The Bloomington Economy 2004

A report prepared for the

Bloomington Economic Development Corporation

by the

Indiana Business Research Center
Kelley School of Business – Indiana University

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Benchmarking the Economy of Bloomington & Monroe County: 2004

In 2000, the Bloomington Economic Development Corporation (BEDC) commissioned the Indiana Business Research Center (IBRC) at Indiana University's Kelley School of Business to prepare a report profiling the economy of the Bloomington, Indiana, area and benchmarking that area against comparable cities within Indiana and around the United States. Two years later, at the request of the BEDC, the IBRC produced an update to the original report. Again in 2004, a benchmarking update has been requested by the BEDC; the report that follows presents the findings of this most recent effort.

A report of this type provides a useful tool to those wishing to understand key characteristics of a community's economy. By comparing the community to selected others, its strengths and weaknesses relative to comparable cities may be reviewed by local citizens, planners and community leaders, business people and organizations considering where to locate or expand their operations. Moreover, by conducting these studies regularly over time as the BEDC has done, a community can build a basis for tracking its progress toward desired goals and for understanding fundamental trends affecting its competitive positioning.

This report begins with a profile of Bloomington's current characteristics, then it brings those characteristics into context by presenting corresponding data for selected other cities. The report also details the characteristics of several sectors of Bloomington's economy that have been identified by the BEDC as targets for development efforts.

Contents

Economic Profile of Bloomington & Monroe County

Population

The city of Bloomington is Indiana's seventh-largest incorporated place, a position it has held for several years among the state's cities. As of July 1, 2003, the official Census Bureau population estimate for Bloomington was 70,642, down very slightly (by 379) from the estimate for July 1, 2000.

As with most of Indiana's largest cities, the population within the incorporated area shrank during this period (though the other cities generally shrank by a larger percentage), while at the same time the population within the unincorporated county increased. Monroe County's 2003 estimated population was 122,903, ranking 12th among Indiana's 92 counties and 461st out of 3,141 counties in the nation. This number grew by 2,340 (1.9 percent) from the 2000 figure, a rate which places Monroe County in the top third of Indiana counties for population growth in this decade.

Bloomington is the central city of the Bloomington Metropolitan Statistical Area, which now includes Monroe, Green and Owen counties. The estimated population of this metro area in 2003 was 178,974, so Monroe County accounts for more than two-thirds of the total metro population. Prior to June 2003, the official definition of the Bloomington metro area included only Monroe County, so any comparisons across time need to take the boundary changes into account. Thus, the three-county area grew by 2.0 percent from 2000 to 2003.

Demographic and economic data that are both current and detailed are typically available primarily at the county level, so most of data discussed in the remainder of the report focus on the county level of analysis.

Age Distribution. Monroe County's population distribution by key age groups is shown below. Not surprisingly for a "college town," the county's median age (28.5 years) is much younger than that of the state (35.5), with a high proportion of residents in the 18-to-24 age group. The three groups ranging from 18 to 64 years of age, representing the majority of "working age" residents, currently account for nearly three-fourths of the county population, suggesting a sizable potential workforce in the county. However, two thirds of the growth in the county's population projected through 2020 will occur in the 45-and-up age groups.

Monroe County Population Estimates & Projections by Age

	2003 Population	Rank in Indiana	Projected Growth 2000-2020	Share of Projected Growth
Preschool (0 to 4)	6,187	17	1,397	6.6%
School Age (5 to 17)	15,639	18	3,392	16.0%
College Age (18 to 24)	29,043	6	706	3.3%
Young Adult (25 to 44)	37,193	10	1,444	6.8%
Older Adult (45 to 64)	23,191	17	7,330	34.5%
Older (65 plus)	11,650	17	6,996	32.9%

Households. Monroe County residents occupied an estimated 51,884 households in 2003. There were an estimated 53,492 housing units in the county. The 2000 Census reported that 49.8 percent of housing units were owner-occupied, a level well below the state average and influenced by the large number of students in the population.

Education

Bloomington's population is substantially more highly educated than state or national averages, reflecting the presence of a flagship state university campus, a robust community college, and numerous scientific, technical and professional establishments. Of all Monroe County adults over age 25, 39.6 percent have a B.A. or higher degree, ranking the county second in Indiana and placing Monroe County in the top 2.2 percent of all counties in the nation.

In the 2003-2004 school year, 768 students graduated from high schools in Monroe County. Of these, 88.7 percent planned to go on to higher education, split among four-year institutions (66.9 percent), two-year (13.3 percent) and vocational/technical (8.5 percent).

Employment

Monroe County's average employment in 2003 was 59,897, an increase of 1.1 percent over 2000 and 10.5 percent over 1994.[1] Shown below is the distribution of employment across major economic sectors, as well as nine-year changes by sector.

Monroe County Employment by Sector

	2003 Avg. Employment	% of Total	Change from 1994	% Change from 1994
Total	**59,897**	**100.0**	**5,702**	**10.5**
Manufacturing	7,515	12.5	-1,531	(16.9)
Health Care & Social Services	7,175	12.0	1,860	35.0
Retail Trade	7,060	11.8	-399	(5.3)
Accommodation & Food Services	6,376	10.6	232	3.8
Construction	2,744	4.6	283	11.5
Admin. & Support & Waste Mgt. & Remediation Svcs.	2,507	4.2	905	56.5
Educational Services	2,491	4.2	570	29.7
Other Services (exc. Public Admin.)	1,950	3.3	147	8.2
Public Administration	1,824	3.0	293	19.1
Professional, Scientific & Technical Services	1,789	3.0	452	33.8
Wholesale Trade	1,486	2.5	382	34.6
Finance & Insurance	1,219	2.0	127	11.6
Real Estate & Rental & Leasing	1,098	1.8	126	13.0
Information	1,068	1.8	-34	(3.1)
Transportation & Warehousing	979	1.6	-5	(0.5)
Arts, Entertainment & Recreation	350	0.6	148	73.3
Utilities	287	0.5	-13	(4.3)
Management of Companies & Enterprises	225	0.4	45	25.0
Mining	132	0.2	-67	(33.7)
Agriculture, Forestry, Fishing & Hunting	84	0.1	34	68.0

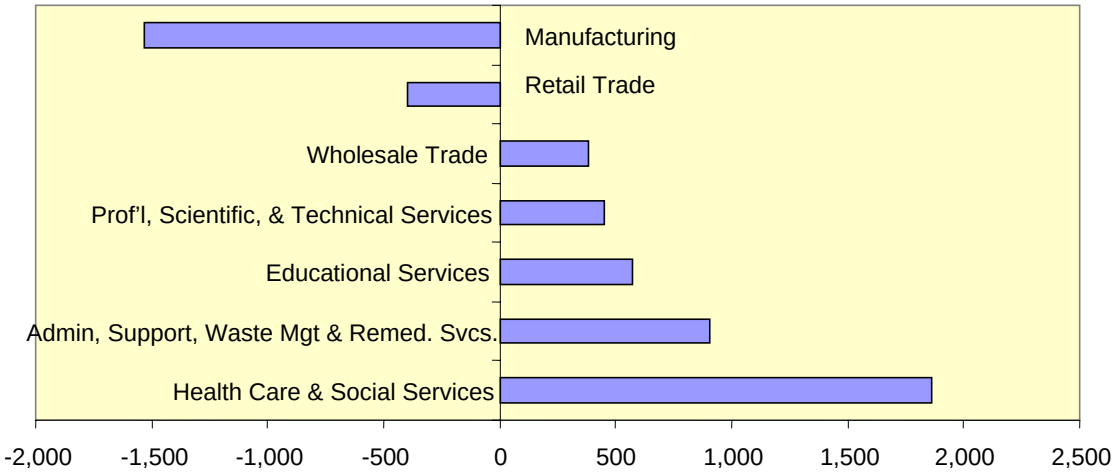
Manufacturing retains its spot as the leading employment sector in the Bloomington area, but its payrolls have declined greatly for several years (by more than one-sixth in the last nine years), while employment

[1] Government employment data for Monroe County prior to 1994 contain a significant, unexplained discontinuity in the education services sector that makes comparisons of current figures to earlier years suspect. Thus, this discussion examines nine-year trends from 1994 to 2003.

has risen sharply in the health care and social services sector. At this rate, jobs in the latter sector will likely outnumber those in manufacturing in Monroe County in the near future.

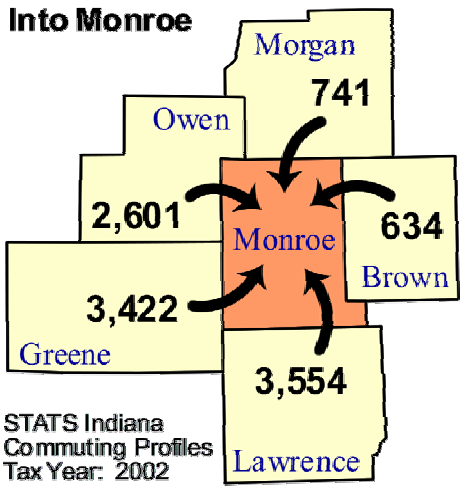
Sectors experiencing substantial growth or shrinkage in Monroe County jobs are shown below. Retail trade and manufacturing, two of the county's three largest employers, were the only sectors experiencing triple-digit or greater job loss since 1994, while several sectors added hundreds of jobs or more.

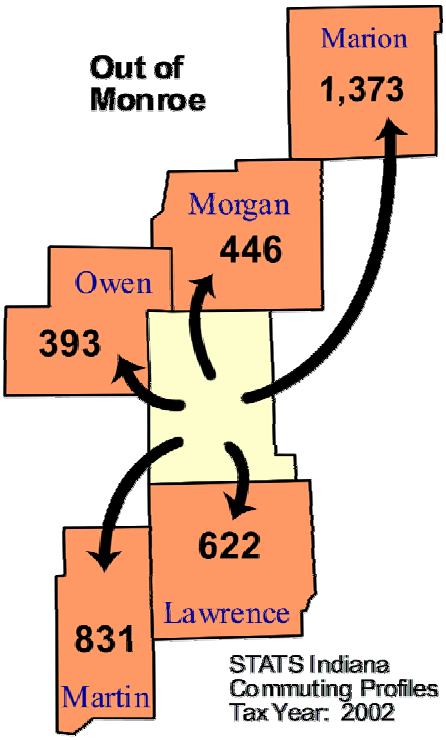
Big Gainers & Losers in Monroe County Jobs



Change in Employment 1994-2003

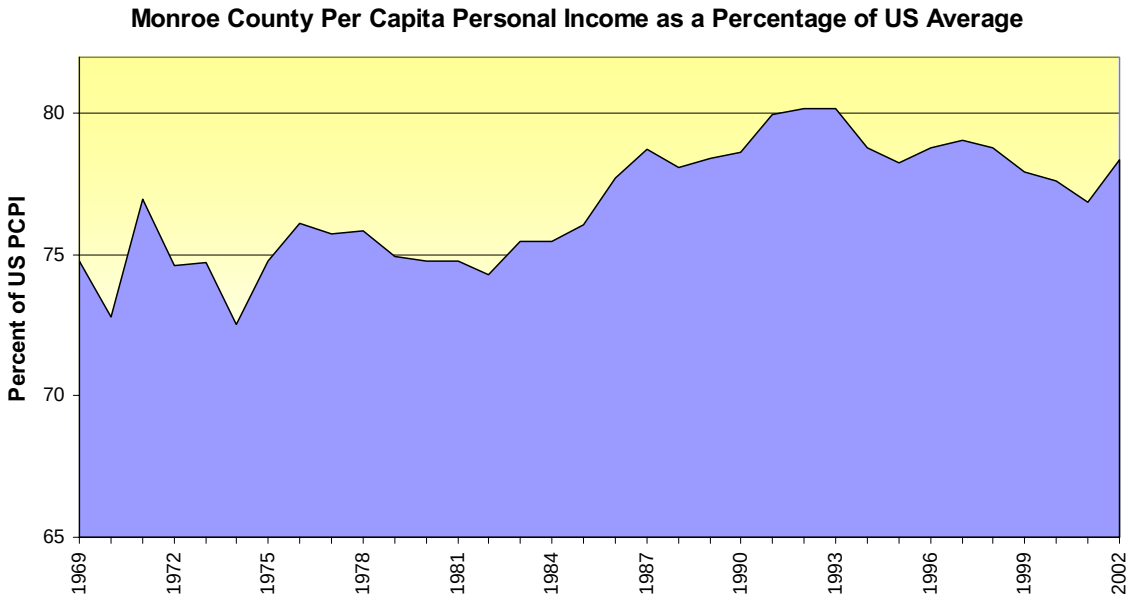
Commuting Patterns. The Bloomington area is a regional hub for many kinds of economic activity such as shopping, health care, business services, higher education, and so on. Data from state income tax returns can be analyzed to show the work-based commuting patterns of Monroe and surrounding counties. In 2002, 15,495 nonresidents traveled to Monroe County to work (19.8 percent of the work force), while 5,234 Monroe residents worked outside the county (7.7 percent of resident workers). The maps below detail the main flows of commuters to and from nearby counties.



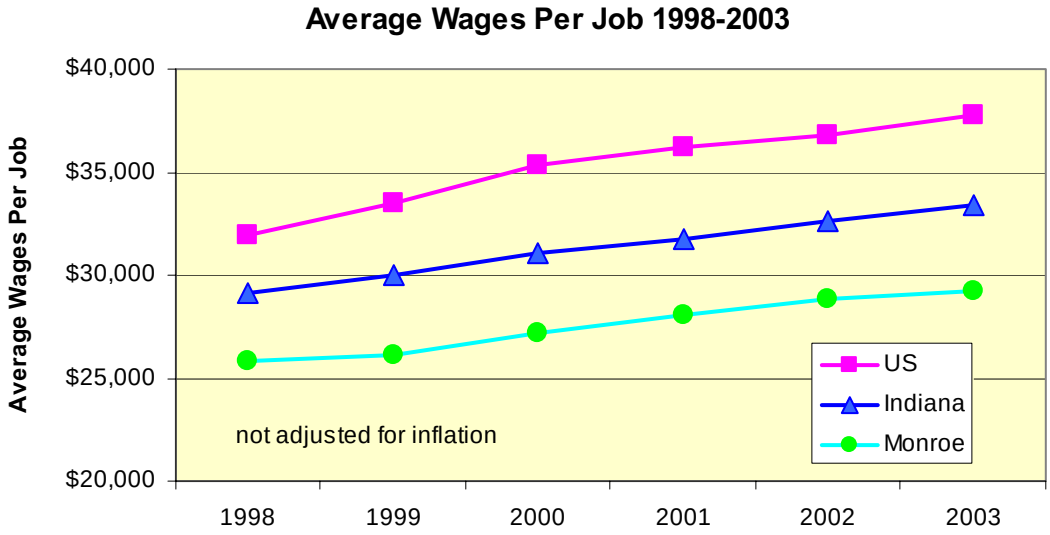


Income

Per Capita Personal Income. Monroe County per capita personal income (PCPI) is shown below, relative to the average for the US, from 1969 to 2002. The city continues a long-term trend of personal income well below the national average. In the 1980s, local PCPI grew significantly relative to the US, but then it started a slow, multi-year decline until 2001. The most recent year shows an encouraging upward shift, but at $24,212, the county is still 21.7 percent below the national average. It should be noted that the large number of students in the county, most of whom have relatively low incomes, tends to depress the PCPI.



Wages. Data from quarterly surveys of employer establishments indicate that wages per job in Monroe County averaged $29,221 in 2003. As shown below, this figure is well below the averages for Indiana ($33,379) and for the US ($37,765), and the gaps are widening over time.



Using a single figure for average wage across all jobs, however, obscures interesting variation in wages by industry. The following table shows that annual wages vary by a factor of 10-to-1 in Monroe County, from six-digit averages in establishments in the management of companies and enterprises sector to near the bottom of the five-digit range in accommodations and food services.

Monroe County Average Annual Wages by Industry, 2003 & 1994

	Average Wage per Job		Change	
Industry	**2003**	**1994**	**Wages**	**Percent**
Management of Companies and Enterprises	107,858	n.a.		
Utilities	59,914	n.a.		
Mining	43,230	n.a.		
Manufacturing	38,794	29,885	8,910	29.8
Wholesale Trade	36,741	n.a.		
Finance and Insurance	36,673	24,289	12,385	51.0
Information	36,619	28,013	8,606	30.7
Construction	34,858	24,465	10,393	42.5
Professional and Technical Services	34,030	n.a.		
Transportation and Warehousing	33,073	26,912	6,161	22.9
Health Care and Social Assistance	32,670	22,937	9,732	42.4
All Industries	**29,221**	**21,894**	**7,326**	**33.5**
Public Administration	28,233	19,333	8,899	46.0
Educational Services	26,941	23,139	3,803	16.4
Arts, Entertainment and Recreation	23,781	10,781	13,000	120.6
Real Estate and Rental and Leasing	21,691	15,369	6,321	41.1
Other Services	19,566	14,667	4,900	33.4
Retail Trade	18,941	13,669	5,272	38.6
Administrative and Waste Services	17,570	13,149	4,421	33.6
Agriculture, Forestry, Fisheries, etc.	16,983	n.a.		
Accommodations and Food Services	10,873	7,331	3,542	48.3

Note: Unadjusted for inflation. n.a. = not available.

Selecting Cities & Counties for Comparison

With which cities should the Bloomington/Monroe County area be compared for purposes of benchmarking? In theory, comparison places should be similar to the local area with respect to size and growth rate, economic characteristics, and other qualities that help distinguish the Bloomington area from other cities in general.

As the present study represents an updating of work begun in 2000 and revisited in 2002, the cities used in those benchmarking efforts (which differed somewhat from each other) provided a starting point. BEDC officials then identified cities with which the Bloomington area has competed in recent years for attracting new businesses or to which the local area has lost site location competitions. Also considered (but not required in every case) was the presence of a university in the community, since IU plays such a prominent role in the local economy and culture, and many firms consider the presence of a university a significant benefit in site decisions.

The previous two Bloomington-area benchmarking studies used MSAs as the level of analysis for comparisons among cities. Prior to June 2003, the Bloomington MSA was defined as just Monroe County; since that time, however, it has been redefined by the federal Office of Management and Budget to include Greene and Owen counties. While expanding the metro area's population by nearly half, adding these two rural counties

also served to significantly alter the resulting nature of what was commonly known as the "Bloomington metro area." Their economies are quite different from that of Monroe County, so a profile of the Bloomington area based on the new metro-area definition would give a potentially misleading impression of what this area is actually like.

Thus, the definition used in the present study for the Bloomington area and comparison cities is **the county containing each metro area's central city**. These central-city counties are generally the largest, most economically important counties among multi-county areas comprising larger metros, and they thus capture effectively the essential qualities of each peer city.

Two sets of peer counties are evaluated in the remainder of the report (see Appendix for maps of the two sets of peers). The set below includes 17 metro counties outside of Indiana. Most of these places are relatively similar in size, income, and other respects to Monroe County, though they differ in various details. It should be noted that one area on this list differs quite notably from the rest of the set in several respects. Despite its substantially larger size and higher income and earnings, the Ann Arbor, Michigan, area was included in this comparison group because it has long been perceived as a key economic development competitor of the Bloomington area.

US Peers

City / State	County	City / State	County
Ann Arbor MI	Washtenaw	Iowa City IA	Johnson
Bellingham WA	Whatcom	Lawrence KS	Douglas
Champaign IL	Champaign	Lexington KY	Fayette
Columbia MO	Boone	Logan UT	Cache
Decatur AL	Morgan	Medford-Ashland OR	Jackson
Fayetteville AR	Washington	Owensboro KY	Daviess
Florence SC	Florence	Sherman-Denison TX	Grayson
Fort-Collins-Loveland CO	Larimer	State College PA	Centre
Greenville SC	Greenville		

The second set of peers includes the central counties containing most of Indiana's major cities. This set comprises a traditional group of "bragging rights" rivals that vary greatly in size and other characteristics; thus, not all are considered direct competitors for economic development. From a starting group of all Indiana metro areas, a few were deleted because their central cities are located in other states or because their economies really should be considered part of the much larger Chicago region. Thus, they don't serve as representative places for comparisons with the Bloomington area. The remaining 11 cities and their counties are shown below.

Indiana Peers

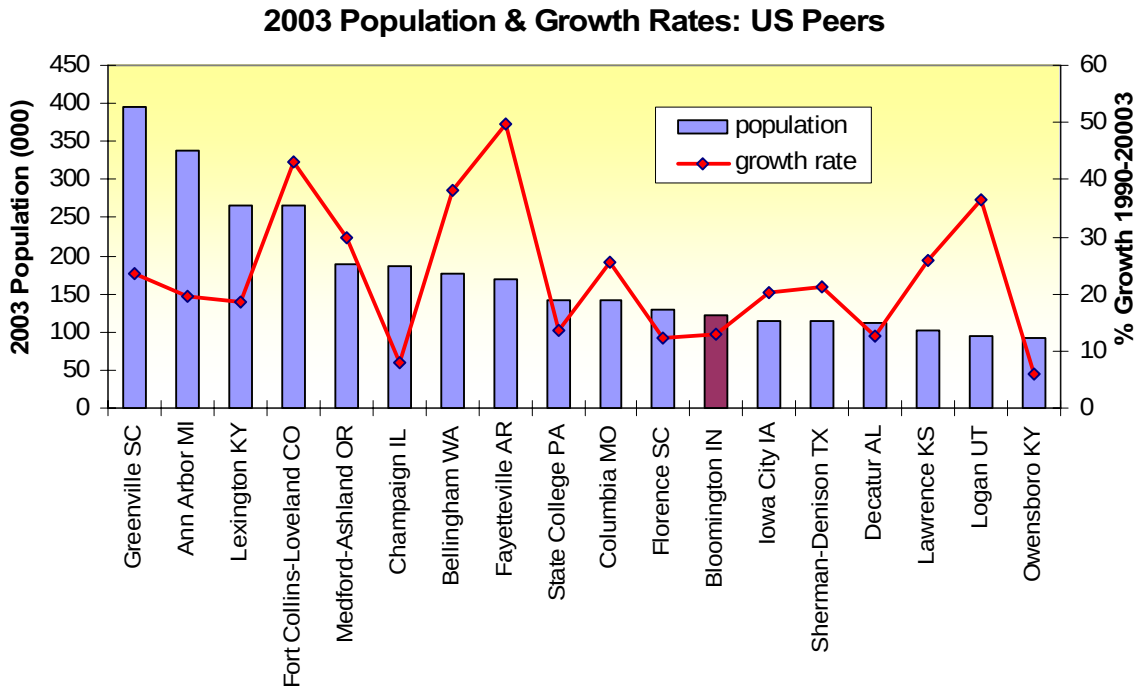
City	County	City	County
Anderson	Madison	Kokomo	Howard
Columbus	Bartholomew	Lafayette	Tippecanoe
Elkhart	Elkhart	Muncie	Delaware
Evansville	Vanderburgh	South Bend	St. Joseph
Fort Wayne	Allen	Terre Haute	Vigo
Indianapolis	Marion		

For convenience, the peer areas will be identified in the data presentations that follow by their more familiar city names, but the reader should remember that the data actually represent the counties containing the cities.

Bloomington/Monroe County Compared to US Peers

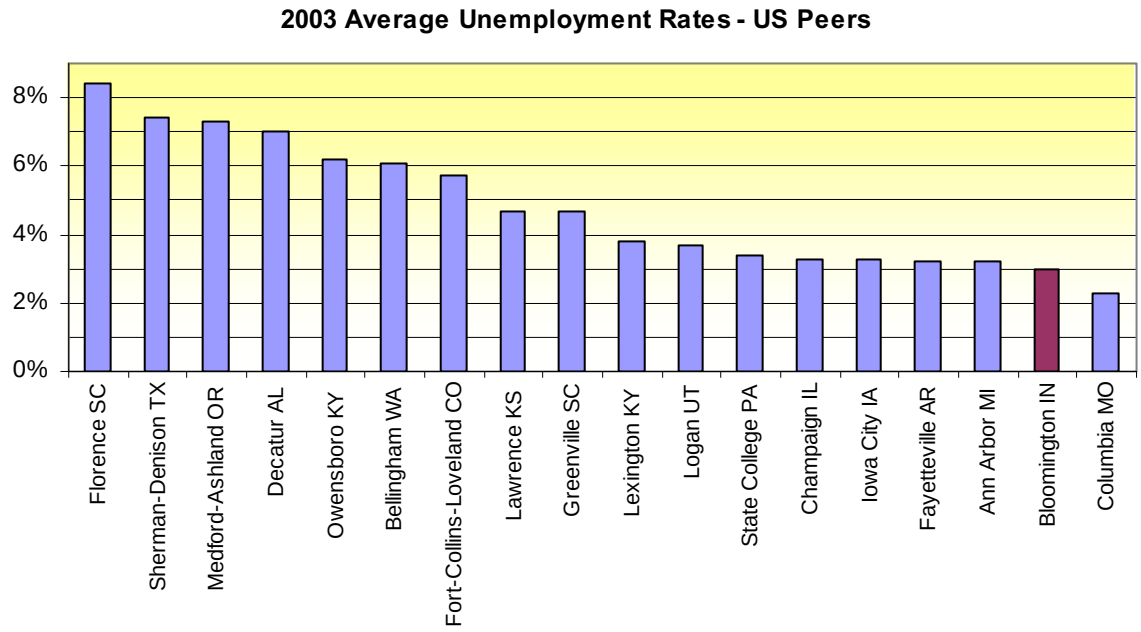
Population and Growth

Most of the counties in the US peer set are fairly similar in size to Monroe County, with a few exceptions at the large end of the spectrum. The counties vary much more widely, however, with regard to population growth since 1990. During that period, the Bloomington area grew at the fifth slowest rate (12.8 percent) among the group, with very strong growth experienced by the counties of the West and the Fayetteville, Arkansas, area.



Unemployment Rate

Monroe County workers have, for some time, enjoyed one of Indiana's lowest unemployment rates. This distinction is also evident in comparisons to the US peer group, among which only Columbia, Missouri, had a lower unemployment rate in 2003. At the other end of the scale, Florence, South Carolina, had the group's highest unemployment rate at 8.4 percent.



Educational Attainment

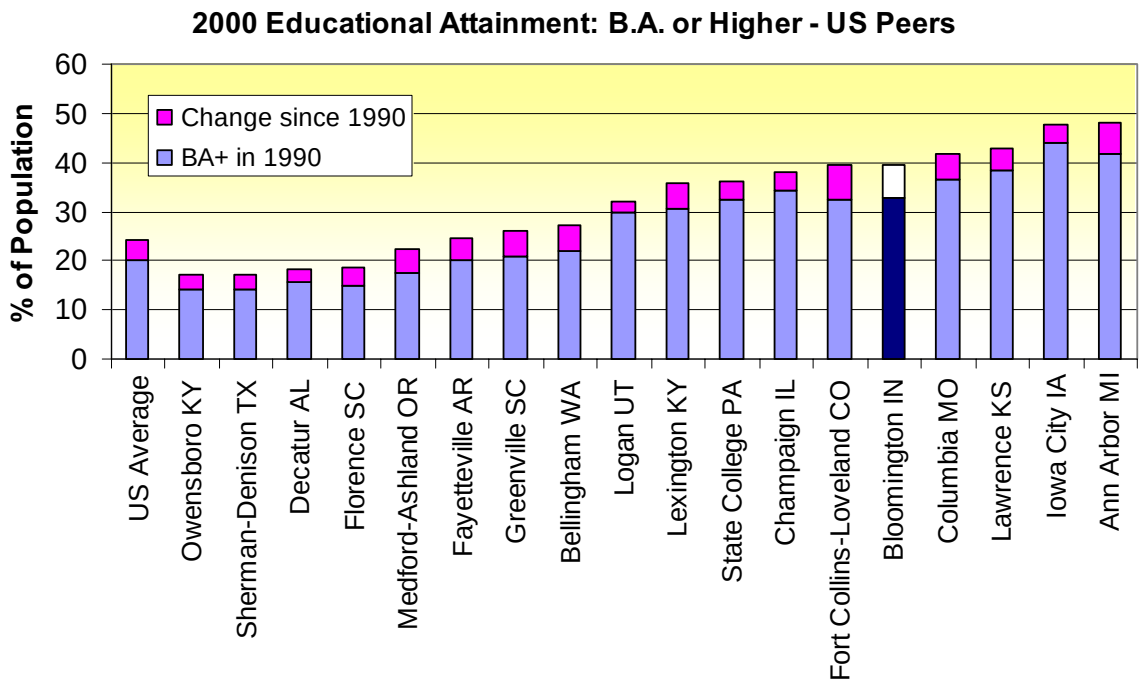
As shown on the following page, Monroe County ranks well toward the upper end of US peers with respect to the percentage of its population (39.6 percent) holding a B.A. degree or higher. Two or three points above the Bloomington area are Columbia, Missouri, and Lawrence, Kansas, while solidly in the lead are Iowa City, Iowa, and Ann Arbor, Michigan. All the top-ranked peers from Ann Arbor down to Bellingham, Washington, are home to universities with enrollments of 12,000 or more, so educational attainments well above the national average of 24.4 percent are not surprising in this subset.

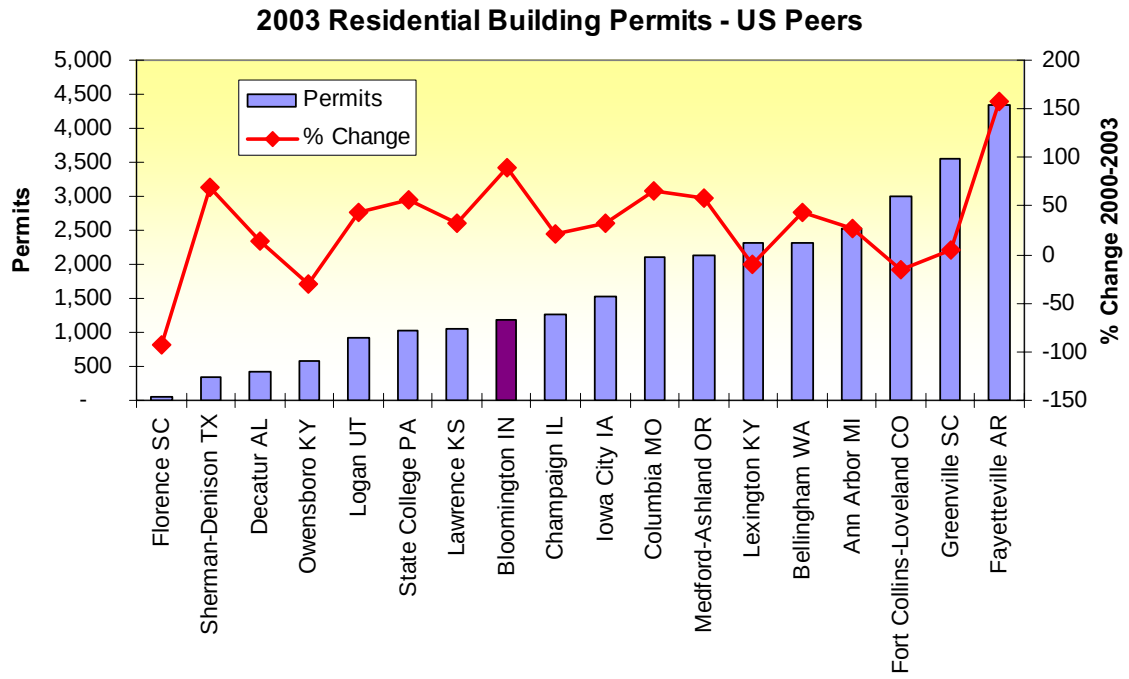
It is interesting also to note the growth in attainment of B.A. or higher education from 1990 to 2000 (these data are collected in the decennial census). The Bloomington area ranked second among its peers only to Fort Collins-Loveland, Colorado, gaining an additional 6.7 percentage points on the B.A. attainment scale over that decade. In the process, Monroe County surpassed Champaign, Illinois, which fell from fifth to seventh place on the list.

Building Permits

Residential building permit activity in 2003 varied greatly among the US peer cities, reflecting in part differences in population, but also differences in short-term growth trends and other activity. For instance, nearly four times as many permits were filed in the Fayetteville, Arkansas, area than in Monroe County, yet the Fayetteville-area population is only about 38 percent higher. Fayetteville, however, has the highest population growth rate among Bloomington's US peers, and also the highest rate of growth in building permits since 2000.

Monroe County finished 2003 in the middle range of the US peer group with 1,173 residential permits filed, but its three-year permit growth rate of nearly 90 percent was second only to Fayetteville. Florence, South Carolina, trailed the pack by a large margin on both permits filed and rate of permit growth.

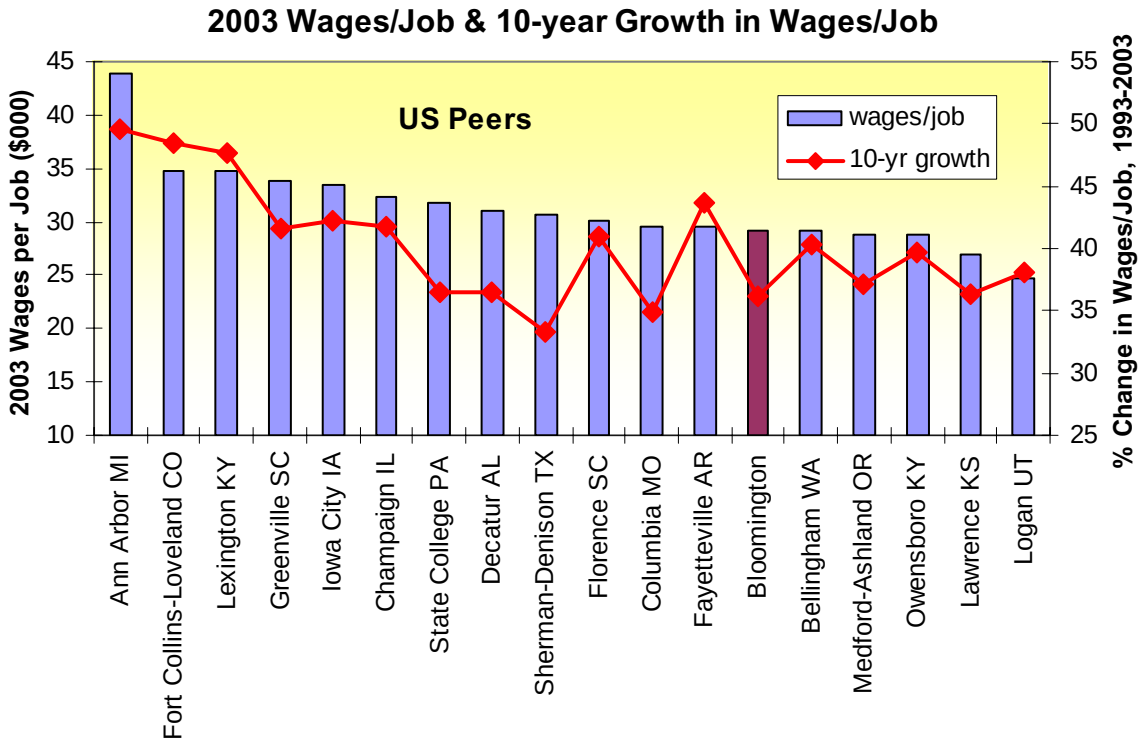

2000 Educational Attainment: B.A. or Higher - US Peers
% of Population
60
50
40
30
20
10
0
Change since 1990
BA+ in 1990
US Average
Owensboro KY
Sherman-Denison TX
Decatur AL
Florence SC
Medford-Ashland OR
Fayetteville AR
Greenville SC
Bellingham WA
Logan UT
Lexington KY
State College PA
Champaign IL
Fort Collins-Loveland CO
Bloomington IN
Columbia MO
Lawrence KS
Iowa City IA
Ann Arbor MI


2003 Residential Building Permits - US Peers
Permits
5,000
4,500
4,000
3,500
3,000
2,500
2,000
1,500
1,000
500
-
Permits
% Change
200
150
100
50
0
-50
-100
-150
% Change 2000-2003
Florence SC
Sherman-Denison TX
Decatur AL
Owensboro KY
Logan UT
State College PA
Lawrence KS
Bloomington IN
Champaign IL
Iowa City IA
Columbia MO
Medford-Ashland OR
Lexington KY
Bellingham WA
Ann Arbor MI
Fort Collins-Loveland CO
Greenville SC
Fayetteville AR

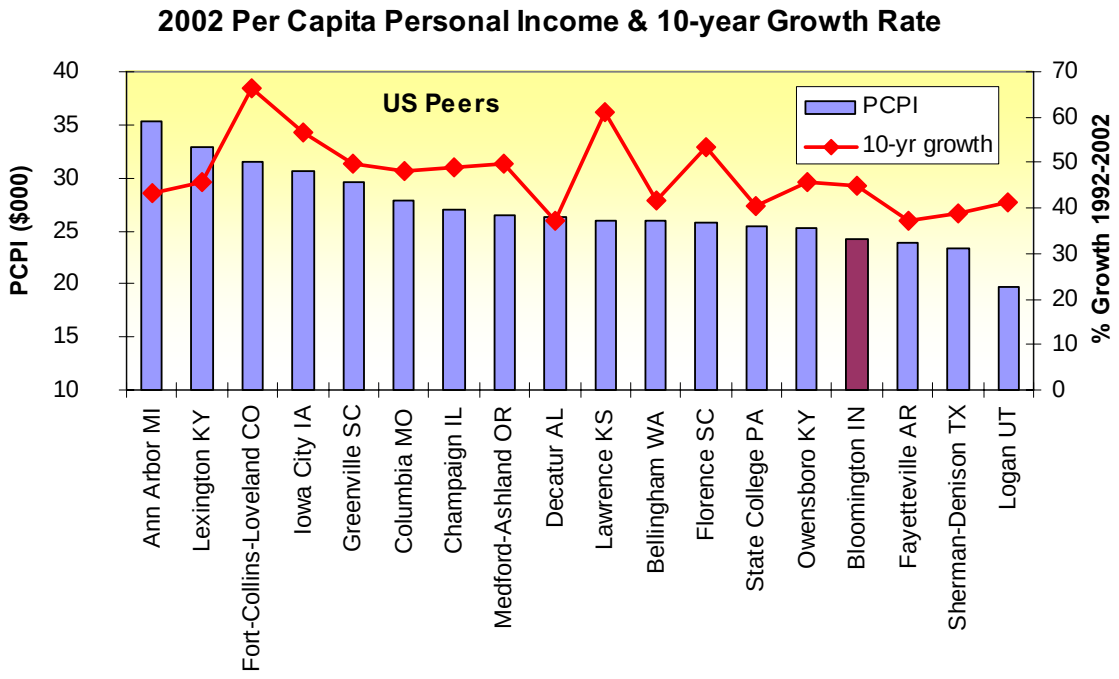
Wages and Per Capita Personal Income

At $29,221, Monroe County's average 2003 wages per job are below most of its US peers. Wages in 16 of the other 17 cities are fairly evenly distributed across a range from $24,760 in Logan, Utah, to $34,807 in Loveland, Colorado, and Bloomington's wages are above those of five peers. The one place that stands well apart from this group is Ann Arbor, Michigan, where the average wage of $43,832 is more than $9,000 above the nearest "peer."

The chart below additionally shows that the counties with higher average wages tended to enjoy the highest wage-growth rates over the past 10 years. These places also had relatively higher average wages in 1993, and they are pulling even further ahead of the competition in wages as time moves along. Bloomington's 10-year growth in average wages was slower than all but two of the peers, Sherman-Denison, Texas, and Columbia, Missouri.



While wages per job conveys a sense of how well-paid workers are, a broader measure of the economic well-being of an area is conveyed by per capita personal income. County PCPI describes the level of earnings from all sources—wages, investment income, transfer payments, etc.—received by an average individual in the county. The Monroe County PCPI of $24,212 trailed all but three of the Bloomington area's US peers. With respect to growth in PCPI, however, over the past 10 years the Monroe County rate of 44.8 percent (not adjusted for inflation) surpassed six peers.



At the top of the rankings for both average wages and PCPI are the counties of five peers: Ann Arbor, Michigan; Lexington, Kentucky; Fort-Collins-Loveland, Colorado; Iowa City, Iowa; and Greenville, South Carolina. It should be noted that four of these places (all but Iowa City) are in the largest counties in the comparison set; both wages and personal income tend to rise with an area's population.

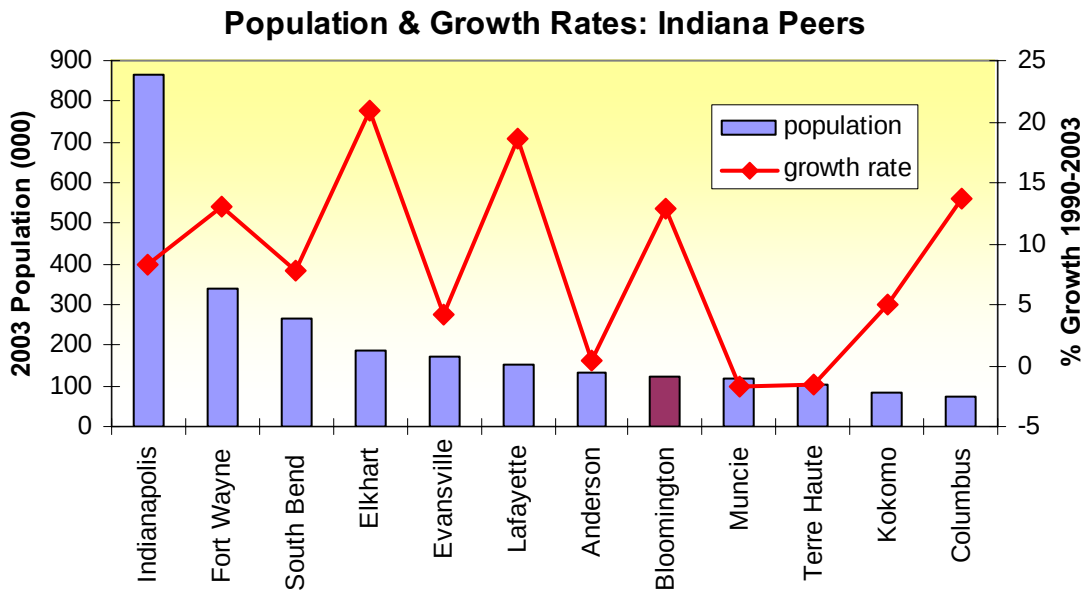
Bloomington/Monroe County Compared to Indiana Peers

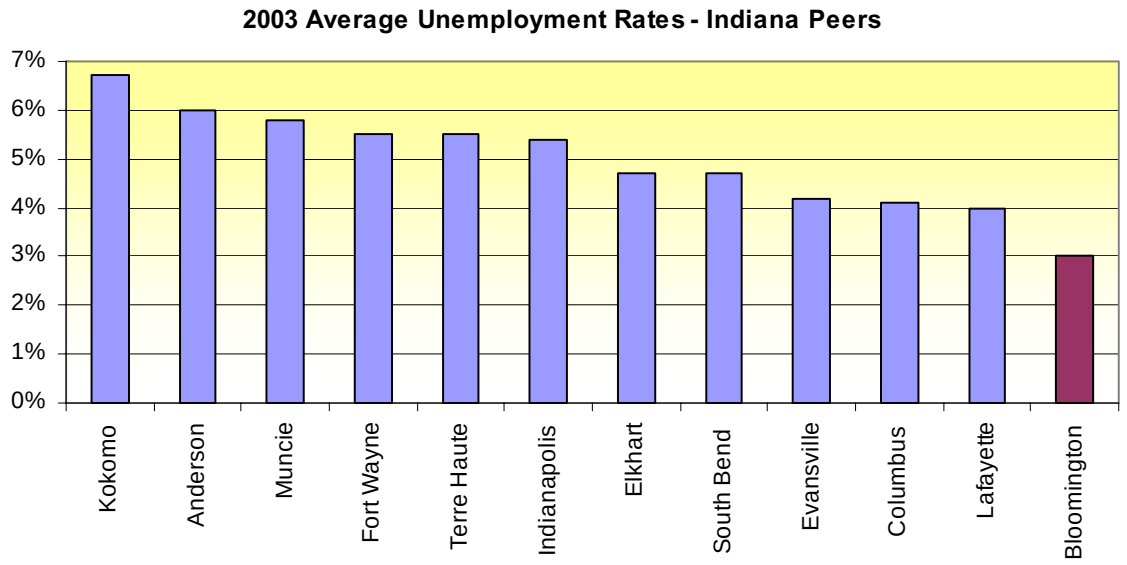
Population and Growth

The populations of counties in the Indiana comparison set vary much more widely than those of the US peers, ranging from 72,341 for Bartholomew County (Columbus) to 863,251 for Marion County (Indianapolis). Monroe County's 122,903 places it in the lower-middle range of the group. While none of the Indiana peers is growing as fast as the western cities in the US peer set, population growth rates do vary widely among the Indiana counties. The Bloomington area grew a relatively robust 12.8 percent from 1990 to 2003, placing it just behind the counties containing Fort Wayne and Columbus. The fastest-growing counties during this period contain Elkhart and Lafayette; the Anderson area barely grew, while the Muncie and Terre Haute areas actually lost population over the 13-year period.

Unemployment Rate

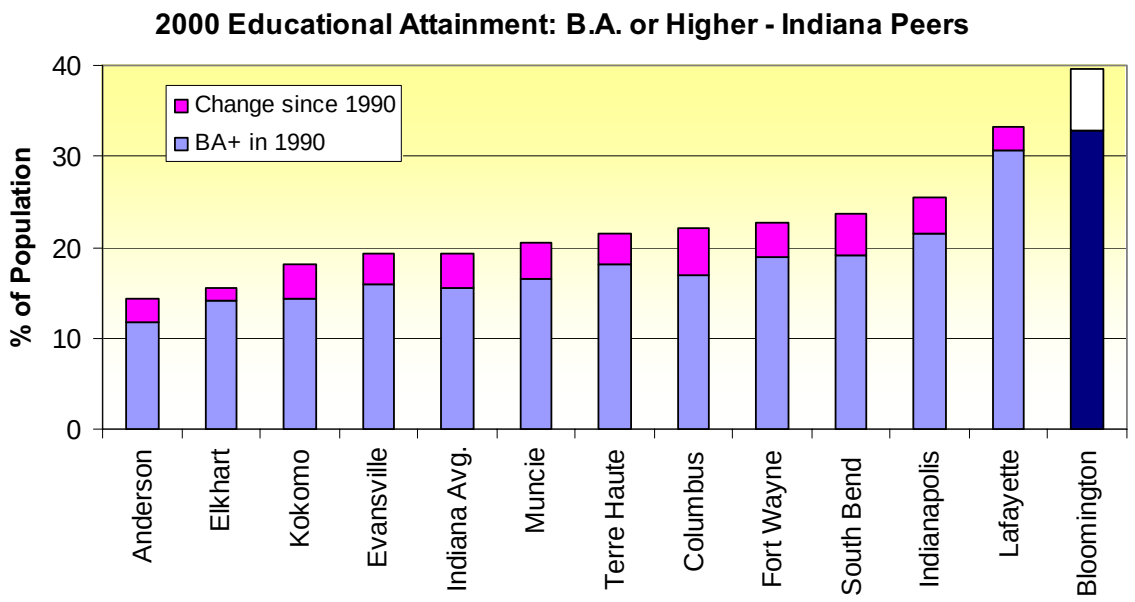
The Bloomington/Monroe County area had the lowest 2003 unemployment rate of any county in the Indiana peer set, a full percentage point below the nearest competitor (Lafayette). In contrast, Kokomo's unemployment rate was more than double that of the Bloomington area.





Educational Attainment

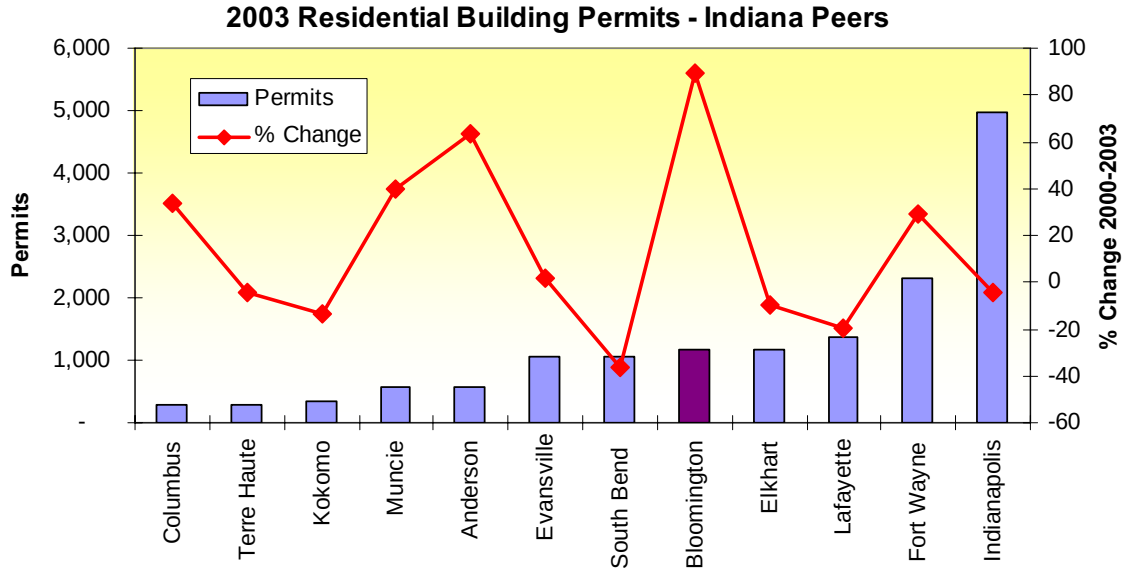
The Bloomington area clearly leads all Indiana peers in educational attainment, even the home of academic arch-rival Purdue University (West Lafayette). These two places, in turn, stood well above the rest of the Indiana peers. While all the cities enjoy access to higher education, the presence of large, research universities clearly serves to attract a more-educated population.



Monroe County's growth in B.A. attainment of 6.7 percentage points from 1990 to 2000 was far ahead of any other Indiana peer. The only place in the group with more than a 5 percentage point rise during the 1990s was the Columbus area.

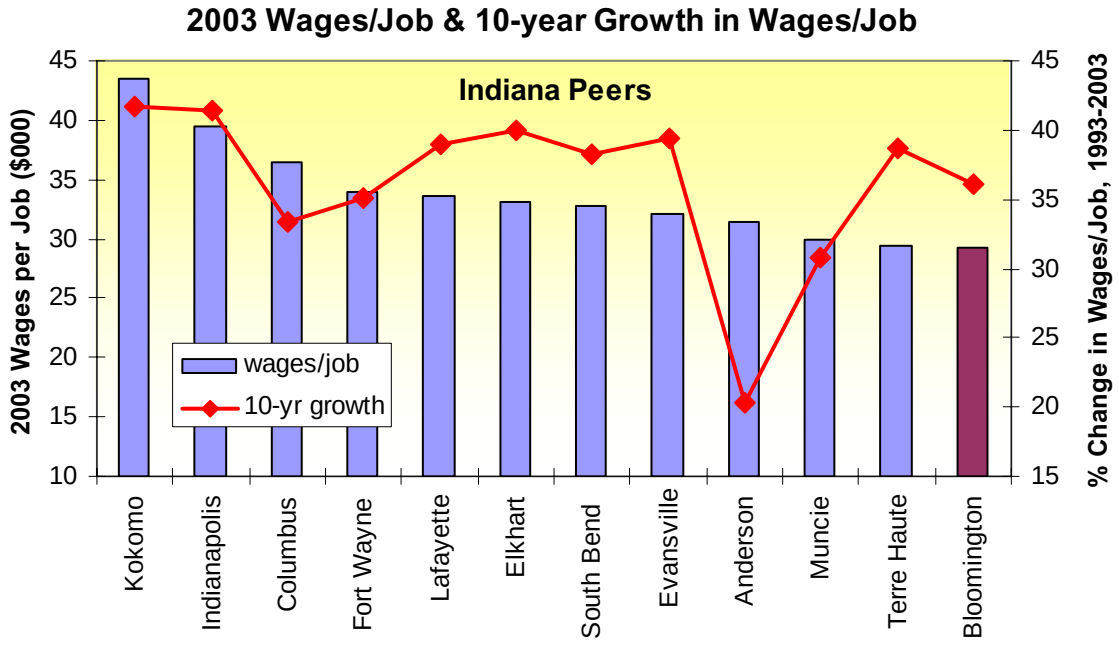
Building Permits

Far fewer residential building permits were filed in Bloomington/Monroe County than in Indiana's largest counties (containing Indianapolis and Fort Wayne), yet fewer permits were filed in South Bend's St. Joseph County, which is twice the size of Monroe County. Moreover, Monroe County experienced the highest rate of growth in permits filed since 2000 of any of the Indiana peers. South Bend, Lafayette, Kokomo, Indianapolis and Terre Haute all experienced drops in residential permits during that period, while Bloomington's building growth was propelled substantially by a burst of multi-family housing projects.



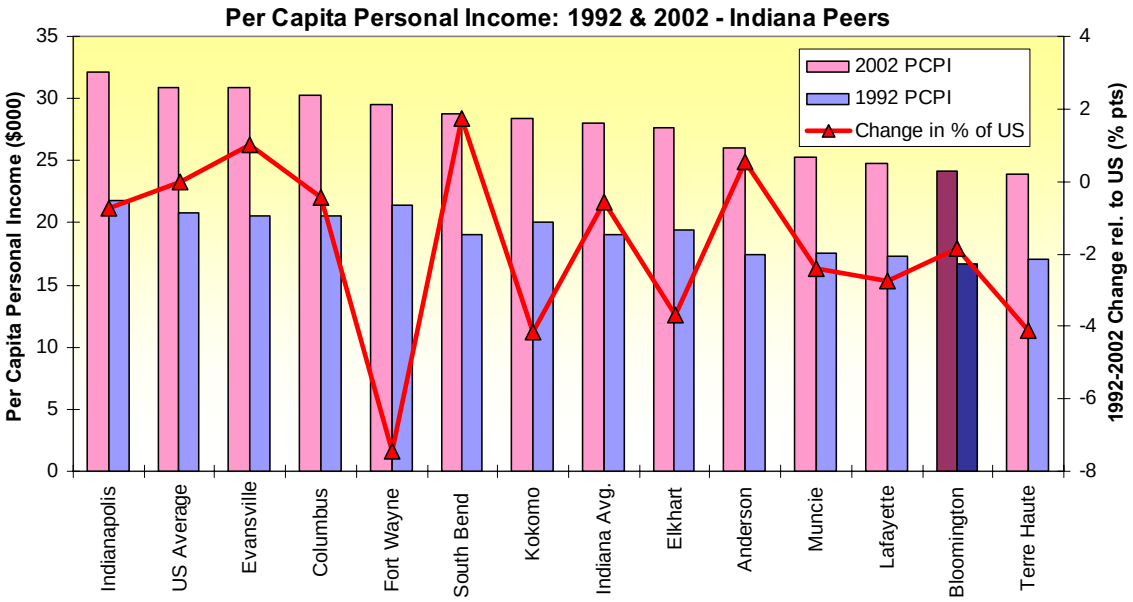
Wages and Per Capita Personal Income

Monroe County's average wages per job in 2003 were the lowest of any Indiana peer city at $29,221. Although this might be viewed favorably by employers seeking to keep payroll costs low, workers probably view the distinction with less enthusiasm. Bloomington's average wage rose during the 1993-to-2003 period by 36.1 percent (unadjusted for inflation), slightly below the average for wage gains in the state as a whole (38.0 percent). The Kokomo area was the Indiana peer with the highest average wage, followed by Indianapolis and Columbus. Anderson had the honor of the slowest 10-year wage growth at 20.3 percent.



In 2002, all Indiana peers except Indianapolis were below the US average for per capita personal income ($32,129). Bloomington had the second-lowest PCPI in the group ($28,032), besting only Terre Haute. Like much of the industrial Midwest, Indiana cities tended to lose ground to other parts of the county during the preceding 10 years. While the average US resident's PCPI grew by more than $10,000 during that period (not adjusted for inflation), only Indianapolis and Evansville achieved that distinction among the Indiana peer group. PCPI for Monroe County residents, in contrast, grew by $7,487.

The red line in the graph below shows how PCPI changed for each Indiana peer in terms of its percentage of the US average PCPI. For instance, in 1992 Bloomington's PCPI was 91.3 percent of the US average, while in 2002 it had fallen to 90.7 percent of the national PCPI. Thus, during the 10-year period, Bloomington lost 0.6 percentage points compared to the national average. The only Indiana peers that gained ground on the US average were South Bend, Evansville and Anderson.



Targeting Industry Clusters in Bloomington/Monroe County

Many studies in recent years have recognized the importance of the clustering of businesses around a significant core industry. This has long been seen in terms of manufacturing, where suppliers and service providers grew up around one or more manufacturing plants in a community or region. The clustering effect is often assessed geographically by combining sectors into so-called clusters of seemingly disparate industries that work together in a supply chain of goods and services. Bloomington is clearly a regional hub of economic activity, with many large employers attracting sometimes smaller but essential goods-producing or services-providing businesses, ultimately attracting further businesses and workers.

From analysis of local economic data, seven clusters emerge as significant to Bloomington in terms of wages, jobs, and the potential to help grow the Bloomington economy. The following table and graphs provide a current snapshot of these clusters' contributions to wages and jobs.

Clusters in Monroe County – 1st Quarter 2004

	Establish-ments	Approx Jobs	Quarterly Wages ($ million)	Avg. Weekly Wage	% of All Jobs	% of All Wages
Total, all industries	**2,644**	**61,000**	**458**	**$580**		
Knowledge Services	215	17,000	158	$740	27.2	34.5
Life Sciences	250	10,000	85	$700	15.3	18.6
Advanced Mfg. and Materials	24	4,000	37	$760	6.2	8.1
Information Technology and Media	164	3,500	27	$610	5.7	5.9
Business Services	328	2,400	20	$650	3.9	4.4
Chemicals	39	2,000	17	$740	2.9	3.7
Earth, Forest and Wood Products	66	1,300	10	$570	2.2	2.1

Notes: Because of the nature of "clusters," some subsectors are included in one or more clusters and totaling any of these figures would lead to duplication. See the Appendix for information on the industries that comprise these clusters. Data sources include the U.S. Bureau of Economic Analysis, ReferenceUSA and annual reports of companies. These are rounded estimates produced by the IBRC.

Several observations warrant mention about these data. First, all but one of these clusters pay wages at least somewhat above the county average, and some are significantly higher. Moreover, the two largest clusters in terms of jobs and aggregate quarterly wages (knowledge services and life sciences) also pay well above average, which is encouraging. In fact, these two clusters account for a sizable portion of all wages paid in Monroe County.

Location Quotients: Industry Concentrations in Monroe County

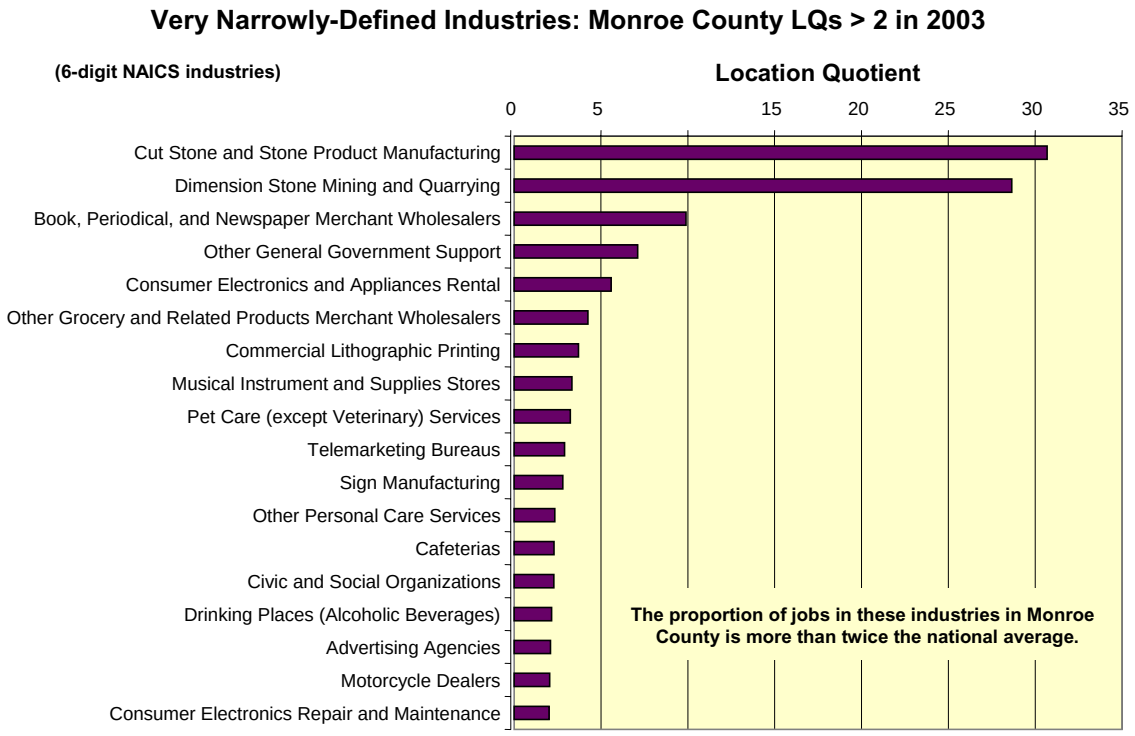
One way to quantify a region's concentration in particular industries is by computing location quotients. A location quotient (LQ) for any given industry and region is simply the ratio of two percentages: the industry's percentage of total employment within the region divided by the industry's percentage for the nation as a whole. If the region has a higher percentage than the nation, then the LQ will be greater than one. For example, if 15 percent of a county's employment is in manufacturing but only 10 percent of the nation's jobs are in manufacturing, then the county's LQ for manufacturing would be 1.5.

In general, industries having LQs that exceed one are often thought to be satisfying demand from outside the region; however, LQs actually reflect the combined effects of regional differences in demand and regional industry specialization, so high LQs are not always an indicator of an industry that "exports" its products outside the local area.

One thing to keep in mind about LQs is that when dealing with industries at the narrowly-defined end of the industry-classification hierarchy (e.g., plumbing, heating and air-conditioning contractors), there is a greater chance of obtaining a high LQ than there is with the more aggregated sectors (e.g., construction). This is a simple arithmetical consequence of the smaller employment figures for the narrowly focused industries. That is, the smaller base percentages for the U.S. make it easier to obtain high ratios.

As evidence, the highest LQ for Monroe County in 2003 at the very-narrow-definition level is 30.7 for cut stone and stone product manufacturing. This means that Monroe County's percentage of total employment in this industry is more than 30 times greater than that of the nation. At a slightly broader level of industry, top honors went to all other nonmetallic mineral product manufacturing with an LQ of 12. Moving to the very broad sector level, the highest Monroe County LQ is about 1.3 for accommodation and food services.

The following chart shows Monroe County's narrowly-defined industries that have an LQ greater than two in 2003. Several industries such as book wholesalers, music stores, telemarketing, and drinking places get a boost from the university community.

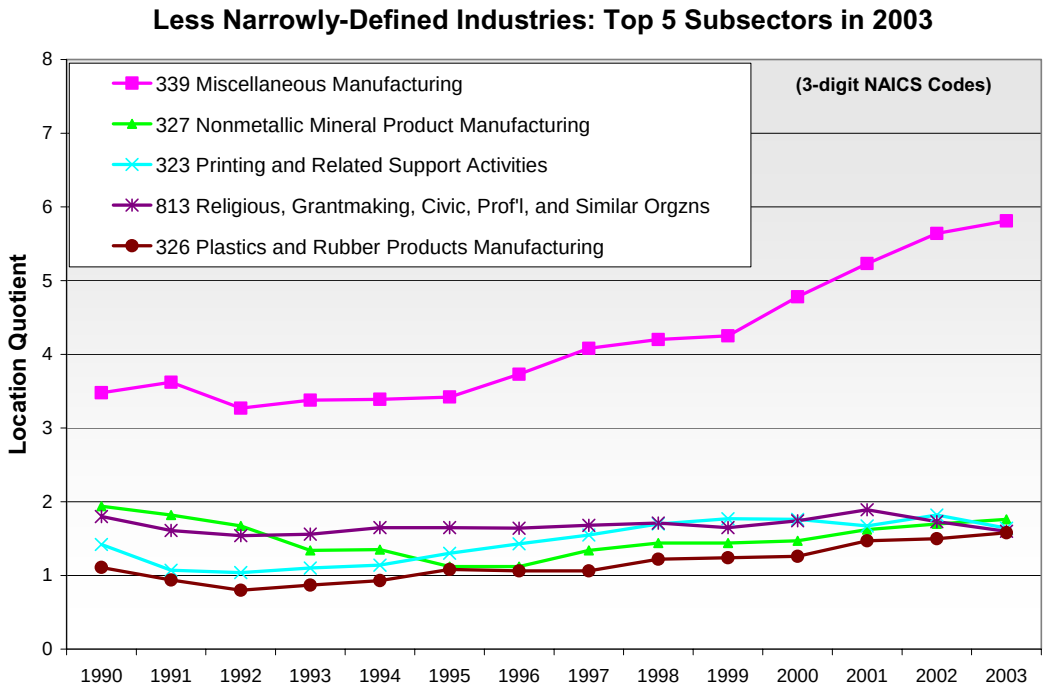


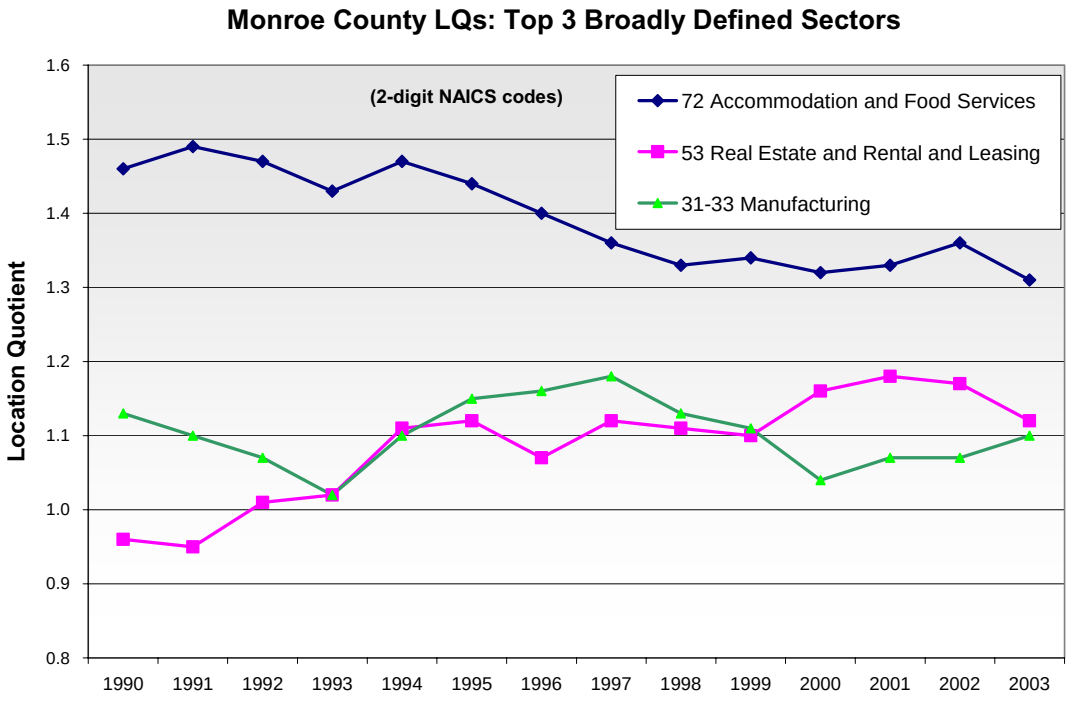
If we move up the hierarchy to the subsector level (three-digit NAICS classifications), we find the top five subsectors shown below. Four of these five subsectors belong to the manufacturing sector. Note the particularly strong showing of the miscellaneous manufacturing subsector, which has an LQ of 5.8 for 2003. Also note its solid upward trend over time. This subsector includes industries such as medical equipment and supplies manufacturing, plus sign manufacturing.

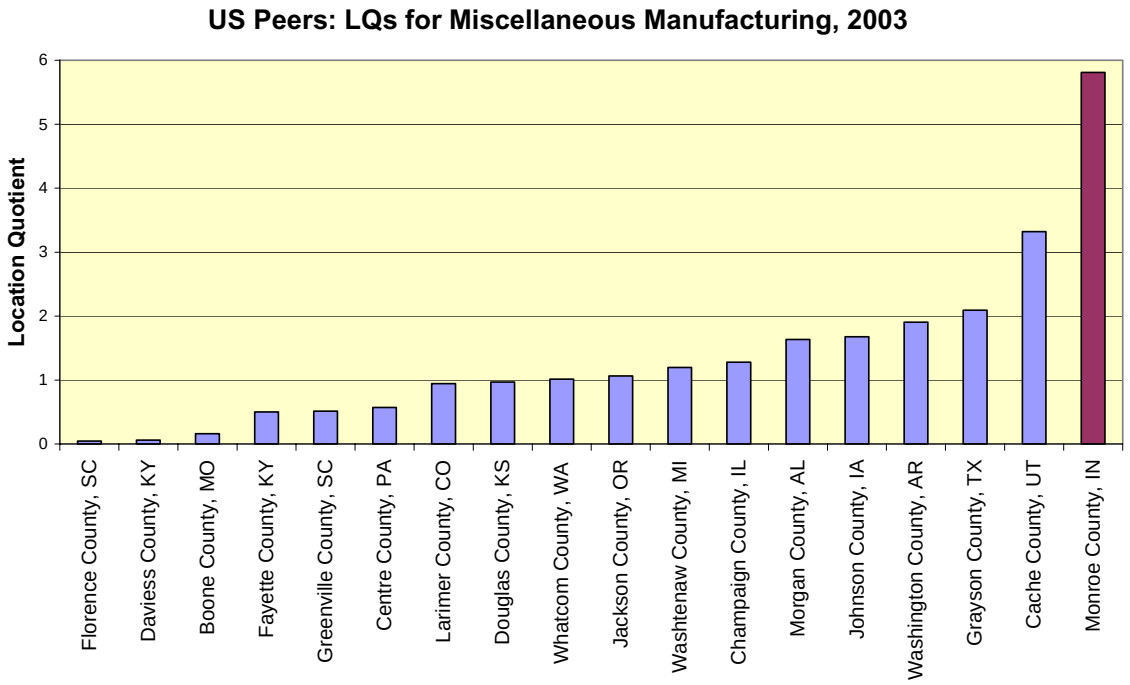
If we move up to the sector level (two-digit NAICS codes), we find that the accommodation and food services sector not only has the highest concentration in Monroe County with a 2003 LQ of about 1.3, but it also has a generally declining trend (shown in the second chart below). The LQ ratio has decreased despite recent increases in employment within this sector. This indicates that the proportion of jobs in accommodation and food services is not growing as fast in Monroe County as nationally.

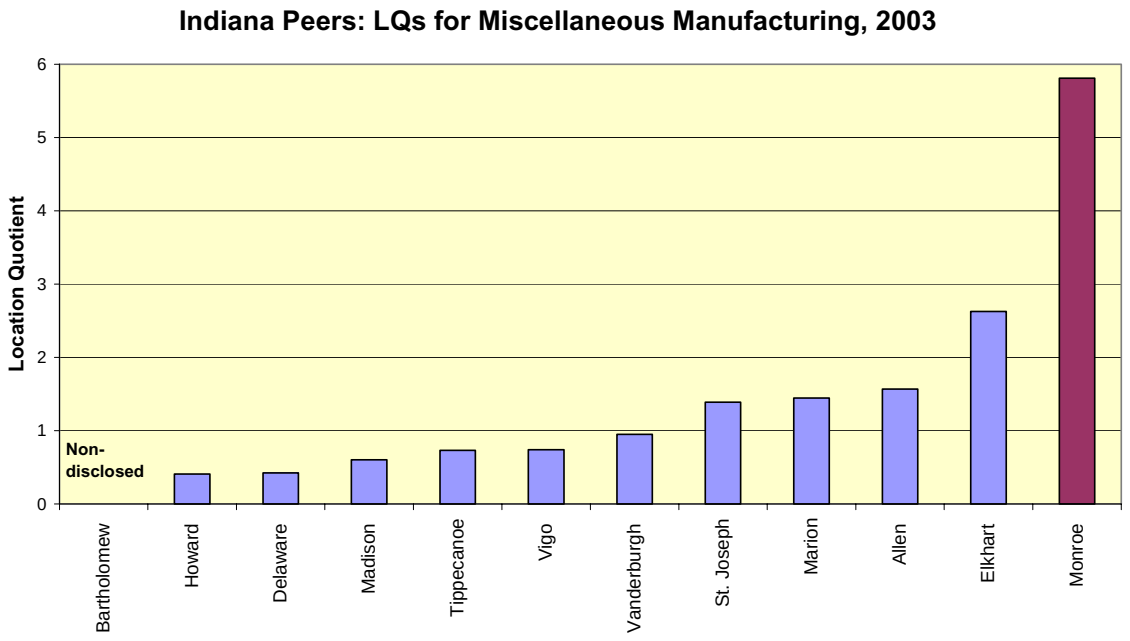
The manufacturing and real estate/rental/leasing industries both have an LQ near 1.1 in 2003, indicating that employment is about 10 percent more concentrated in these sectors locally than the national average.

One industry that stands out as having a critical mass both in terms of employment and LQ is the miscellaneous manufacturing subsector (which includes medical equipment and supplies manufacturing). The final two charts show how Monroe County compares to its peers in this subsector: we lead both our US and our Indiana peers by substantial margins in concentration of jobs in miscellaneous manufacturing.


Less Narrowly-Defined Industries: Top 5 Subsectors in 2003
(3-digit NAICS Codes)
339 Miscellaneous Manufacturing
327 Nonmetallic Mineral Product Manufacturing
323 Printing and Related Support Activities
813 Religious, Grantmaking, Civic, Prof'l, and Similar Orgzns
326 Plastics and Rubber Products Manufacturing
Location Quotient
0
1
2
3
4
5
6
7
8
1990
1991
1992
1993
1994
1995
1996
1997
1998
1999
2000
2001
2002
2003

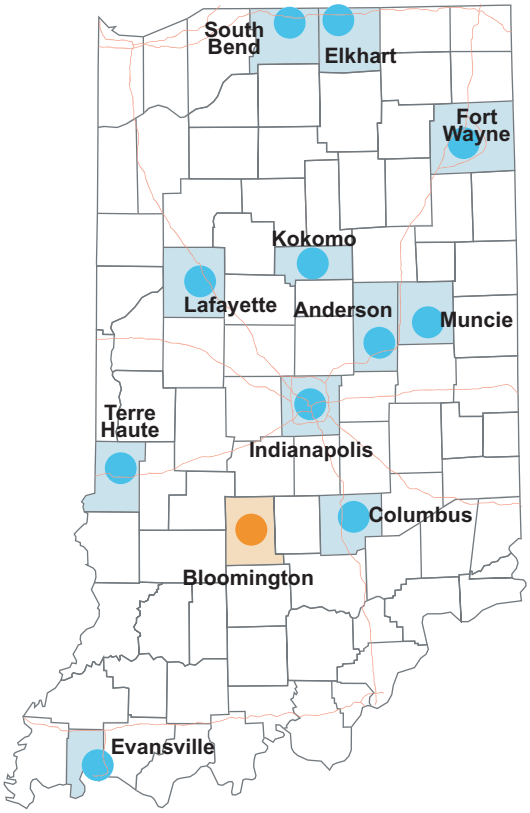

Monroe County LQs: Top 3 Broadly Defined Sectors
(2-digit NAICS codes)
72 Accommodation and Food Services
53 Real Estate and Rental and Leasing
31-33 Manufacturing
Location Quotient
0.8
0.9
1.0
1.1
1.2
1.3
1.4
1.5
1.6
1990
1991
1992
1993
1994
1995
1996
1997
1998
1999
2000
2001
2002
2003

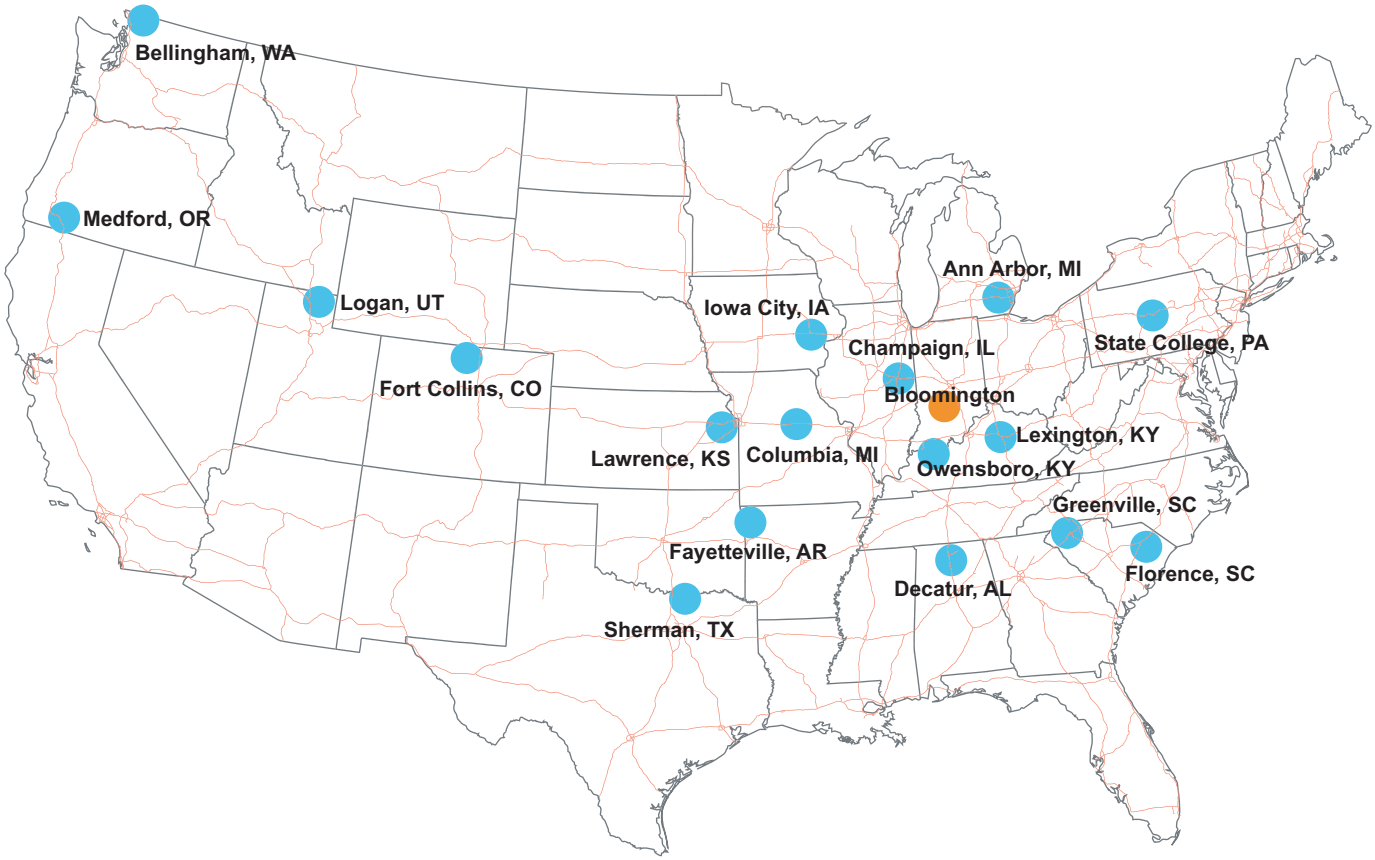

US Peers: LQs for Miscellaneous Manufacturing, 2003
Location Quotient
0
1
2
3
4
5
6
Florence County, SC
Daviess County, KY
Boone County, MO
Fayette County, KY
Greenville County, SC
Centre County, PA
Larimer County, CO
Douglas County, KS
Whatcom County, WA
Jackson County, OR
Washtenaw County, MI
Champaign County, IL
Morgan County, AL
Johnson County, IA
Washington County, AR
Grayson County, TX
Cache County, UT
Monroe County, IN


Indiana Peers: LQs for Miscellaneous Manufacturing, 2003
Location Quotient
0
1
2
3
4
5
6
Non-
disclosed
Bartholomew
Howard
Delaware
Madison
Tippecanoe
Vigo
Vanderburgh
St. Joseph
Marion
Allen
Elkhart
Monroe

Appendix

State and US Peers





Defining Clusters: The Interdependence of Industries

Business-to-business interdependence has grown to new proportions—businesses outsource to other companies for workers or parts. Just-in-time inventory practices have risen to new heights of complexity. Research into supply chains and clusters as they relate to local economies has also grown. Businesses can prosper as a result of geographic clustering and so, too, can a local economy.

The economic clusters below were constructed from combinations of industry sectors and subsectors that relate to one another through differing roles in a local economy. The premise behind clustering sectors is to create groupings of industries that have potential for growth. Individual sectors were included or excluded in defining these clusters with a view to both today's economy and what holds promise for the future.

- **Knowledge Services:** As home to one of the nation's largest and most prestigious universities, Bloomington has grown a strong knowledge-based economy. This cluster includes sectors ranging from educational services (including colleges, public and private schools, vocational training and other types of specialized training schools), Internet service providers, custom engineering and computer programming design, publishing and broadcasting.

- **Life Sciences:** Medicine (both as a field of practice and the manufacturing aspects), doctors, dentists, hospitals, laboratories, instrument makers, long-term care facilities and physical, engineering and biomedical research.

- **Advanced Manufacturing and Materials:** Businesses in this cluster either use advanced processes in the making of their goods, or the goods themselves are advanced (e.g., computers, medical instrumentation, digital imaging equipment). Advanced materials can include special coatings, semiconductors, electronic coils and computer equipment.

- **Information Technology and Media**: Telecommunications, broadcasting, publishing, motion picture production, navigational equipment, newspapers, scientific research and consulting services, sound and video production, computer animation, and libraries.

- **Business Services:** Financial management, investment banking, insurance carriers, architecture design, management consulting, accounting, design services, market research, public relations, and legal services are among the sectors included in this cluster.

- **Chemicals:** Farmers need them, consumers need them, and they take form as plastics, pharmaceuticals, fertilizer, petroleum products and other nonmetallic mineral products.

- **Earth, Forest and Wood Products:** Quarries, furniture makers, commercial nurseries, sawmills, millwork, and paper makers are the main sectors in this cluster.

A variety of federal, state, and commercial resources were used to compile the data for these clusters, which provide a snapshot of the relative strength of the clusters in Monroe County.

Resources for further investigation into clusters as a tool for economic development:

1. Indiana Economic Development Council: www.indianaplans.org.
2. The Institute for Strategy and Competitiveness: www.isc.hbs.edu/econ-clusters.htm

For Further Information

A detailed profile of demographic and economic information about any county in the US may be obtained from the IBRC's **STATS Indiana** website (www.stats.indiana.edu) using the **USA Counties IN Profile** feature (www.stats.indiana.edu/uspr/a/us_profile_frame.html).

Information about the Indiana Business Research Center and its services may be found at www.ibrc.indiana.edu.

For information about the Bloomington Economic Development Corporation, visit www.comparebloomington.org/index.php.