

Conclusions

With continued moderate growth in the U.S. economy, growth in Northwest Indiana will almost certainly slow from its already slow pace of the past two years, with employment growth of 1 percent to 1.5 percent. Manufacturing employment will probably continue to decline, led by potentially large declines in employment in steel. Moderate growth in services (including retail) will lead to slow overall growth. The local unemployment rate is likely to rise to around 5 percent.

However, the local economy remains vulnerable to a national slowdown. An end to the U.S. expansion would likely lead to declining employment and 7 percent to 8 percent unemployment in Northwest Indiana. In the event of a national recession, the decline in the local economy would be even more severe.

While we do not expect that U.S. economic growth will end (still less do we expect a national recession), the chances of such a result are greater now than a year ago. We remain optimistic about the short-term future of the local economy, but our optimism is tempered.

not been accompanied yet by rising mortgage, credit card, or installment loan delinquencies, it does raise a question about the strength of consumption in 2001.

Capital spending, which has contributed to 35 percent of the growth of real GDP in 2000, but represents only 10 percent of nominal GDP, is expected to slow after the capital goods backlog is reduced. Large increases in federal and state spending to improve highways and mass transit, authorized by the Transportation Emergency Act21 (TEA-21) in 1998, will continue in 2001 in the Indianapolis area. Also, increased defense spending may have some modest local impacts later in the year.

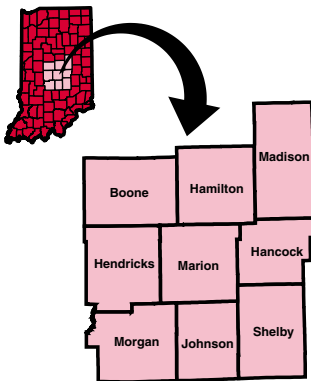
Recent Performance

How has the Indianapolis metropolitan area done over the past year (3rd quarter, 1999 to 3rd quarter, 2000)? Based on nonfarm payment employment, Indianapolis is compared to other areas in our region and others outside our region of similar size in **Table 1**. Indianapolis was third in our region. How will a slowing rate of consumer spending affect the Indianapolis metropolitan area economy? Let's look at the sources of growth in employment in the past year in **Table 2**.

Chemicals, a nondurable manufacturing component, reflects, in part, the publicly-announced Eli Lilly expansion plans that will continue. The large federal government increase was the extra hiring for the 2000 U.S. Census enumeration, and will not be reoccurring in 2001.

Construction has been a primary contributor to employment growth for the past several years. Single-family building permits were down about 6 percent for 2000 through September compared to the same period in 1999. In 2001, if the local employment growth is a little slower, then housing permits, and expenditures for household furnishings, will follow the same pattern but will be cushioned by eventually falling mortgage rates. Office vacancy rates have moved up. The supply of hotel rooms will increase by 616 rooms with the opening of the Indianapolis Marriott Downtown. It will be a challenge to duplicate the impressive employment increase in construction in 2001.

Consumer spending consists of durables, nondurables, and services. Expenditures on durable goods tend to be more volatile than services. Indianapolis has a lot of auto-related durable goods-based employment. Consumers will have increasing choices, especially in the SUV market. Many SUVs



Indianapolis

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The outlook is for a moderating rate of employment growth for the metropolitan (nine county) Indianapolis area. This outlook is based on the national consumption growth rate slowing to a rate closer to the national disposable personal income growth rate. From 1995 to 2000, consumers had the best of times—low unemployment and inflation, and growth in household wealth. However, an uncertain stock market, due to rising costs and slowing profit growth, will result in more moderate growth in consumer spending.

Also, at the national level the ratio of household debt service to disposable income has risen to a high level of 13.6 percent. Although this high level has

are coming off lease. This reduces the residual value that, in turn, could lead to more expensive leases on new vehicles. Because the auto industry has been meeting increases in demand since the mid-1990s by using more overtime, a sales slowdown would show up first in a reduction of overtime, to be followed by a reduction of employment.

How have consumers changed the allocation of their budgets? The Consumer Expenditure Survey does not provide data for the Indianapolis metropolitan area. There are data for consumer units in the Midwest, however. **Table 3** provides selected components of expenditures for two surveys, 1988-89 and 1997-98 (the most recent).

Housing, the largest component, includes mortgage interest and property taxes. The Indiana Tax Court ordered a new property tax reassessment rule to be adopted by June 1st, 2001 to be effective by March 1st, 2002, with taxpayers first paying property taxes under the rule in 2003. In addition to the increase in assessed values, there will be a decrease in tax rates (but not necessarily levies), and burden shifts between and within property classes.

Natural gas for home heating is classified as a utilities expenditure. Natural gas prices are expected to be higher until increased supplies reach the market. If households have to allocate more for natural gas and maybe gasoline because there are few substitutes (demand is price inelastic—insensitive to price change), then other budget categories will be reduced given a fixed budget level. Medical insurance premiums have been going up compared to the mid 1990s, and are expected to continue their rate increase. So, the result of the above could be a reduction of discretionary income and expenditures.

Table 1
Employees on Nonfarm Payrolls for Selected Metropolitan Areas, 1999 (3rd quarter) to 2000 (3rd quarter)

Metropolitan Area	Total Employment 2000 (3rd Quarter)	Change in Total Employment 1999 (3rd Quarter)—2000 (3rd Quarter)	Percent Change*
Indianapolis	887,200	15,500	1.8
Cincinnati	894,900	15,100	1.7
Columbus, OH	870,700	10,500	1.2
Louisville	595,100	12,700	2.2
St. Louis, MO	1,339,300	13,200	1.0
Detroit, MI	2,179,400	40,400	1.0
Chicago, IL	4,248,200	40,500	1.0
Austin, TX	666,200	31,500	5.0
Raleigh/Durham, NC	679,000	10,500	1.6
San Jose, CA	993,500	17,100	1.8

Source: U.S. Bureau of Labor Statistics, <http://stats.bls.gov>
*These data are subject to revision

Table 2
Indianapolis Metropolitan Area Employment Change by Major Sector, 1993 (3rd quarter) to 2000 (3rd quarter)

Sector	Percent Change
Construction	5.3
Manufacturing	1.9
Transportation Equipment	2.9
Chemicals	4.1
Transportation, Communication, Public Utilities	-0.9
Wholesale and Retail Trade	2.4
Finance	1.5
Services	1.3
Federal Government	8.0
State Government	-0.4
Local Government	0.6

Source: Indiana Department of Workforce Development

Metropolitan Area Livability

How livable is Indianapolis? One indicator is how are people “voting with their feet”? Are they moving to Indianapolis? The net migration rate is one measure of “voting.” Howard Wall, Federal Reserve Bank of St. Louis, uses the net domestic in-migration to rank 59 large metropolitan areas. His “livability index” is the rate of net domestic in-migration, the net domestic in-migration 1990-1997 divided by the 1990 population. **Table 4** lists Indianapolis and selected metropolitan areas.

Indianapolis is third among mid America areas. Austin and Raleigh/Durham are two high-tech areas with which Indianapolis would like to have increased (air service) interaction. Interestingly, San Jose (Silicon Valley) is third from the bottom.

Table 3
Consumer Expenditures by Selected Categories for the Midwest,
1988-1989 and 1997-1998, percent composition

	1988-1989	1997-1998
Average Annual Expenditures	\$25,418	\$34,109
Selected Categories:		
food	14.9%	13.8%
food at home	8.5%	8.0%
food away from home	6.4%	5.8%
housing	30.0%	31.6%
apparel and services	5.8%	4.9%
transportation	19.5%	18.6%
vehicle purchases	3.7%	3.1%*
gasoline and motor oil		
health care	5.1%	5.7%
entertainment	4.9%	5.4%**

*real price of oil was historically low in 1997-1998

**includes fees and admissions, televisions, radios, sound equipment, pets, toys, and playground equipment

Table 4
Livability Index, 1997-1999

Metropolitan Area	Net Domestic In-Migration Rate		
Top Ten		Mid America	
Las Vegas	38.0	Nashville	9.1
Atlanta	17.0	Cincinnati	5.6
Phoenix	16.6	Indianapolis	2.7
Austin	15.2	Kansas City	2.2
Raleigh/Durham	14.6	Columbus, OH	2.0
West Palm Beach	12.7	Minneapolis/St.Paul	1.9
Orlando	11.3	Bottom Three	
Fort Lauderdale	10.5	San Jose	-8.6
Portland, OR	10.4	New York	-13.3
Charlotte	9.9	Los Angeles	-15.1

Source: Howard J. Wall, "Voting With Your Feet," The Regional Economist (April 1999), pp. 10-11.

Table 5
Employment Concentration for the Information Sector, 1998
Selected Metropolitan Areas

Metropolitan Area	Software (5112)*	Cable (5132)	Telecommunication (5133)	Information Services (514)
Austin, TX	5.32	.98	1.79	1.27
Raleigh/Durham, NC	1.52	.68	1.39	.78
San Jose, CA	10.36	1.20	.97	1.45
Indianapolis	.69	.57	1.01	.82

*the new North American Industrial Classification System (NAICS)

Source: U.S. Bureau of the Census, County Business Patterns, 1998 and author's calculations

Infrastructure

Population and employment growth can put pressure on the infrastructure of a metropolitan area. Efficient connectivity and mobility are two major requirements for economic development in the 21st century. How well does Indianapolis meet these requirements? Connectivity will be discussed in terms of information technology, air passenger transportation, and combined sewer overflows; mobility by vehicular congestion.

Information Technology and Indianapolis' Role in Internet2

In February 2001, construction will begin on a Communications Technology Building on the IUPUI campus. This building will be the center of IU's telecommunications infrastructure for IUPUI, its state network and its connections to other national and international networks. It will house the Network Operations Center for the Internet 2 Abilene network, the TransPAC network to Asia, and a number of other high-performance research networks. Abilene, KS, was the gateway to the future on the old American frontier. Information technology plays that role today, and Indianapolis plays a key role. The Abilene Network was created by the University Corporation for Advanced Internet Development (UCAID) in partnership with Qwest Communications, Cisco Systems, Nortel Networks, and Indiana University. Abilene is a backbone network used by the Internet2 community. Abilene network supports the Internet2 by providing an effective interconnect among the regional networking aggregation points, pioneered by Internet2 universities.

Air Passenger Service Connectivity

Air passenger service connectivity is critical for development of information economy firms. Indianapolis would like to establish air passenger linkages with certain metropolitan areas, such as Austin, TX, Raleigh/Durham, NC, and San Jose, CA. How do these areas compare with Indianapolis? The method of comparison is to use a measure of employment concentration—the measure is greater than 1.0 if the metropolitan area has a greater concentration than in that same industry at the national level. Measures of concentration for components of the information sector are given in **Table 5**.

Table 6
Mobility Trends, 1992-1997 (for Selected Metropolitan Areas)

Metropolitan Area	Travel Rate Index		Rank		Percent Severe Congestion			
	1992	1997	1992	1997	Freeways		Arterial Streets	
					1992	1997	1992	1997
Indianapolis	1.09	1.22	46	28*	5	31	13	20
Columbus, OH	1.13	1.21	33	33	23	24	17	11
St. Louis	1.13	1.24	33	21	11	33	17	16
Kansas City	1.04	1.09	55	52	15	14	18	18
St. Jose	1.30	1.29	7	15	41	50	14	9

*the lower the rank, the greater the congestion

Source: Texas Transportation Institute. 1999 Annual Mobility Report, <http://tti.tamu.edu>

For many observers the convenient shorthand explanation is that there is a regional culture that fosters an entrepreneurial spirit. The cultural explanations are peculiar because they are all-encompassing but convey little information. The driving force in Silicon Valley is fundamentally economic, and the institutions that have arisen to facilitate new firm formation are based on the capital gains derived from firms that have grown incredibly quickly. The culture is not a prerequisite to an economy based on large capital gains; it is an outcome of such an economy.¹

Austin is a state capitol, and the home of the University of Texas at Austin as well as Dell Computer Corporation. A statistical analysis of outbound air passenger traffic from Austin to 57 cities showed that after controlling for hub status and distance from Austin of the paired city, the outbound traffic from Austin was positively associated with a concentration of software employment in the paired city. Indianapolis-based software firms, such as Powerway and Interactive Intelligence, have announced major employment expansion plans over the next several years. The Indiana Technology Partnership is working in Indianapolis and statewide to promote new information sector firms and, therefore, to make air connections more economically attractive.

What are determinants of software employment? In an analysis by this author, workforce quality, as measured by a weighted measure of the educational attainment, and the presence of venture capital were found to be important. More generally, in a discussion of what generated high-technology firms, such as Apple Computer, Cisco, Genentech, Intel, Oracle, Sun Microsystems, and 3Com in Silicon Valley, Martin Kenney, University of California, Davis and a Senior Project Director at the Berkeley Roundtable on the International Economy writes:

Combined Sewer Outflows

The Indianapolis Chamber of Commerce Infrastructure Commission issued a report, *Getting Indianapolis Fit for Tomorrow (GIFT)*, ten years ago. The report called for 1.1 billion in infrastructure spending over the next ten years. Mayor Bart Peterson has indicated that tomorrow is here, and that he intends to address the combined sewer overflow problem, one component of the report. The cost depends on the level of abatement. The method of finance has not yet been determined but the solution to the problem will require some increase in fees.

Auto and Truck Mobility, and Congestion

The Northeast Corridor transportation study (from Noblesville to downtown Indianapolis) focuses on the projected increased levels of congestion by 2025, and the alternative strategies to deal with it. Analysts at the Texas Transportation Institute, located at Texas A & M University, have been studying mobility issues of metropolitan areas.

They have developed a Travel Rate Index that shows the difference between a trip taken during peak travel times and the same trip made in uncongested conditions. Those metropolitan areas with the highest index in 1997 were Los Angeles, Seattle-Everett, San Francisco-Oakland, Washington, D.C.-MD-VA, and Chicago-Northwestern, IN. **Table 6** shows Indianapolis and some similarly-sized metropolitan areas.

The table shows that for the 68 urban areas studied, Indianapolis became: 1) more congested—our Index increased, 2) more congested at a faster rate than other urban areas—our rank decreased, and 3) severe congestion increased on our freeways and arterial streets. The Mobility Report estimated the annual congestion cost per eligible driver to be \$865

for Indianapolis (rank 13) and \$1,370 for Los Angeles (rank 1). What are the options? The Texas analysts observe:

If building additional roadway capacity were the only option, the cities in the study would have to add an average of 37 more lane miles than they currently do to keep pace with only one year of increased traffic demand.

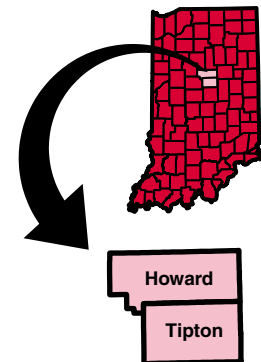
If carpooling were the only answer, the average city would have to increase its annual number of carpool trips by at least 100,000 every year. They note that "...There is not a need for a specific option so much as there is a need for consensus that transportation is an important element of our cities, and something will be done to address the mobility issues."² In the short run, we can use our existing highway capacity more efficiently with intelligent transportation system activities and commuter van services (under federal law, the first \$65 provided to an employee monthly for vanpooling is tax-free income). Long run options include capacity enhancements—freeway expansion and commuter/light rail transit. Congestion reduction options come with a variety of price tags. What price are we willing, and able, to pay?

So, in 2001 the residents and the leadership of the business, government, and nonprofit sectors of Indianapolis face major infrastructure issues in "getting fit" for the coming decade. How creatively and constructively we respond will influence our economic future.

Endnotes

¹Martin Kenney, "A Note on the Comparison between Cambridge, England and Silicon Valley, Berkeley Roundtable on the International Economy," Research Note #6, July 2000.

²David Schrank and Tim Lomax, "Study Shows Traffic Worsening in a Variety of Ways and Places," 1999 Annual Mobility Report, Texas Transportation Institute, <http://mobility.tamu.edu>.



Kokomo

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Kokomo is experiencing its longest period of economic expansion since 1992. Recently, Industry Week magazine stated that Kokomo is among the top 15 manufacturing centers in the U.S. According to the U.S. Department of Labor's Bureau of Economic Analysis, Kokomo's average salary ranks among the top 15 MSAs in the nation. The same source reports that Kokomo MSA has held #1 ranking in Indiana in terms of average salary for the past 16 years! Kokomo has a prosperous business partnership with DaimlerChrysler, the world's 3rd largest auto manufacturer. In addition, Kokomo's housing is affordable, its population is growing, its property values keep rising, and its credit rating is high. Optimism abounds in Kokomo!

Although the Kokomo economy is barreling along, it is not as super-charged as it was during the previous several years. Apparently, it is showing some signs of economic growth fatigue. There are, however, no signs of a significant slowdown. Manufacturing still remains strong. There is no significant reduction in factory overtime. The jobless rate remains low. The labor market is super tight. Payrolls are high. The retail sector is vibrant. Nonresidential construction is up (see **Table 1**).