IN the Spotlight:

Business Uses of Census Data

The results are in — well, some of them, with more to come over the next year. And while the first job of the census was to apportion seats in Congress and then provide population counts for redistricting, we recognize that census data are essential to a business's bottom line.

If your company buys, or perhaps even does its own, market research, chances are that the basis of that research is census data. Few surveys get even close to the quantity or quality of data produced from the census. The census, which is conducted every 10 years, elicits a veritable boatload of information about how Americans — and Hoosiers — live.

For businesses whose sales depend on individual consumers, the census is essential. It tells us how many people live in a given area. It describes their living arrangements, ages, income, educational attainment, commuting patterns and occupations. It even describes the kinds of homes people have, in terms of age of home, number of rooms, value, whether it has complete kitchen and plumbing facilities, the availability of telephones and automobiles and the type of home-heating fuel used.

That information can be taken, in an aggregated form (all individual responses to the census are confidential, so don’t look to the census for a mailing list) and crunched (continued on page 2)
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to help determine markets or determine skill levels and reasonable commute distance for the labor market. Because the census asks about language spoken at home, it can even be used to determine if a given area may have a large number of people who speak a particular language.

Cases in Point
• With the majority of mothers in the workplace, day care is a necessity. If someone wants to open a daycare center, the first thing to do is to look at various locations based on the number of children under age 6 living within a 1- to 5-mile radius.
• A person with skills in renovating older homes would search for those neighborhoods where much of the housing was built prior to 1950 or 1940.
• A company considering relocation would look for areas with a significant supply of skilled labor, combining those data with commuting patterns, occupation and education data.
• A company that provides personal services, such as cleaning or lawn-care or car detailing, would seek out information on middle- and high-income neighborhoods.
• A law firm, looking at the aging of the population in the state, may decide to expand its practice in law specific to the elderly.

Challenges to Using the Data
The data are plentiful, as are the uses. But finding the specifics can sometimes pose a challenge. The sheer quantity of information to sort and sift can be overwhelming. This is where market research companies and consultants come in to provide tailored reports for specific needs, for a fee, of course. CACI Demographics is one such market research company. It uses census data as the foundation of much of its work, but customizes the data for specific purposes. Lifestyle segmentation is one such customization of census data and is combined with vendor estimates of income. (Census data on income will not be available for almost another year.)
A free version by zip code is available on CACI’s Web site. When the author typed in the zip code 46205, the lifestyle segmentation description was “Urban Working Families.” Colleagues’ zip codes elicited a variety of other catchy appellations, such as “Boomers with Children,” “Young Professionals with Children,” “Older Couples” and “Urban Professional Couples.” A northern Indiana zip came back as “Rustbelt Neighborhood” (that term hasn’t been used much since the 1980s). Both Bloomington, Ind., zip codes elicited “College Campuses,” which shows clearly how such broad categorization can mask important details of an area, since there are thousands of highly paid professionals in Bloomington who are potential customers or workers.

Not so catchy, but also not subject to pigeon-holing, are the useful and free profiles of Indiana counties available on the Web site STATS Indiana, which details population, household types, employment status, income and commuting patterns (with graphs).

In Short
Census data are an essential part of business. Their role in decision making for profit ventures is not highly visible, masked as it may be by tailored reports and customization. And while the census data are not collected for business use, businesses have recognized its value.

<table>
<thead>
<tr>
<th>Table 1: Useful Marketing: A Selection of Web Sites</th>
<th>Web Address</th>
</tr>
</thead>
<tbody>
<tr>
<td>CACI Demographics ($)</td>
<td><a href="http://www.caci.com">www.caci.com</a></td>
</tr>
<tr>
<td>City Comparisons (cost of livings, etc.)</td>
<td>verticals.yahoo.com/cities/</td>
</tr>
<tr>
<td>Claritas ($)</td>
<td><a href="http://www.claritas.com">www.claritas.com</a></td>
</tr>
<tr>
<td>Consumption Profile</td>
<td>ftp.bls.gov/pub/special.requests/ce/highincome/y9899/highcome.txt</td>
</tr>
<tr>
<td>American Demographics</td>
<td><a href="http://www.demographics.com">www.demographics.com</a></td>
</tr>
<tr>
<td>STATS Indiana</td>
<td><a href="http://www.stats.indiana.edu">www.stats.indiana.edu</a></td>
</tr>
<tr>
<td>Census Bureau</td>
<td><a href="http://www.census.gov">www.census.gov</a></td>
</tr>
</tbody>
</table>
Measuring Growth Momentum, Part III: Indiana's 'Big Mo' Industries

What are the high-growth industries in Indiana? This is a question that we attempted to answer in previous issues of IN Context using a new economic measure that we called growth momentum.

Growth momentum for a particular variable during a specific time period is calculated by multiplying numeric change for that variable by the percent change for the same variable during the given period. In the May 2001 issue, we identified 10 industries with high employment growth momentum between 1995 and 2000. In the June 2001 issue, we applied the momentum approach to identify 10 industries with high total wage growth momentum.

Let's put it all together. Figure 1 is a Venn diagram that lists those industry sectors that appear in either or both high momentum categories. A total of 15 industry sectors (at the three-digit SIC level) were identified as ranking in the top 10 for either employment growth momentum, wage growth momentum or both.

Examples of the types of establishments found in each of the three categories of growth momentum sectors can be found in Table 1 on page 4. These industries vary widely in terms of their sizes, numeric growth amounts and percentage growth rates, but each of these industries grew substantially between 1995 and 2000 in both employment and wages.

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Figure 2 shows the relative size of employment in the five industry sectors that were identified as high growth in both momentum categories — our “Big Mo” industries. Figure 2 also displays the growth in employment between 1995 and 2000. The elementary and secondary schools sector is by far the biggest employer in the group; the smaller personnel supply service industry saw the largest numeric growth in employment.

Figure 3 shows the growth rates for both employment and total wages for each of the big momentum industries. In both wages and employment, the fastest growth occurred in the amusement and air transportation industries. These industries also

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**Table 1: Sectors with High Growth Momentum**

<table>
<thead>
<tr>
<th>SIC</th>
<th>Sector</th>
<th>Examples of Types of Establishments</th>
</tr>
</thead>
<tbody>
<tr>
<td>011</td>
<td>Cash Grains</td>
<td>Wheat, rice, corn, soybeans</td>
</tr>
<tr>
<td>539</td>
<td>Misc. General Merchandise Stores</td>
<td>Stores selling department store commodities in limited amounts</td>
</tr>
<tr>
<td>594</td>
<td>Miscellaneous Shopping Goods stores</td>
<td>Sporting goods and bicycle shops, book, jewelry, hobby and gift stores</td>
</tr>
<tr>
<td>874</td>
<td>Management and Public Relations</td>
<td>Business management and public relations services, consultants</td>
</tr>
<tr>
<td>961</td>
<td>Admin. of General Economic Programs</td>
<td>Government economic development agencies</td>
</tr>
<tr>
<td>283</td>
<td>Drugs</td>
<td>Medicinal chemicals, pharmaceutical preparations</td>
</tr>
<tr>
<td>371</td>
<td>Motor Vehicles and Equipment</td>
<td>Motor vehicles, car, truck and bus bodies, parts and accessories</td>
</tr>
<tr>
<td>621</td>
<td>Security Brokers and Dealers</td>
<td>Investment bankers, security brokers and dealers</td>
</tr>
<tr>
<td>671</td>
<td>Holding Offices</td>
<td>Bank holding companies, other holding companies</td>
</tr>
<tr>
<td>794</td>
<td>Commercial Sports</td>
<td>Professional sports clubs and promoters, racing</td>
</tr>
</tbody>
</table>

**High Growth Momentum**

| 451  | Air Transportation, Scheduled       | Air passenger and cargo carriers, courier services                               |
| 736  | Personnel Supply Services           | Employment agencies, temporary and office help                                   |
| 737  | Computer and Data Processing Services| Programming, design & development of software, systems development, computer repair|
| 799  | Misc. Amusement, Recreation Services| Riverboat casinos, amusement parks, public golf courses                          |
| 821  | Elementary and Secondary Schools    | Schools, academies, boarding schools                                             |

Source: Standard Industrial Classification Manual, 1987
Considered together, the five ‘Big Mo’ industries outpaced the state in terms of growth rates for employment and wages. Figure 4 shows that wage growth was almost twice the state figure, and the employment growth rate for this group was more than three times the rate for the state. Impressive growth in employment and wages has resulted in larger shares of state totals for this group. These five industries accounted for 10.3% of the state’s employment and 8.9% of the state’s wages in first quarter of 2000, up from 8.4% of state employment and 7.6% of state wages in the first quarter of 1995.
Regional Patterns in Personal Income Growth

The latest data from the U.S. Bureau of Economic Analysis show that total personal income in the United States grew by 4.2% in the fourth quarter of 2000. (These data are seasonally adjusted at annual rates, not adjusted for price changes.) This was the slowest quarterly growth rate since the first quarter of 1999. Although slowing of the economy is evident, there is no indication of a recession in these data since the growth rate still exceeds the rate of inflation, which was 2.9% in the fourth quarter.

Across the nation, the rates of growth ranged from 5.4% in the Mideastern states to -2.2% in the Plains states. Personal income in the Great Lakes region, which includes Indiana, grew by 4.0% (see Figure 1). Indiana recorded a 1.8% advance in the fourth quarter, after jumping 6.7% in the third quarter and nearly 8% in

Figure 1: Personal Income Growth Rates for Regions of the U.S., 2000:4
Mideast states led the nation, Great Lakes states were close to national average

Source: U.S. Bureau of Economic Analysis
last year's second quarter.

The high standing of the Mideast states in the latest data could be misleading. This region encompasses the District of Columbia plus five states, including New York and Pennsylvania. It experienced the lowest average rate of growth during the past 11 years and also had the highest degree of variability in growth rates (see Figure 2). Since 1990, the best growth records were turned in by the Rocky Mountain and Southwest regions, which also had the lowest variability in growth rates. The Great Lakes states grew less rapidly than the nation with more variability than the U.S., but Indiana's 5.3% increase bested the region's 11-year average of 5.2%.

Indiana's position among its Great Lakes neighbors is worth noting. While it has been shown frequently that Indiana's share of the nation's personal income has fallen since 1994 (see right scale of Figure 3), the Hoosier state did well in comparison with some of the Great Lake states (see left scale of Figure 3).

During the early years of the last decade (1990:1 to 1994:1), Indiana's share of U.S. and Great Lakes personal income grew. There followed a period of decrease in the state's share of both aggregates, with more decline vis-a-vis the region than against the nation. But that pattern was broken in 1996. Since then, Indiana has increased and sustained a higher rate of growth than the region. Thus, while the state's share of the nation declined from 2.017% at the start of 1990 to 1.967% at the close of 2000, its share of the region advanced from 12.16% to 12.30%.

This finding suggests that, in direct competition with its neighbors, Indiana has performed well. But its region has lost ground in the nation, falling from 16.5% of U.S. personal income to 15.9% in 2000.

*Variability is measured by the coefficient of variation, which is the mean rate of growth divided by the standard deviation of those growth rates.
Changing Spending Patterns

From month-to-month and year-to-year, consumer spending is a great constant in the economy. But seen over a longer period of time, changing prices and developing opportunities cause dramatic shifts in consumer spending.

In broad terms, there has been little change in the share of consumer spending claimed by durable goods in the period 1947 to 2000 (see Figure 1).

Motor vehicles consistently cycle between 5% and 7% of consumer spending, while spending on medical services has more than tripled to 15%.

Durables have fluctuated in a narrow range between 11% and 16% of personal consumption expenditures. By contrast, nondurable goods and services have exchanged positions in their share of consumer spending. Services were less than one-third of consumer spending in '47 and grew to 58% by 2000. This increase was possible because the components of nondurable goods fell in relative price, bringing this class of spending down from 56% to 30% of all consumer outlays.

Among durable goods (see Figure 2), motor vehicles and parts show a strong cyclical pattern since the late 1950s. But most of that movement lies between 5% and 7% of consumer spending. Furniture and household equipment gives evidence of a slight downward trend, but also exhibits some cyclicity. Rising in importance over the period were other durable goods, including computers, boats and the assets of affluence.

![Figure 1: How U.S. Consumers Spent Their Money, 1947-2000](image1.jpg)

![Figure 2: Consumer Spending on Durable Goods, 1947-2000](image2.jpg)
Nondurable goods (see Figure 3) saw a dramatic decline in the share of consumer spending going to food. Rising income and falling food prices drove the percent of total spending down from 32% to 14% of the consumers' outlays. Similarly, clothing expenditures have declined from nearly 12% to less than 5% of consumer spending, and energy has a declining claim on consumers' outlays.

Services include several sectors that grew dramatically over the past half-century (see Figure 4). Housing and household operations (including electricity and gas) assumed greater importance from the close of WWII until the early 1960s, but have remained stable since then at 20% of total consumer spending. Medical services rose steadily from 4% up to 15% in the early '90s, when they leveled off at 15%. Although transportation services have changed from trains and buses to airplanes, the portion of consumer spending going to this sector has remained fairly constant, below 5%. In similar fashion, Americans seem to be spending little more of their budgets on recreation today than they did 50 years ago.

The vast category of other services has nearly doubled as a portion of consumer spending. This group includes the barber, the beautician, the nail decorator, the veterinarian, the mini-storage facility, the CPA who works on taxes, and others who provide services for us, our pets or our possessions. It also includes the writing of computer software. Higher incomes make these services more accessible for more people.

There is a temptation to project these trends into the future. But how far will food fall as a portion of our spending when we choose more and more prepared food? Health care services may not rise as dramatically as in the past if we become more attuned to preventive measures. And if we are healthier, will we spend more on travel or on having our backs rubbed by a professional masseur?
Indiana’s Unemployment Rate Lower than Surrounding States

The unemployment rate in Indiana dipped in April, to a non-seasonally adjusted 2.9%. The average rate in the state for the first three months of 2001 was about 3.5%. Nationally, the non-seasonally adjusted unemployment rate was 4.2% in April, also a decline from first quarter levels.

This improvement in the unemployment rate occurred even though Indiana’s labor force expanded. The total civilian labor force rose by nearly 32,000 in April over the first three months’ average.

Strong gains in employment in the Indianapolis metropolitan area led the state. Unemployment in Indianapolis fell to 2.1% in April. The Gary metro area, made up of Lake and Porter counties, had 3,000 more of its residents employed in April than in March. The April unemployment rate in Gary, Indiana’s second largest metro area, dropped to 3.6% from 4.2% in the prior month.

In every Indiana metro area, in fact, employment and the unemployment rate both improved in April. Even Kokomo, where manufacturing cutbacks have made headlines, saw its unemployment rate shrink to 4.3% in April from 5.9% in March.

Indiana’s 2.9% unemployment rate was the best among its neighboring states in April. Ohio’s rate improved to 3.6%, while Kentucky held steady at 4.1%. Unemployment rates rose to 4.4% in Michigan and 5.1% in Illinois.

IU Economic Forecast Sees Flat Year

We should expect little economic growth in Indiana for the rest of this year, according to the latest economic forecast from Indiana University.

The Center for Econometric Model Research in Bloomington produces econometric forecasts of the Indiana and U.S. economies. Whereas real personal income in Indiana grew 3.2% in 2000, the Center’s model predicts less than a 1% increase in 2001. Although Indiana’s income did decline slightly in the first quarter of this year (down 1.25% at an annual rate), some strengthening later in 2001 is expected to produce a small positive growth rate for the year.

The Center’s forecast shows unemployment climbing, too (see Figure 1). After sinking to record-low levels during 2000, Indiana’s unemployment rate should follow the U.S. rate up later this year. By the end of 2001, expect unemployment in Indiana to top 4%, up from around 3% in the early part of this year. That’s still not a high rate of unemployment by historical standards. Indiana’s rate was above 4% as recently as 1995 and 1996, in the heart of the last decade’s economic boom. On average, then, businesses in Indiana should see about the same level of sales as last year. Lower sales at manufacturing firms are likely to be offset by higher revenues in the health and business services sectors and in financial sectors.

The U.S. economy will not go into recession this year, according to the Center’s forecast. Gross domestic product should rise about 1.8% in real terms. While small by comparison to the 5% jump in 2000, this positive growth rate for 2001 means that lower interest rates, a strengthening stock market and renewed consumer confidence should begin to move the national economy forward at a brisker pace later this year. Already we are seeing encouraging national sales figures for vehicles and housing.

Table: Unemployment Rate Forecast, 1995-2002

<table>
<thead>
<tr>
<th>Year:Quarter</th>
<th>Indiana history</th>
<th>U.S. history</th>
<th>Indiana forecast</th>
<th>U.S. forecast</th>
</tr>
</thead>
<tbody>
<tr>
<td>1995:1</td>
<td>5.1</td>
<td>5.7</td>
<td>4.5</td>
<td>5.3</td>
</tr>
<tr>
<td>1996:1</td>
<td>4.9</td>
<td>5.4</td>
<td>4.3</td>
<td>5.0</td>
</tr>
<tr>
<td>1997:1</td>
<td>4.7</td>
<td>5.1</td>
<td>4.1</td>
<td>4.8</td>
</tr>
<tr>
<td>1998:1</td>
<td>4.5</td>
<td>4.9</td>
<td>3.9</td>
<td>4.6</td>
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<tr>
<td>1999:1</td>
<td>4.4</td>
<td>4.7</td>
<td>3.8</td>
<td>4.4</td>
</tr>
<tr>
<td>2000:1</td>
<td>4.3</td>
<td>4.5</td>
<td>3.7</td>
<td>4.3</td>
</tr>
<tr>
<td>2001:1</td>
<td>4.2</td>
<td>4.4</td>
<td>3.6</td>
<td>4.2</td>
</tr>
</tbody>
</table>

Source: Center for Econometric Model Research, Kelley School of Business, Indiana University, May 2001
State Unemployment Rate = 2.9%

Above State Rate (40 counties)
Approx. Equal to State Rate (+/- 0.3) (23 counties)
Below State Rate (29 counties)

Highest Unemployment Rates, April 2001:
COUNTIES
- Orange: 7.2%
- Greene: 5.4%
Metros
- Kokomo: 4.3%
- Terre Haute: 4.1%

Lowest Unemployment Rates, April 2001:
COUNTIES
- Hamilton: 1.2%
- Boone: 1.4%
- Hendricks: 1.4%
- Johnson: 1.4%
Metros
- Bloomington: 1.5%
- Indianapolis: 2.1%

Change in the Number of People Employed, April 2001 Compared to April 2000:
Largest County Increases
- Marion County: 13,360
- Hamilton County: 3,000

Largest County Declines
- Howard County: -1,690
- Wayne County: -1,010
For all the latest state and county figures and complete time series data sets related to the Indiana economy, visit the following Internet sites:

- www.ibrc.indiana.edu/incontext
- www.stats.indiana.edu
- www.indianacommerce.com
- www.dwd.state.in.us