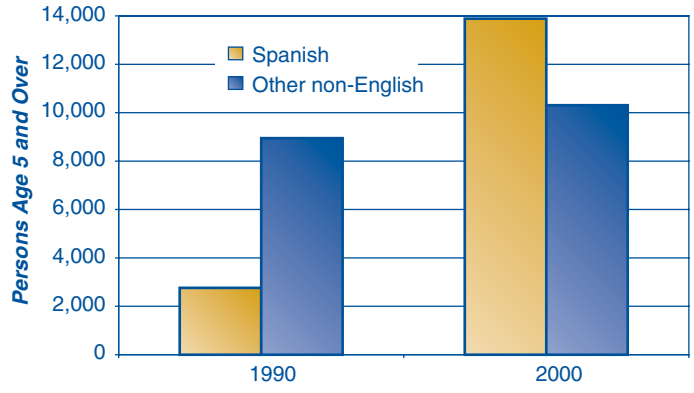
Number of Hispanics on the Rise

Between 1990 and 2000, the number of Hispanics in Elkhart-Goshen increased 455.9 percent. This growth of over 13,000 people ranked third in the state. With such a large increase, Hispanics jumped from less than 2 percent of the Elkhart-Goshen population in 1990 to nearly 9 percent in 2000, the largest percentage point change in the state. By 2002 (the latest year for which data is available), the Hispanic population had reached 18,990—a 2,690 person increase from Census 2000, which brings the Hispanic share of total population to 10.2 percent (compared to 3.8 percent statewide).

Language is one implication of this demographic shift. While 85.6 percent of the population spoke only English in 2000, Spanish became dominate among those speaking another language at home (see Figure 1). The number of people speaking Spanish at home grew 402.6 percent between 1990 and 2000, compared to 15.3 percent for other non-English languages (mostly attributable

Figure 1: Foreign Languages Spoken at Home in Elkhart

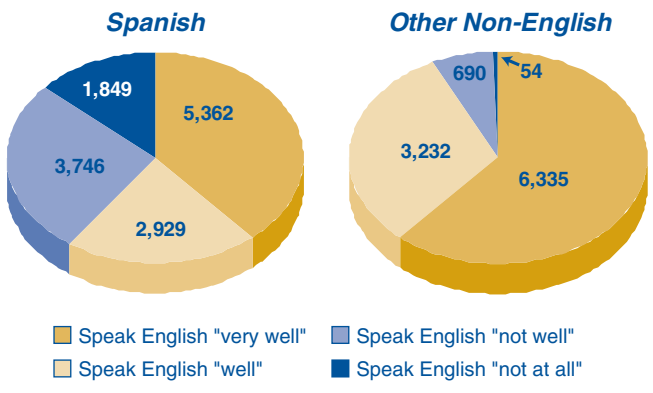
Spanish grew more than 400% between 1990 and 2000



Source: U.S. Census Bureau

Figure 2: Ability to Speak English in Elkhart, 2000

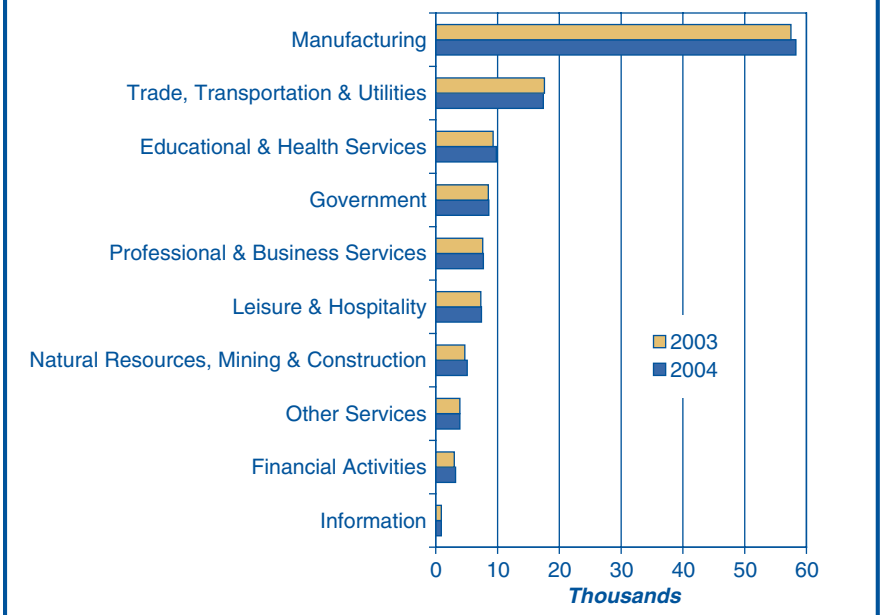
1,849 Spanish speakers in Elkhart do not speak English



Source: U.S. Census Bureau

Figure 3: Elkhart's Industrial Mix, May 2003 and 2004

Manufacturing is by far the largest sector



Source: Indiana Department of Workforce Development

to the Amish communities who speak Pennsylvania Dutch or some other Germanic language) and 9.6 percent for those who use English alone.

Rapid growth in linguistically isolated households (where all members 14 years old and over have at least some difficulty with English) is cause for concern. Isolated households increased nearly 150 percent during the past decade to encompass over 2,400 families. One can extrapolate from Figure 2 that nearly all of the linguistically isolated households are speaking Spanish.

Industrial Mix and Jobs

Even though Elkhart was built around an island near the convergence of the St. Joseph and Elkhart rivers that resembles an elk's heart (hence, the name Elkhart), the true heart of the city is manufacturing. As of the third quarter of 2003, manufacturing had fallen to just over 20 percent of employment statewide and 11 percent nationally, yet over half of all Elkhart County employees worked in manufacturing. Recreational vehicles (RVs) and manufactured housing are the products of choice. Four of the five largest companies in the county (Forest River Industries, Fairmont Homes, Monaco Coach Corp., Holiday Rambler and Coachmen Industries) are in the RV industry, with several other RV and manufactured housing companies in the top 20, according to the Elkhart Chamber of Commerce. In recent news, the Forest River RV manufacturer has announced plans to build three new plants in Goshen by August of next year.

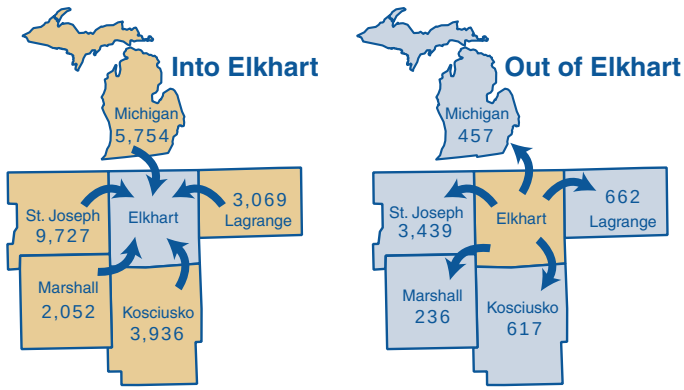
Looking at the monthly data for May 2004, 58,300 people were employed in manufacturing, posting a gain of 800 workers since May 2003 (see Figure 3). The largest manufacturing subsector—transportation equipment manufacturing—grew by 1,400 jobs, which was offset by losses elsewhere. Overall, nonfarm employment increased by 2,000 to a total of 122,300 jobs.

According to a recent Manpower Employment Outlook Survey, over half of Elkhart companies interviewed plan to hire more employees (the statewide average was 33 percent), and none were planning cutbacks during the third quarter of 2004. This ranked Elkhart-Goshen's employment outlook sixth in the nation.

The improving business scene, combined with rumors of rising interest

Figure 4: Commuting Patterns, 2003*

St. Joseph County sends 9,727 workers to Elkhart



Source: STATS Indiana (2003 tax year commuting profiles)

*Data are preliminary.

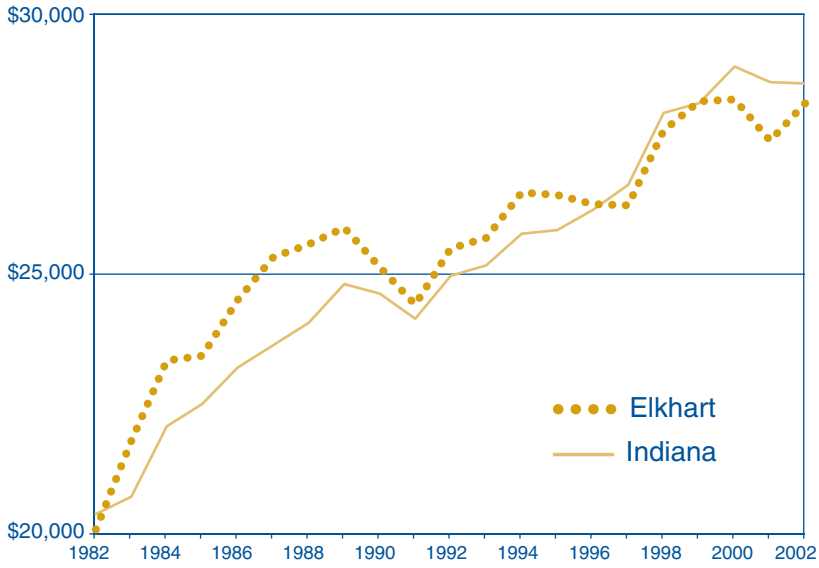
Table 1: Weekly Wages, 2003:3

Industry	Elkhart	Indiana
Total	**$623**	**$627**
Management of Companies and Enterprises	$1,277	$1,052
Utilities	$1,184	$1,074
Construction	$745	$735
Finance and Insurance	$727	$833
Wholesale Trade	$716	$830
Manufacturing	$696	$835
Educational Services	$693	$639
Professional, Scientific and Technical Services	$692	$825
Transportation and Warehousing	$664	$682
Health Care and Social Services	$623	$644
Information	$622	$708
Public Administration	$585	$620
Real Estate and Rental and Leasing	$517	$522
Other Services (except Public Administration)	$445	$417
Retail Trade	$411	$402
Agriculture, Forestry Fishing and Hunting	$389	$423
Administrative and Support and Waste Management and Remediation Services	$370	$419
Arts, Entertainment and Recreation	$260	$437
Accommodation and Food Services	$202	$217

Source: Indiana Department of Workforce Development

Figure 5: Per Capita Personal Income, 1992 to 2002

In 2002, Elkhart's PCPI was 98.7 percent of the state average



Source: U.S. Bureau of Economic Analysis; adjusted for inflation

rates and steel prices, has caused an upswing in commercial building projects. According to Elkhart's newspaper, *The Truth,* 16 commercial building projects are underway in Goshen this year, almost reaching the total for all of 2003 and at a value worth twice as much.

Over 91,000 people both lived and worked in Elkhart County in 2003. Because of its close ties to South Bend and Mishawaka, St. Joseph County sends the most workers into Elkhart (see Figure 4). In addition, over half of those commuting out of Elkhart work in St. Joseph County.

Income and Wages

At $623, the average weekly wage in the Elkhart-Goshen metro was a few dollars less than the state average for the third quarter of 2003. Most industries fell below the statewide average, led by arts, entertainment and recreation with a difference of $177 per week. Manufacturing wages ($696) were also significantly less than Indiana's with a weekly difference of $139. On the flip side, those managing companies and enterprises earned $1,277 per week, averaging $225 more than the state average.

Despite wages slightly below the state average, the Elkhart-Goshen metro was ranked first among the nation's metro areas for housing affordability by the National Association of Home Builders for the first quarter of 2002 (the latest quarter for which the housing opportunity index has been calculated). This index calculates affordability based on the annual median family income and average home ownership costs in a given area. As it turns out, a family earning the median family income can afford 94.9 percent of the housing in Elkhart-Goshen (trailing right behind were Kokomo, Ind., at 94.8 percent and Fargo, N.D., at 94.5 percent).

For the past twenty years, Elkhart's per capita personal income (PCPI) has slightly exceeded the state (see Figure 5). However, Elkhart-Goshen did not keep pace with the boom of the late 1990s and has yet to regain its lost ground. As of 2002, PCPI for the county was $27,665, or 98.7 percent of the state's average.

—Rachel Justis, Managing Editor, Indiana Business Research Center, Kelley School of Business, Indiana University

Who's Growing and Who's Not?
City and Town Population in 2003

New data show that Indianapolis has maintained its rank as the 12th largest city in the United States every year since the 2000 Census. However, by this time next year, the Circle City will probably give up that spot to 13th-ranked Jacksonville, Florida, which is the third fastest-growing of the nation's 25 largest cities.

Each summer, the U.S. Census Bureau releases official population estimates for the nation's counties, cities, towns and other subcounty units. The most recent figures represent the Bureau's best guess as to populations on July 1, 2003. Unlike the major census that actually counts people every 10 years, these annual updates use administrative records to estimate population changes since the 2000 census.

This procedure pegs the growth of Indianapolis at only 0.2 percent from 2000 to 2003, while Jacksonville grew by an impressive 5.2 percent. Most of the fastest-growing cities of the nation are located in the Sun Belt states of the South and West; however, two Illinois cities made the 25-fastest-growing list: Peoria (17.4 percent) and Aurora (13.3 percent).

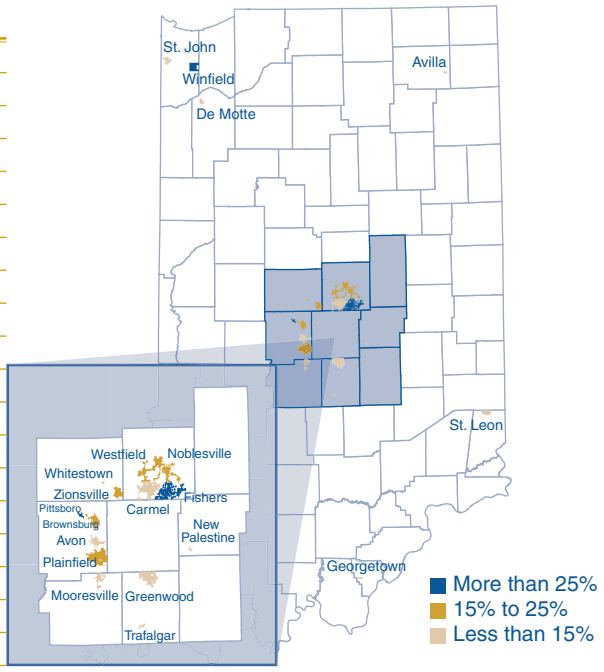
Shifting the focus closer to home, Census estimates reveal a mixed picture of population growth and shrinkage throughout Indiana. Of the state's 569 incorporated cities and towns, 219 grew in population, with estimated growth ranging from one person in several places to nearly 10,000 people in the booming town of Fishers (no, it's not a city!).[1] Population gains for all 219 growing cities and towns totaled 181,117 people. It is important to note that the population changes described here are based on a Census 2000 figure adjusted to reflect boundary changes submitted to the Census Bureau through January 2003.

Figure 1 presents the changes in Indiana's 20 fastest-growing cities and towns. Seven of these fast-growing places are small towns with fewer than 5,000 residents, where a modest change can represent a relatively large percentage of the total population. But nine of the fastest-growing cities and

Figure 1: Twenty Fastest-Growing Cities and Towns in Indiana, 2000 to 2003

Fishers added nearly 10,000 residents in three years

Indiana Places	Percent Change 2000 to 2003	Growth 2000 to 2003	Estimated Population 2003
Winfield	43.8	888	2,916
Pittsboro	33.7	535	2,123
Fishers	26.3	9,955	47,790
Whitestown	22.0	105	583
Westfield	20.1	1,871	11,182
Zionsville	17.3	1,525	10,336
Brownsburg	16.3	2,374	16,956
Plainfield	15.5	2,870	21,386
Noblesville	15.0	4,311	33,046
Mooresville	14.1	1,306	10,581
Carmel	12.9	4,907	43,083
St. John	12.4	1,056	9,545
Trafalgar	12.2	97	895
Avon	11.6	729	7,017
De Motte	10.9	351	3,585
New Palestine	9.6	121	1,385
Avilla	9.3	191	2,240
Greenwood	8.8	3,199	39,545
Georgetown	8.4	188	2,415
St. Leon	8.3	38	496



Source: U.S. Census Bureau

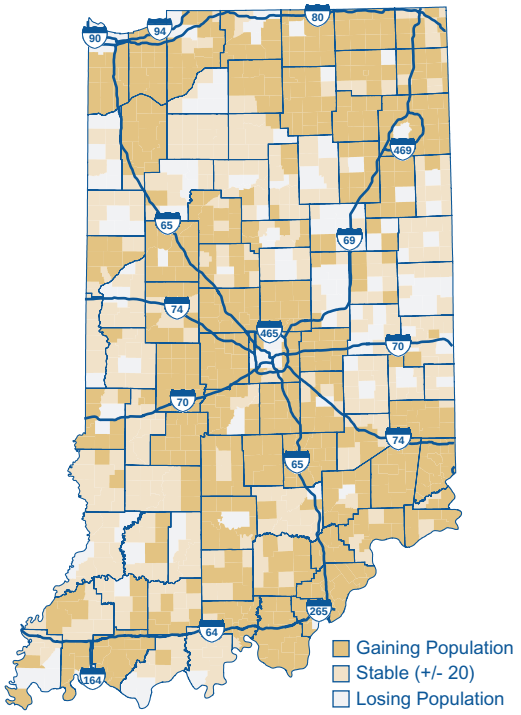
Table 1: Twenty Largest Cities and Towns, 2003

Place	Estimated Population 2003	Population Rank 2003	Numeric Change 2000 to 2003	Percent Change 2000 to 2003
Indiana	**6,195,643**		**115,137**	**1.9**
Indianapolis	793,430	1	1,504	0.2
Fort Wayne	219,495	2	-988	-0.4
Evansville	117,881	3	-3,701	-3.0
South Bend	105,540	4	-2,379	-2.2
Gary	99,961	5	-2,785	-2.7
Hammond	80,547	6	-2,501	-3.0
Bloomington	70,642	7	-379	-0.5
Muncie	66,521	8	-1,494	-2.2
Lafayette	61,229	9	704	1.2
Anderson	58,394	10	-1,346	-2.3
Terre Haute	58,096	11	-1,588	-2.7
Elkhart	51,682	12	-784	-1.5
Mishawaka	48,396	13	1,782	3.8
Fishers	47,790	14	9,955	26.3
Kokomo	46,154	15	-355	-0.8
Carmel	43,083	16	4,907	12.9
Lawrence	40,795	17	1,880	4.8
Greenwood	39,545	18	3,199	8.8
Columbus	39,058	19	-7	0.0
Richmond	38,201	20	-938	-2.4

Source: U.S. Census Bureau

Figure 2: Township Change, 2000 to 2003

Over 75% of Indiana's 1,008 townships grew



Source: U.S. Census Bureau

towns have more than 10,000 residents. And, as shown in Figure 1, 14 of these fast-track places are located in the Indianapolis metropolitan area.

Population changes in Indiana's largest cities have varied greatly since the 2000 Census, as displayed in Table 1. Only seven of the 20 largest cities grew at all during this period. The rest of the large cities experienced population losses ranging from seven people in Columbus to 3,701 in Evansville. Altogether, population declines were experienced by 321 of Indiana's 569 cities and towns. These losses totaled 36,295.

So, if shrinking towns and cities significantly outnumber growing ones, is Indiana losing people? Far from it: the state's population grew by an estimated 115,137 people between April 1, 2000, and July 1, 2003. On average, cities and towns with increasing populations grew by significantly larger amounts than declining places shrank.

A closer analysis of where the population has increased and decreased examines changes for all of Indiana's 1,008 townships. More than three-fourths of the state's townships grew during the first three years of the decade, as evident in Figure 2.

All but one of the 10 townships showing the largest estimated population gains are in the counties surrounding Indianapolis. This reflects a trend in which population is shifting from many of the state's larger cities to the surrounding towns and unincorporated areas. The trend is also evident in the townships with the largest decreases in population. The two biggest losers are at the old, industrialized northern end of Lake County, while St. John township, farther south in Lake County, is the seventh fastest-growing township in the state.

Population estimates for all Indiana counties, cities, towns and townships are available online at www.stats.indiana.edu – click on Population under Data Tables.

Notes

1. A Special Census conducted for the Town of Fishers yielded a population or 52,390 as of November 2003. Special Censuses are actual head counts, not the results of estimation formulas. Thus, Fishers is growing faster than current estimates reveal. This special census will be taken into account when the 2004 estimates are released next year. See the official posting on the Census Bureau's web site at www.census.gov/field/www/specialcensus/files/indiana.htm

—Jerry Conover, Director, Indiana Business Research Center, Kelley School of Business, Indiana University

Vehicle Registrations: An Economic Indicator?

Every year Hoosiers register their vehicles so they can drive legally and so the state can collect vehicle excise taxes and registration fees. Can we extract any economic insight from such a routine activity? Yes, but bear in mind that vehicle registrations, if they are to be used as an economic indicator, will be most useful when viewed in relation to other statistics.

As shown in Figure 1, Indiana posted its largest yearly decline in registrations last year with 186,314 fewer vehicles registered, a decline of 3.2 percent. Nearly 90 percent of the decline can be attributed to the decline in passenger car registrations. Declines in truck and car registrations were offset by increases in trailer, motorcycle and other components of total registrations. Fewer registrations are likely due to an oversaturated market and the economic uncertainty that weighed on consumers throughout 2003. Excise taxes in Indiana may also have played a part as people registered only the cars they must use for their transportation needs and excluded vehicles used strictly for recreation.

Of course, Figure 1 may not tell the whole story. Anecdotal evidence suggests that some people living in Indiana may register their cars out of state, or hold onto another state's registrations even after moving to Indiana, perhaps to avoid excise taxes. Therefore, the number of resident cars may be different than the number of registered cars. In fact, Utah reported in October 2001 that 2.8 million in state revenues are lost each year due to vehicles that should be registered in Utah but are inappropriately registered in other states.[1]

Fewer New Cars

New car registrations (model years 2003 and 2004) for popular U.S. and foreign makes[2] dropped off from 2002 to 2003 by 10.2 percent, or 25,501 cars (see Figure 2). Note that car registrations exclude trucks and SUVs registered as trucks. Hoosiers prefer Chevrolets and Fords, which comprised about 30 percent of new car registrations.

The fact that Hoosiers bought or leased fewer new cars in 2003 may be due to a wait-and-see attitude as economic uncertainty remained high and consumer confidence stayed low. For example, outside of October, Indiana had lower levels of total non-seasonally adjusted nonfarm jobs in the second half of 2003 compared to 2002.

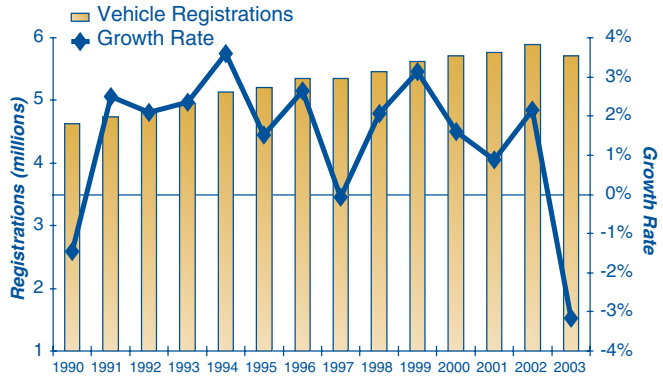
Newer and Older Cars

In 2003, registrations for newer cars (model years 2000, 2001 and 2002) increased by 11,108—the largest yearly increase since 2000. Some of these vehicles may be coming off lease, some may be cars that dealers still had in their inventory and were newly purchased, and others may be the result of people moving into the state. A net migration figure of 12,166 people coming into the state from 2002 to 2003 seems to support the latter.

Since financing terms usually span three to five years, it is not surprising that most Hoosiers are driving older model years. In fact, 72 percent of registered cars had a vehicle year of

Figure 1: Total Hoosier Vehicle Registrations

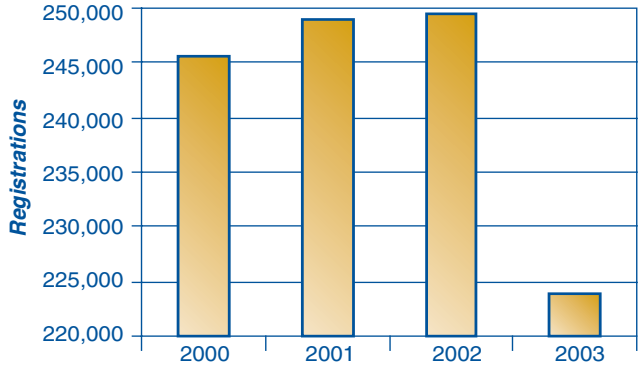
Indiana registered 5.7 million vehicles in 2003



Source: Indiana Bureau of Motor Vehicles

Figure 2: New Car Registrations

Registrations dropped 10.2% from 2002 to 2003



Source: Indiana Bureau of Motor Vehicles

1999 or earlier. In 2003, the most common older Hoosier cars on the road were Chevrolets (18.6 percent) and Fords (15.2 percent).

In 2001, there was a decline of 35,060 in older vehicles being registered in Indiana (vehicle years 1997 or earlier). "Keep America Rolling" financing incentive campaigns in the fall of 2001 may have led Hoosiers to dump their old clunkers for a new car at 0 percent APR for 60 months.

However, there was a net gain of 27,722 (or 1.2 percent) in the number of older vehicles registered between 2000 and 2003. Growth in older used vehicle registrations in the past two years could be argued as good or bad—good for used car dealerships and motor vehicle parts and repair shops, but not so good for new car dealers.

Most Popular Cars

Chevrolets are the most popular cars among Hoosiers (see Figure 3). The highest concentration of Chevys is in east central Indiana (with a high in Madison County of 29 percent), while lower concentrations are found in the state's larger cities. Also, Fords are notably prevalent within the Louisville metro area.

Hoosier Trucks and SUVs

Truck registrations in Indiana accounted for 24.4 percent of total registrations in 2003, some of which are sport utility vehicles (SUVs). The release of the Census Bureau's 2002 Vehicle Inventory and Use Survey (VIUS), as part of the Economic Census, provides some additional insight. The Census Bureau estimates that the number of SUVs registered in Indiana increased 105 percent from 1997 to 2002 (note that truck registrations for the VIUS report includes those SUVs registered as passenger cars in Indiana). Out of the total 2002 truck registrations in Indiana, the survey found 25 percent were SUVs while 46 percent were pickup trucks. The report also found that Indiana has approximately one pickup truck for every four licensed Hoosiers and one SUV for every seven licensed Hoosiers. To access the VIUS report providing more detail regarding trucks and SUVs in Indiana, go to www.census.gov/svsd/www/02vehinv.html.

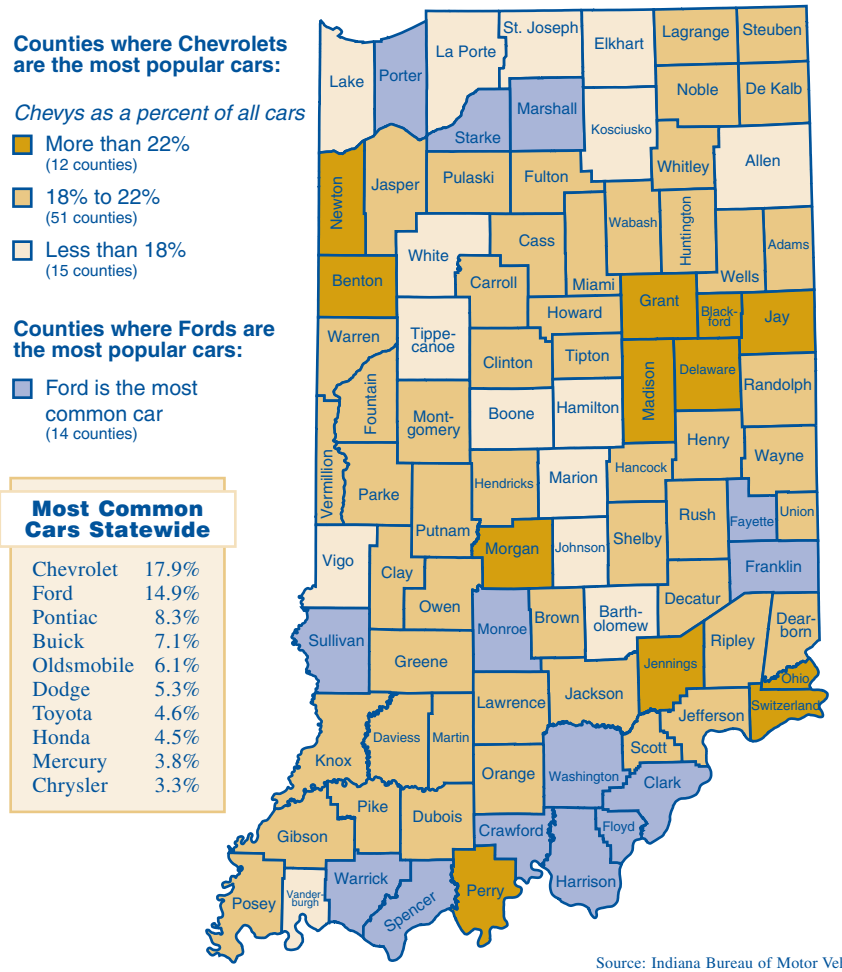
Notes

1. More on Utah's findings are available at www.le.state.ut.us/audit/01_10rpt.pdf.
2. The BMV file that provides detailed vehicle data has different reporting requirements from the total registration file discussed earlier.

—Amber Kostelac, Data Manager, Indiana Business Research Center, Kelley School of Business, Indiana University

Figure 3: Most Popular Cars by County, 2003

Chevys are the most common car in 78 out of 92 counties



Source: Indiana Bureau of Motor Vehicles

Life Sciences in Indiana: Current Trends by Sector

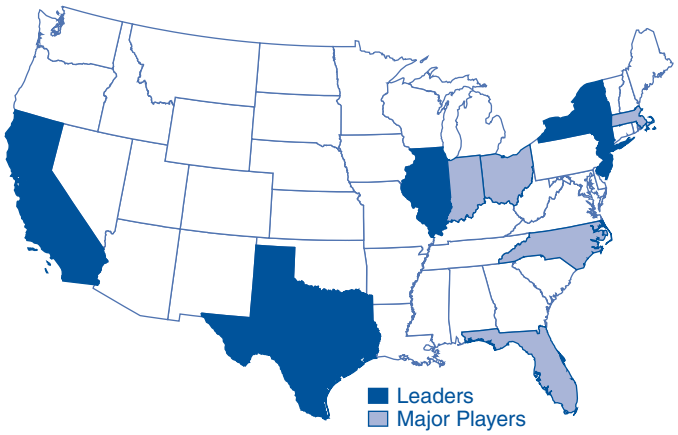
Life science is one of four targeted industries in Indiana. Using the Biotechnology Industry Organization's (BIO) guidelines, Indiana is part of an important group of life science states (see Figure 1).

Indiana's strength is in life science manufacturing with 4.9 percent of the U.S. jobs and a 6.7 percent job growth since 2001 compared to a 1.2 percent national decline, using 2003 preliminary data (see Table 1). Indiana is outperforming the U.S. in the pharmaceutical and medicine and medical equipment and supplies sectors (see Figure 2). Since 2001, Indiana jobs in medical equipment and supplies increased 11.3 percent (1,500 jobs) compared to a U.S. decline of 2.1 percent. During this period, Indiana accounted for one in eight net jobs added to national pharmaceutical and medicine employment. Although jobs in the agricultural-related sector declined in Indiana, on a percentage basis, it was approximately one-third less than the national rate of decline. Indiana's electrical medical apparatus sector showed the most significant decline on a percentage basis. However, Indiana's share of this sector is small because the industry is highly concentrated in a few states (with nearly a quarter of all jobs in California).

Since 2001, Indiana experienced a slight decline in nonmanufacturing life science jobs (-0.9 percent) while the nation grew 4.8 percent. It should be remembered, however, that agreement on what constitutes this sector is subject to debate and a considerable amount of research activity and jobs are not captured by the NAICS codes used to define life sciences. Life science research conducted by Eli Lilly, Purdue and Indiana Universities and various Indianapolis hospitals would be reported under codes for manufacturing, education and hospitals, respectively.

Figure 1: Ten Leaders in the Life Science Industry

Indiana plays a major role in life sciences manufacturing



Source: Research Office of the Indiana Department of Commerce

Table 1: Jobs in Life Sciences, 2003

Life Science Sectors		Indiana				United States		
		Jobs 2003	Change from 2001 Number	Change from 2001 Percent	Share of U.S.	Jobs 2003	Change from 2001 Number	Change from 2001 Percent
Total		**55,877**	**2,427**	**4.5%**	**3.0%**	**1,869,688**	**37,207**	**2.0%**
Manufacturing	Agricultural Life Sciences	4,928	-316	-6.0%	3.6%	137,006	-13,496	-9.0%
Manufacturing	Pharmaceutical and Medicine Manufacturing	19,957	1,421	7.7%	6.8%	294,100	11,000	3.9%
Manufacturing	Electrical Medical Apparatus Manufacturing	572	-123	-17.7%	0.6%	99,482	-1,097	-1.1%
Manufacturing	Medical Equipment and Supplies Manufacturing	15,563	1,581	11.3%	5.1%	304,700	-6,500	-2.1%
Nonmanufacturing	Medical, Dental and Hospital Equipment and Supplies Wholesalers	2,910	296	11.3%	1.7%	168,400	15,700	10.3%
Nonmanufacturing	Drugs and Druggists' Sundries Merchant Wholesalers	3,561	-182	-4.9%	1.7%	210,500	8,800	4.4%
Nonmanufacturing	Research and Development (Physical, Engineering and Life Sciences)	3,528	-265	-7.0%	0.7%	475,600	13,200	2.9%
Nonmanufacturing	Medical Laboratories	4,029	-139	-3.3%	3.1%	128,500	4,700	3.8%
Nonmanufacturing	Diagnostic Imaging Centers	829	154	22.8%	1.6%	51,400	4,900	10.5%

Source: Research Office of the Indiana Department of Commerce; U.S. Bureau of Economic Analysis

Even if these data were available, however, it is likely that Indiana would still be underperforming in most nonmanufacturing life science sectors.

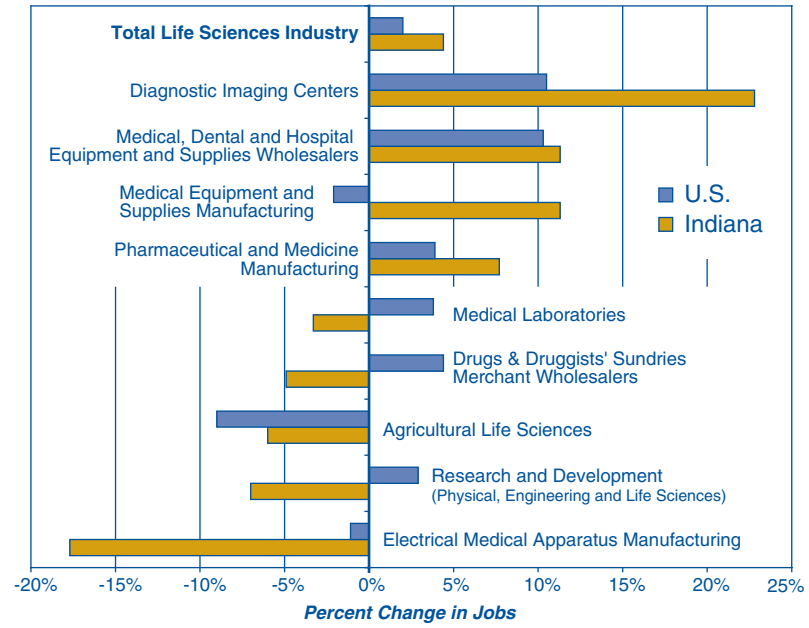
Life Sciences Rankings

To get detailed rankings for all states, 2002 benchmarked data was used. There may be slight differences in Indiana's share of U.S. jobs from the preliminary 2003 data, but relative rankings will show little change.

- **Starch and Vegetable Oil Manufacturing:** Led by companies such as A.E. Staley, Cargill, Central Soya and National Starch, Indiana ranks third.
- **Ethyl Alcohol Manufacturing:** With so little information available, it is difficult to determine the significance of Indiana's share of the nation's jobs. Since no state has a concentration, if synthetic fuels ever become common, Indiana will be on an equal footing.
- **Agricultural Chemicals:** Indiana ranks seventh in agricultural chemical manufacturing (fertilizers and pesticides) with a 5.6 percent share of U.S. jobs, but has few jobs in other basic organic chemical manufacturing.
- **Pharmaceutical Manufacturing:** Indiana ranks seventh in the combined pharmaceutical and medicine manufacturing sector and ranks fifth when pharmaceuticals is ranked alone. Pharmaceutical and medicine manufacturing is made of four sectors (pharmaceuticals plus three other small sectors), and while the three other sectors are small to begin with, Indiana's difference in ranking illustrates that Indiana has very few jobs in them. These sectors are involved with manufacturing and processing uncompounded botanicals, producing substances used in diagnostic testing and manufacturing. It may be that Eli Lilly has a number of jobs involved in these three sectors, but reporting procedures include them in pharmaceutical manufacturing.
- **Electromedical Manufacturing:** Only a handful of states have more than 1,000 jobs in any of these sectors. For example, Utah ranks fourth in irradiation apparatus with fewer than 1,000 jobs. Some Hoosier companies are more involved in producing components for electromedical equipment than the final product. Unfortunately, there is no parts sector for electromedical equipment, so determining its exact size and importance is not possible.
- **Medical Equipment and Supplies Manufacturing:** This is a complex sector producing a wide range of products, including hospital furniture, contact lenses, dental equipment, surgical tools and orthopedic devices. Indiana excels in the larger surgical instruments and appliance sectors, ranking fifth in both categories. While many states saw job declines during the last recession, Indiana continued to experience job growth in both sectors. This growth has been steady over the past decade and there is no reason that Indiana's rankings in these areas should not continue to climb.
- **Distribution:** The job performance of Indiana's life sciences distribution

Figure 2: Percent Change in Jobs, 2001 to 2003

Hoosier diagnostic imaging centers grew 22.8%



Source: Research Office of the Indiana Department of Commerce; U.S. Bureau of Economic Analysis

IN CONTEXT

Published six times per year by a partnership of:

Indiana Business Research Center
Kelley School of Business
Indiana University

Director: Jerry Conover
Editor: Carol O. Rogers
Managing Editor: Rachel Justis
Circulation: Nikki Livingston

Bloomington Campus
1275 E. Tenth Street, Suite 3110
Bloomington, IN 47405

IUPUI Campus
777 Indiana Avenue, Suite 210
Indianapolis, IN 46202

Web: www.ibrc.indiana.edu
E-mail: context@indiana.edu

INDIANA UNIVERSITY
KELLEY
School of Business

Indiana Department of Commerce

Executive Director: Tim Monger
Research Director: Dennis Paramore

One North Capitol
Suite 700
Indianapolis, IN 46204

Web: www.indianacommerce.com

Indiana
Be in a state of progress
Indiana Department of Commerce

IN the Workforce

(continued from page 11)

sectors presents something of a mystery. Even considering the fact that many wholesale operations locate near their customers, Indiana's jobs as a share of the United States is below the state's share of the national population. The fact that Indiana is a major producer of medical equipment only adds to the mystery. The importance of this sector is best illustrated by wages. The average annual U.S. wage for the wholesale sector in 2002 was $49,241, while it was $62,858 for medical equipment wholesalers and $70,083 for druggists' goods wholesalers.

- **Physical, Engineering and Biological Research:** Indiana's job ranking in this sector is well behind the leaders. The difficulty in using this ranking is that this sector includes non–life sciences research areas, such as engineering, electronics, mathematics, forestry and oceanography. With the recent emphasis being given to research, however, job growth in this sector may attract considerable attention, even if the growth is not life science oriented.
- **Medical and Diagnostic Laboratories:** This is another sector that may be driven by population levels; but since Indiana ranks above its share of the population, it suggests more than population is driving job levels. It must be remembered that many hospitals and other medical providers outsource their tests and diagnostic services. With increasing Internet capabilities, outsourcing of these types of services will be increasing.

More information on these life sciences rankings will be available on the web at: www.incontext.indiana.edu/2004/july-aug04/workforce.html

—Ted Jockel, Senior Economist, Indiana Department of Commerce

For the latest information and news, these are must-bookmark websites:

IN Context Online
www.incontext.indiana.edu

STATS Indiana
www.stats.indiana.edu

Indiana Economic Digest
www.indianaeconomicdigest.net

Indiana Business Research Center
Kelley School of Business
Indiana University, IUPUI Campus
777 Indiana Avenue, Suite 210
Indianapolis, IN 46202

Nonprofit Org.
U.S. Postage
PAID
Bloomington, Indiana
Permit No. 2