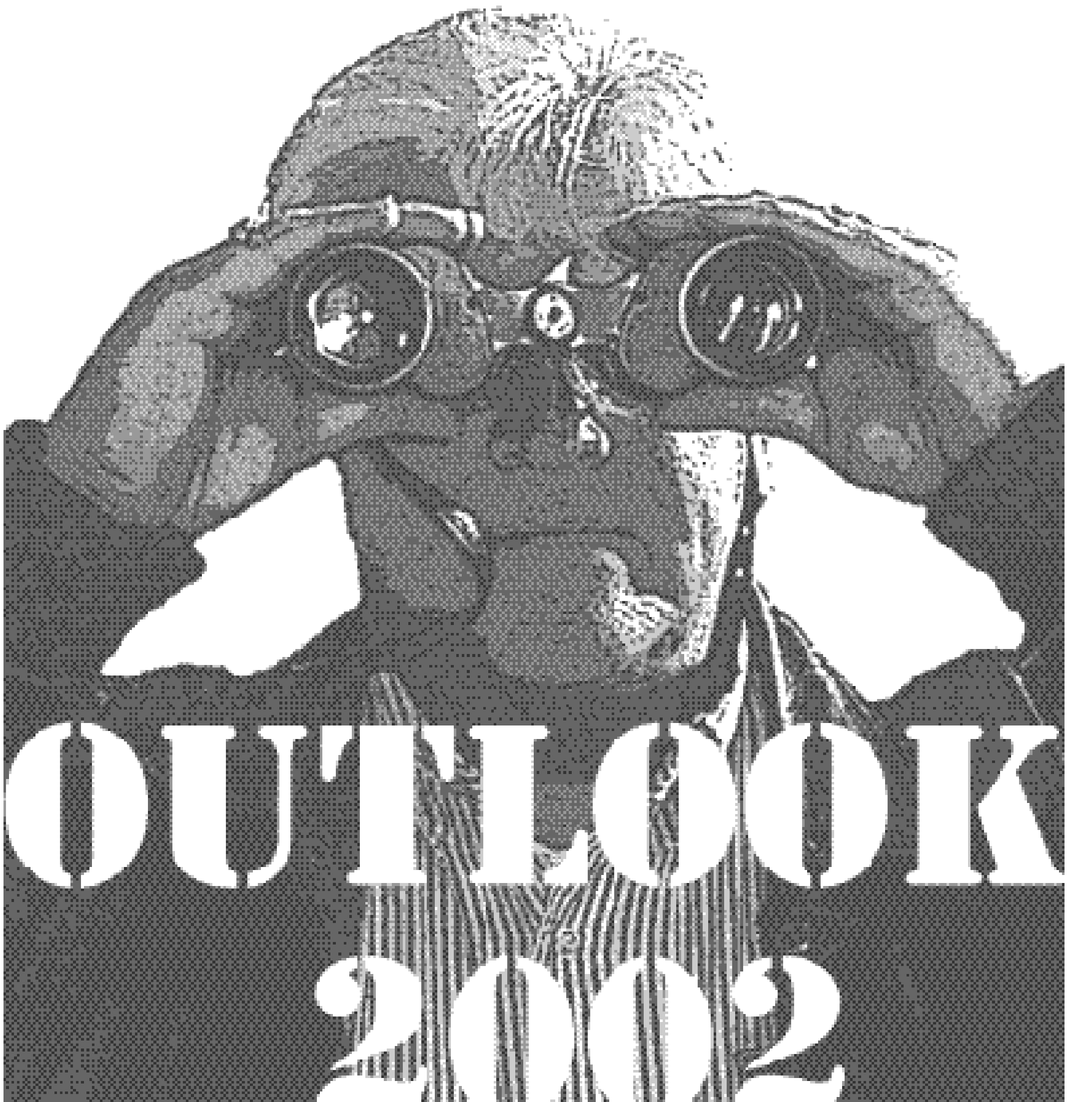
Indiana Business Review



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From the Editor's Desk:

September and November. These two months underpin the forecasts you will find on these pages. September of course refers to the tragic events that occurred on the 11th day of that month. As each week goes by we learn more about the rippling effects those events have had on the economies of the nation and Indiana. November is the month our authors put pen to paper to document their forecasts for 2002. That said, we believe that this Outlook edition will provide the public and private sectors with important information that can be used for many months ahead.

Keeping current with the economic situation as the months go by has been made easier with the Web. The Indiana Business Research Center maintains web sites that provide current economic indicators and demographic trends for the state and the nation. We encourage our readers to make use of those resources.

Outlook for 2002

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The year 2001 was supposed to be the 10th year of the long economic expansion that began in the second quarter of 1992. Instead, it will be recorded as part of the 2001-2002 recession. This is the third consecutive decade that started in recession—the 1980s opened with two recessions (two quarters in 1980 and five quarters spanning 1981 and 1982) and the 1990s began with a recession covering three quarters of 1990 and 1991. The U.S. economy doesn't seem to start decades well, but it clearly recovered each time and did very well through much of the 1980s and 1990s.

Not all recessions are alike, however. Between 1979 and 1982, the unemployment rate rose from 5.8 percent to almost 9.7 percent. In December of 1982 it was nearly 11 percent. It wasn't until 1988 that the rate for the year had fallen back to below 5.8 percent. Contrast that performance with the unemployment rate in the 1990s. From 1989 to 1991 the unemployment rate rose from 5.3 percent to 6.8 percent. The rate rose again in 1992, but averaged 5.4 percent by 1996. Clearly, in terms of unemployment, the short recession of 1990–1991 had a much less pronounced and briefer impact.

We believe the current recession will be more like the one in the 1990s. It will have started in mid-2001 and should be over by early to mid 2002. While two or more quarters of that time period will register a contraction in GDP, each year will show a year-over-year positive rate of growth, in the neighborhood of 1 percent. The unemployment rate should rise from a low of 3.9 percent in 2000 to a peak of about 6.4 percent in 2002. Within two to four years, the rate should be back to around 4 percent.

It is debatable whether or not we would have entered a recession in 2001 had it not been for the attack on the United States on September 11th. The economy had already been slowing and GDP growth was barely on the positive side during the first two quarters of the year. The unemployment rate had risen from 3.9 percent in September of 2000 to 4.9 percent in August of 2001. The Federal Reserve began aggressively lowering interest rates early in 2001, attempting to stabilize the economy against the impacts from lower profits, declining business investment, slowing export sales, and decreasing consumer spending. Since September, the Federal Reserve continued this policy and it appears that the federal government will do its own part to resuscitate spending through its own spending increases, industry subsidies, and tax decreases. Central banks in many countries have joined the U.S. Federal Reserve in a concerted effort to provide liquidity in distressing times.

We predict a short and shallow recession because we believe that these policy responses will be measured and adequate. Because the country's growth was slowing in the first half of 2001, some of the previous imbalances were starting to be corrected before the September attack. The last five years revealed a strong engine of growth for the U.S. that should resurface once imbalances are worked off, the direct impact of the September attack recedes, and confidence returns to realistic levels. Some of the highlights of our 2002 forecast include:

- GDP growth of 1.0 percent and an economic recovery phase in late winter
- GDP inflation of 1.6 percent
- Unemployment rate averaging 6.3 percent
- Historically low short-term rates; Prime Rate of 5 percent
- Housing starts of 1.5 million units
- A trade deficit of approximately 4 percent of GDP
- A declining value of the dollar
- Indiana employment falling by 90,000 jobs
- Modest growth in Indiana exports

The U.S. Economy: The Great Expansion Ends

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As we look at the economy in late 2001, after the terrible shock of September 11th, it is easy to see signs of a significant downturn. The National Bureau of Economic Research (NBER) has recently announced that a recession began in March of 2001. How deep will it be? How long will it last?

The dates associated with economic recessions and recoveries are determined by the National Bureau of Economic Research. A recession begins when the NBER decides the economy has reached a peak and ends when the economy reaches a trough. The duration of the recession is the length of time, in months, between the peak and trough. The NBER recently decided that the peak was reached in March 2001. However, this was a difficult choice since different parts of the economy were behaving in very different ways.

Figure 1

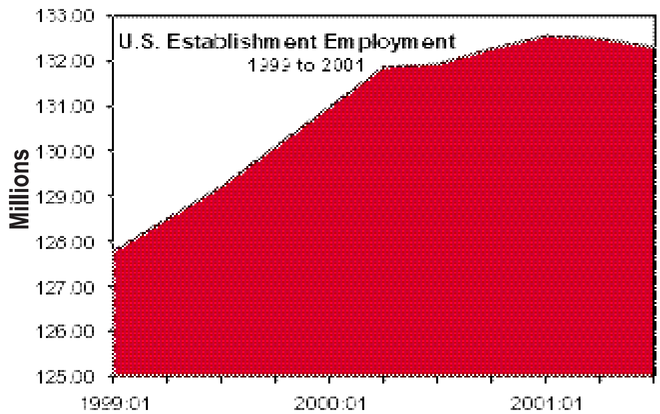


Figure 2

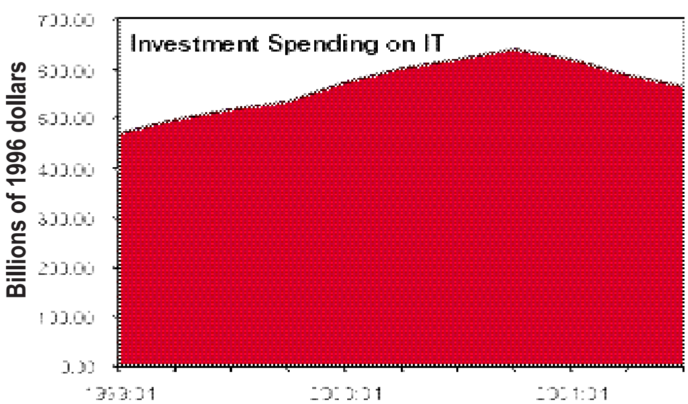
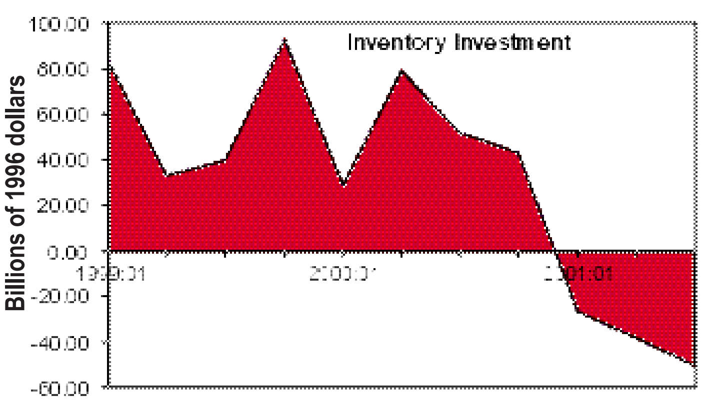


Figure 3



An early sign of trouble in the economy was the bursting of the Internet bubble in March 2000. The Internet and technology-heavy NASDAQ reached a peak on March 10 before beginning a dizzying fall. As Internet companies began to suffer, spending on new technology slowed and then declined. Growth in real GDP slowed significantly, from 4.2 percent over the four quarters ending in the first quarter of 2000, to 2.5 percent over the four quarters ending in the first quarter of 2001. The Index of Industrial Production peaked in September 2000 and declined by 5.8 percent over the following twelve months. Real investment spending on communication and information processing equipment peaked in the fourth quarter of 2000. Also, as the high tech sector unraveled, employment gains slowed and then stopped. Establishment employment peaked in March 2001 while the unemployment rate reached a low of 3.9 percent in September and October of 2000. Firms also began to trim inventories in the first quarter of 2001 (see **Figures 1**,**2** and **3**).

Despite all these signs of weakness, other parts of the economy continued to show some small gains. Real GDP continued to grow through the second quarter of 2001, and real consumer expenditures and real disposable personal income continued to increase through August 2001. Considering all these indicators, by September 11th the economy was either in a recession or was barely avoiding one.

Because of the complex movements of the economy any date between September 2000 and September 2001 was a candidate for selection as the beginning of the recession. The NBER considers depth, duration, and dispersion when deciding whether a recession has occurred and the dates of the associated peak and trough. Depth and dispersion are particularly important in assigning a date to the peak.

The strongest case for a September 2000 peak centers on the sharp declines in financial markets, the peak in industrial production, and the trough in the unemployment rate. The most telling argument against that date is that real GDP continued to increase, albeit slowly, for another year. The March 2001 date is supported by a peak in establishment employment, a series that the NBER considers an important indicator. September 2001 could be considered the peak if one thinks the economy had slowed but not stalled prior to September 11th. My view is that September 2000 is the most persuasive choice for the peak, but ultimately the choice is made by a committee at the NBER and committees often make compromises. March 2001 was the logical compromise.

Evidence is beginning to accumulate that the economy weakened sharply after September 11th. For example, new orders for durable goods declined at an annual rate of 8.5 percent in September, and consumer confidence, as measured by the Conference Board, declined 12 percent in September. Real disposable personal income fell 0.6 percent in September and real consumer spending dropped 1.3 percent. The very weak September performance led to a decline of 0.4 percent in real GDP for the third quarter.

When will the trough be reached and recovery begin? Our latest forecast indicates the economy will likely reach the bottom and begin to recover by late winter of 2002. If the trough occurs in March 2002, the duration of the recession will be 12 months if the peak was March 2001 and 18 months if the peak was in September 2000. In comparison, the average duration of the last six recessions since 1960 has been 11 months.

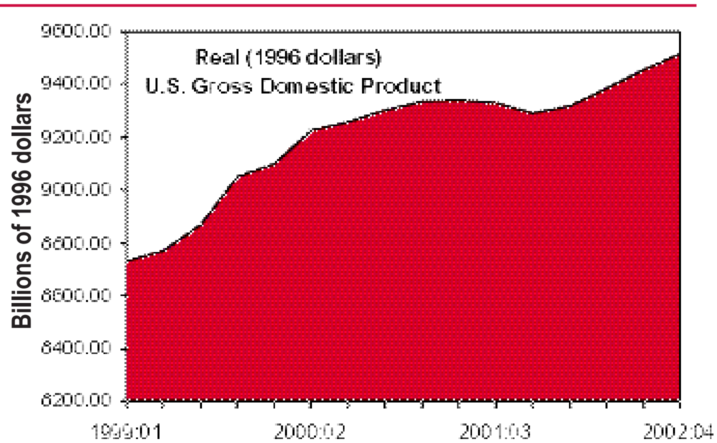
One of the reasons we expect the recession to end in early 2002 is that the economy underwent considerable adjustment prior to the onset of the recession. As mentioned earlier, the decline in financial markets started in early 2000 and the drop in investment spending began shortly thereafter. The inventory adjustment began in early 2001. Thus, if the recession is judged to have begun in March 2001, or even September 2000, many necessary structural adjustments were well underway before the economy peaked.

Strong policy moves toward expansion are the other reason we expect the recession to end soon. The Federal Reserve cut interest rates nine times between January and early October of 2001. The reductions lowered the Federal Funds rate from 6.5 percent to 2.5 percent. Fiscal policy, partly as a result of the Bush tax policy and partly as a result of the response to the September 11th tragedies, eased significantly. In fact, the Federal surplus will likely disappear by 2002. While not a policy move, the decline in world energy prices during 2001 will stimulate the economy as well. By October 2001, average OPEC crude petroleum prices were 8.9 percent below their level in January 2001 and 14.1 percent below their level in January 2000.

Our latest forecast indicates the recession will be moderate in depth. The average decline in real GDP, from peak to trough, in the last six recessions has been 2.1 percent. If we eliminate those recessions with sharp increases in energy prices, the average decline is only 1.4 percent. We expect a decline from peak to trough of about that magnitude (see **Figure 4**).

We have already been through a sharp falloff in investment spending and in exports. We have also seen a sharp inventory correction. We expect the rest of the recession, lasting through the winter, to be characterized by weaker consumer spending and a continuation of export and investment problems. Government spending will create a stimulus to the economy, and tax relief, combined with low energy prices and low interest rates, will moderate the decline in consumer spending. We expect both investment spending and consumer spending to be increasing by spring, bringing an end to the recession. By the second half of 2002, economic growth should be in the two to three percent range. Higher growth rates must wait for the recovery of the international economy, and that could take longer.

Figure 4



The International Outlook

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Economic growth in the world in 2001 was projected at 2.6 percent (measured in terms of real GDP), compared to growth rates of 3.6 percent in 1999 and 4.7 percent in 2000. The International Monetary Fund in Washington forecasts world economic growth for 2002 at an optimistic 3.5 percent[1] without, or incompletely considering, the economic consequences of September 11th's tragic events. The Organization for Economic Co-Operation and Development in Paris predicts a modest growth rate of around 1.2 percent for the 30 most developed countries in 2002.[2]

In contrast to the past decade, the world currently lacks a growth locomotive. One has to go back almost three decades, to the year 1973, to find the coincidence of recession in the world's three largest economic areas, the U.S., Europe, and Japan. Events of September 11th contribute to the gloomy economic outlook, but are not the primary force of the worldwide economic slowdown.

The developing countries, especially those in Asia, face a sharp decline of economic growth rates for this and the following year, in particular due to sluggish demand for imports in the industrial centers. South America has been negatively affected by the sudden drop of capital imports from the United States and Europe.

Table 1
Current and Projected Indicators

	GDP		Consumer Prices		Current Account Percent of GDP		Unemployment	
	2001	2002	2001	2002	2001	2002	2001	2002
United States	**1.1**	**0.0**	**3.1**	**2.1**	**-4.0**	**-3.8**	**4.7**	**6.3**
Canada	1.6	1.8	2.8	2.0	1.9	0.9	7.4	7.3
Japan	-0.7	-0.8	-0.6	-0.6	2.2	2.6	5.0	5.6
France	1.9	1.6	1.9	1.5	2.5	2.6	8.7	8.5
Germany	0.7	1.0	2.4	1.4	-0.8	-0.5	7.5	7.9
Italy	1.8	1.5	2.7	1.8	-0.1	0.1	9.5	9.1
Euro area	1.6	1.5	2.6	1.7	0.3	0.4	8.4	8.4
United Kingdom	2.0	1.9	2.0	2.1	-1.7	-2.0	5.2	5.3
Mexico*	0.8	4.0	6.3	4.8	-2.8	-3.3		
China	7.4	7.1	1.0	1.5	0.9	0.1		
India	4.5	5.7	3.6	5.5	-0.8	-0.9		
Indonesia	3.0	4.3	10.8	7.0	3.2	2.0		
South Korea	2.5	4.5	4.4	3.4	2.6	2.1	4.0	3.5
Taiwan	-1.0	4.0	0.1	0.8	2.5	2.6	4.6	4.8

**This optimistic IMF estimate does not fully consider September 11th's consequences.*
Sources: Center for Econometric Model Research, Indiana University, IMF World Economic Outlook, Fall 2001, The Economist, October 20th-26th, 2001.

Forecast by Region

The core European countries have recently cut back their growth estimates for 2001 and 2002. Germany expects a mere 0.7 percent growth for this year and a modestly higher 1.0 percent growth rate for the coming year. France, Italy and the UK expect only slightly higher economic growth, between 2.1 to 2.3 percent for 2002. These moderate growth rates and the slow pace of necessary reforms, above all labor market reforms, will keep unemployment rates at existing high levels of around 12 percent for Spain and around 8 percent for the three big continental European countries, France, Germany and Italy (see **Table 1**).

The main causes for the continued growth weakness of Europe is its dependence on export growth and sluggish internal demand (investment as well as consumption expenditures). Despite these facts, neither national governments nor the European Central Bank (ECB) seem to be implementing appropriate counter cyclical policy measures. National governments see their hands tied by their commitment to reduce domestic debt, thereby limiting the scope for fiscal expansion. The ECB, still an untested institution, is fighting for its reputation and the future strength of the euro. This is the reason why the organization is so cautious in cutting money market interest rates. In sum, the somber estimates for world trade and the questionable passivity of economic policy give very limited hope for a stronger pick up of economic activity in Europe.

After a decade, the Japanese recession is developing into a permanent economic calamity. Real GDP growth is estimated to be at -0.7 percent in 2001 and -0.8 percent in 2002. Several previous fiscal stimulus packages have had ephemeral effects. Although short-term interest rates are close to zero, investment and consumption have failed to pick up. The unemployment rate reached 5 percent this year and is expected to rise further. In addition, deflation, that is, a continued decline of the price level, is darkening the economic outlook for the world's second largest economy.

The Japanese quandary is compounded by forestalled domestic reforms. There is insufficient political will to privatize and open the country to international competition. The Japanese financial crisis reflects the economic and political conditions of the country. After a decade, the size of non-performing loans has risen from the billions to the trillions of dollars. There will be no economic recovery without a clean up of the financial sector.

The best guess for the U.S. economy seems to be a modest recovery of economic dynamic next year with an estimated real GDP growth of 1 percent. Unemployment will reached almost 5 percent this year and will also rise next year. Monetary and fiscal policy point in the right direction, that is, at stimulating economic activity.

NAFTA members are closely trade integrated. Canada and Mexico are strongly depending on the U.S. demand for their exports. Real GDP growth for Mexico and Canada this year is expected to be around 0.8 percent and 1.6 percent, respectively, and slightly higher next year.

The picture for emerging economies looks only slightly better than for the industrialized countries. Economic growth in the East European countries and in Russia is projected at 2.5 to 4.5 percent this year and next year.

Southeast Asian emerging economies have suffered a dramatic decline in output in the second half of this year, caused by a sharp slump of import demand in the United States. China and India have bucked the regional trend with projected growth rates of 7.5 and 4.5 percent, respectively, in 2001 and 7.0 and 5.7 percent in 2002.

Latin America, with much less intense trade with the United States, faces a sharp decrease of capital imports that are needed to finance the current account deficits. Exchange rates of several countries, especially the Argentine peso and the Brazilian real, came under pressure to devalue.

The Risk

The war against terrorism presents the largest risk in the forecast.

The projected U.S. current account deficit of $400 billion this and next year, around 4 percent of GDP, is problematic. The deficit indicates that internal absorption, the sum of consumer expenditure and investment, exceeds domestic production. The gap is financed by net capital inflows. Investing in the United States was attractive for foreigners expecting high rates of return. They might be less optimistic in the near future. Interest rates in Europe and the United States narrowed over the year, most industries announced lower rates of return for the coming future, equity investment became riskier. A reversal of net capital flows would either cause a sharp drop in consumption (a forced rise in private savings) with severe negative effects for economic growth or provoke a strong depreciation of the dollar, further reducing the attractiveness of foreign investment in the United States. A weaker dollar might be good for U.S. exporters, but will at the same time make the economy more vulnerable against imported price inflation. An increase of inflation would limit the scope for future interest rate cuts by the Fed.

Many commentators predict another speculative attack on the Argentine currency board (the peg of the peso), the domestic currency to the U.S. dollar. An implosion of Argentina's exchange rate regime would possibly cause a default on its government debt of approximately 132 billion U.S. dollars This would not only severely harm international creditors, but also provoke a wave of financial contagion around South America and other emerging markets.

"The best guess for the U.S. economy seems to be a modest recovery of economic dynamic next year...."

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1. International Monetary Fund, *World Economic Outlook*, Fall 2001.

2. Organization for Economic Co-Operation and Development, *World Economic Outlook*, November 2002 (forthcoming).

The Financial Market Forecast

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A noted economist once said, "The five most dangerous words for investors are: This time really *is* different". So before trying to gaze into the crystal ball let's look backward and put the recent market performance in historical perspective. The S&P 500 generated annual total real returns (after accounting for inflation) of slightly less than 15 percent over the last 15 years (1986-2001),with the average over the last five years being just over 20 percent per year. This was much higher than the five percent real return on the S&P during the fifteen years from 1971-1985. Productivity growth, the expansion in global trade and the technological revolution were clearly important factors for the recent performance. However, two other factors emerged in the latter half of the 1980s and the 1990s.

The first factor was the level of inflation and interest rates. In the early 1980s interest rates on long-term government bonds and inflation were both around 14 percent. By the mid-1980s inflation had dropped to about five percent but the government bond rates were still in double digits. The mid-1980s saw the start of a fairly steady decline in interest rates that has continued to this date. Since rates and prices move in opposite directions, the drop in rates caused an increase in asset prices—stocks as well as bonds. To see this effect, think of a security that was paying out $100 per year. At a rate of 15 percent, this security would sell for $667. If the rates drop to 10 percent the security price increases to $1,000. If the rates further drop to 5 percent, the price increases to $2,000. This is without any increase in the payout from the security!

Can we expect more normal rates of return next year?

The second factor is a change that occurred in the risk premium—the extra return that investors demand to bear higher risks. In the early 1980s Baa corporate bonds (the lowest investment grade bonds) were commanding a risk premium of about 3.5 percent above government bonds. By the late 1990s this risk premium had declined to about 1.25 percent. While the risk premium on common stocks is hard to estimate, without question it followed a similar pattern. This drop in risk premium magnified the decline in overall interest rates, with a consequential increase in stock prices.

The net result is that these two factors enabled investor's returns in stocks to outpace the growth in profits. In looking to the potential returns for the next year and beyond, we have to recognize that these factors will not be duplicated. First, there is no room for interest rates to drop much more. Second, there is some evidence that the risk premium has risen recently. The spread of Baa bonds over governments rose to the 2 to 2.5 percent range in 2000 and 2001. It is unclear what the economy sliding into a recession and the terrorist activity is having on the risk premium for stocks, but it is not likely to cause the premium to fall.

While the market has recovered the losses following September 11th, the next year is likely to be a time of substantial uncertainty. Third quarter earnings for the S&P 500 are now expected to decline about 22 percent from year ago levels and an unusually large number of companies have pre-announced lower future earnings. This pattern is gradually expected to improve with a forecasted 14 percent decline in the fourth quarter (year-to-year) and a 2 percent decline in the first quarter of 2002. Positive earnings growth is expected to return in the second or third quarter of 2002, with an approximately 5 percent growth rate for the year.

Much of this free fall in earnings is associated with the September 11th attack. In the five weeks after the attack, earnings forecasts plummeted 11 percent for the fourth quarter and 10 percent for the first quarter of 2002. Economically sensitive sectors such as technology and airlines were especially hard hit.

Over the very long horizon, the return to stocks has averaged about 7 percent more than the inflation rate. Does this mean that we can expect normal rates of return for the next year? Unfortunately, there are two red flags on the horizon. First the price/earnings ratio of stocks is currently about 21, well above the historical average of 14. While the prospect of low inflation and strong savings from 401k plans contribute to a higher than average price/earnings ratio, reversion towards its historical average will likely come from lower stock prices. Second, there can be long periods when stocks remain poor investments. For example, from 1966 to 1981, the average return on stocks was about the same as the inflation rate.

On the upside, many analysts believe that the September lows have signaled the bottom of the market. For the first time in several years, corporate insiders were net buyers of stocks and surveys of corporate technology spending suggest that IT investment has stabilized after months of sharp declines. The downturn of the past 18 months has essentially erased the run-up of stock prices in the 1990s. Since the recession of 1991, if stocks had simply averaged 7 percent above inflation per year, then the stock prices would be close to current levels.

Over the next year we expect to see market returns more closely related to expected growth in corporate profits and the growth in the economy in general. Once the recovery is under way we are likely to see economic growth in the 2 to 3 percent range, inflation of 1 to 2 percent and corporate profit growth in the 5 to 6 percent range. Price/earnings ratios will shrink somewhat, but remain above their historical average. Overall, expectations of stock market returns are more likely to be in the high single-digits than the double-digit rates of the mid-1990s. We appear to be gradually returning to more "normal" times.

Short-term government rates are currently about 2 percent, and should remain at these low levels over the near term. Since the start of the year, the Federal Funds rate has been cut by 450 basis points and short-term Treasury Bills have shown a similar decline in yields. Despite the lowest short-term rates in 40 years, the yield on 3-month T-bills is lower than the Federal Funds rate, suggesting that additional interest rate cuts are forthcoming. Overall, short-term rates will remain in the 2 percent range until there is clear evidence that recovery is underway. The bank prime rate is expected to continue a slight decline and be around 5 percent until loan demand increases with an increase in economic activity.

Long-term Treasury rates have also declined, although much less than the short-term rates. The 10-year Treasury rate is about 4.25 percent, a reduction of 85 basis points since the start of the year. Since short-term rates have fallen by more than long-term rates, the yield curve has become steeper. This development is a favorable indicator for the economy because a steepening of the yield curve is associated with higher growth in the future. As growth picks up, short-term rates will rise as the Federal Funds rate reverts to a more balanced target.

The Outlook for Housing

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Activity in the nation's home building industry is expected to hold up fairly well against a general decline in economic growth during the final two business quarters of 2001. While the terrorist attack on America on September 11th has had a negative impact on consumer confidence, it appears that a healthy number of prospective homebuyers remain in the marketplace, and that low mortgage interest rates are helping to moderate the housing slowdown that is now occurring.

For the past year, the role of housing has been anything but typical, as it remained strong as the economy weakened, preventing growth of the Gross Domestic Product from turning negative. New residential construction alone accounts for 5 percent of the GDP on average and 14 percent when related financial and other activities are included.

The drop in mortgage rates from a peak of 8.7 percent in May of 2000 is helping to support the industry by making home buying more affordable. Interest rates are around 6.5 percent for fixed-rate mortgages and close to 5 percent for adjustable-rate mortgages. According to Freddie Mac, the national average commitment rate for a 30-year, conventional, fixed-rate mortgage was 6.82 percent in September, down from 6.95 percent in August; it was 7.91 percent in September 2000. Rates for fixed-rate mortgages had increased slightly at the time of this writing, but remain near historic lows, which allows homebuyers and people refinancing their homes probably the best mortgage financing terms since the 1960s.

There are some reasons to believe that the next significant move in long-term mortgage rates will be up from current levels. For one, the rate on the 10-year Treasury Note, a bellwether bond used to help price mortgages, has kicked up recently. It stands now at 4.57 percent—not that much higher than its recent low of 4.48 percent on October 3rd, but it is not falling, either.

Second, the housing market may be holding up better than most had expected following September

11th. The number of mortgage applications to finance a home purchase has been rising, and is down only modestly from its pre-terrorist attack levels. And housing starts did not swoon during September, as had been widely expected. (While the reported September pace was actually stronger than August's rate, the two numbers are, statistically speaking, indistinguishable.) All of this activity means that demand is holding up better than expected, which adds upward pressure to mortgage rates.

The third reason mortgage rates are likely to go up is inflation. While there is hardly any inflation at the moment, the forward-looking nature of the financial markets means that future inflation is always much more important than current inflation. Mortgage rates (as well as other long-term interest rates) will incorporate the rising expectation that higher inflation will result in a couple of years from this year's significant Federal Reserve easing and the likelihood of a sharp economic rebound by early 2002. Because the rates on adjustable-rate mortgages, such as the 1-year ARM are less susceptible to inflation, these rates are less likely to reverse course as quickly as the rates on 15-year and 30-year fixed mortgages.

From 1992-2001, existing home sales increased from an annual rate of 3.3 million to 5.5 million and the median sales price of an existing home zoomed from $98,200 to $150,000. Sales traffic was down by about 10 percent immediately following September 11th, but it is now off by only about 5 percent.

Table 1
Housing and Interest Rate Forecast

	1999	2000	2001	2002	2003
Total Starts (000)	1,647	1,575	1,554	1,574	1,684
Single-Family (000)	1,306	1,233	1,227	1,240	1,324
Multifamily (000)	341	342	327	334	360
New Home Sales (000)	879	881	890	889	957
Existing-Home Sales (000)	5,194	5,123	5,218	5,238	5,562
Interest Rates (Freddie Mac Commitment)					
Fixed Rate	7.4%	8.1%	6.9%	6.9%	7.8%
ARMs	6.0%	7.0%	5.7%	5.3%	6.4%
Prime Rate	8.0%	9.2%	7.0%	6.1%	7.4%

Source: NAHB Economics Department
Annual data are averages of seasonally adjusted quarterly data and may not match annual data published elsewhere. Updated September 28th, 2001.

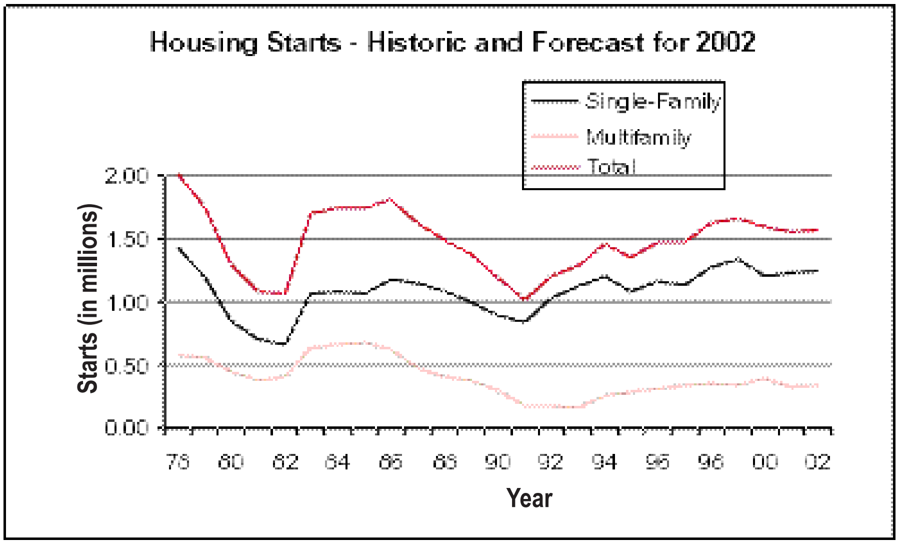
The market for existing single-family home sales fell in September as the nation reacted to the attack on America. Existing-home sales dropped 11.7 percent to a seasonally adjusted annual rate of 4.89 million units in September from an upwardly revised pace of 5.54 million units in August, which was an all-time record. Last month's sales activity was 5.2 percent below the 5.16 million unit pace in September 2000. The National Association of Realtors (NAR) projects total sales for this year at 5.19 million, an increase of 1.3 percent from 2000, which will be the second highest total for existing-home sales on record.

In a surprisingly strong showing, starts of new housing units rose 1.7 percent in September to a seasonally adjusted annual rate of 1.574 million according to the Census Bureau. The housing numbers for September were better than expected, although permits for new construction, which can be an indicator of future activity, decreased by 3 percent, including a 4 percent setback for single-family units. Permit issuance weakened in September (establishing downward pressure on housing starts for October), mortgage applications for home buying were down in the first half of October, and the National Association of Home Builders (NAHB) Housing Market Index dropped in October to the lowest level since mid-1995.

September starts and permit figures reflect builder behavior, not consumer actions. The starts numbers show that builders were still in gear in September, but the permits suggest that they were seeing demand drop off as the month progressed. Most of the increase in housing starts in September was in the multifamily sector. Multifamily rebounded from the previous month with a 6.3 percent increase. Single-family housing starts increased by only 0.6 percent.

The NAHB is forecasting 1.45 million housing starts for the fourth quarter, down 9 percent from the revised third quarter pace, despite maintenance of low interest rates in the mortgage market (see **Table 1**). The NAHB's forecast continues to show improvement in housing market activity and resumption of positive economic growth in the first quarter of 2002, followed by even stronger activity during the year. The NAHB forecasts housing starts to be about 1.57 million for 2002, up slightly from 1.55 million expected for 2001. This may be a little optimistic, however, and our forecast is for housing starts to be flat for 2001. This would still be a very respectable number by historical standards (see **Figure 1**).

Figure 1



The national median existing-home price was $148,100 in September, up 4.6 percent from September 2000 when the median price was $141,600. The median is the midpoint, which is a typical market price where half of the homes sold for more and half sold for less.

Regionally, existing homes in the Midwest were selling at an annual rate of 1.08 million units in September, down 9.2 percent from August; the pace was 3.6 percent below September 2000. The median price in the Midwest was $131,000, up 2.6 percent from September 2000.

Growth in home values increased by an annualized rate of 6.9 percent nationwide in the second quarter of 2001, down from a revised annualized rate of 9.2 percent for the first quarter of 2001, according to the Conventional Mortgage Home Price Index released recently by Freddie Mac. The index showed that annual house-price appreciation also increased 8.5 percent from the second quarter of 2000 through the second quarter of 2001.

Housing has remained a strong sector throughout the first half of 2001, due in part to the low mortgage interest rates that prevailed throughout that period. Nationally, home values have appreciated at more than twice the rate of consumer price inflation, which means housing remains a good investment for families.

Freddie Mac expects annual growth in home prices to slow to more normal levels, in the 4 to 5 percent range, over the rest of the year. The Federal Reserve Bank's efforts to boost the economy through lower interest rates should help the housing sector remain vibrant and healthy.

Indiana

James C. Smith

Director, Indiana Business Research Center, Department of Business Economics and Public Policy, Kelley School of Business, Indiana University, Bloomington and Indianapolis

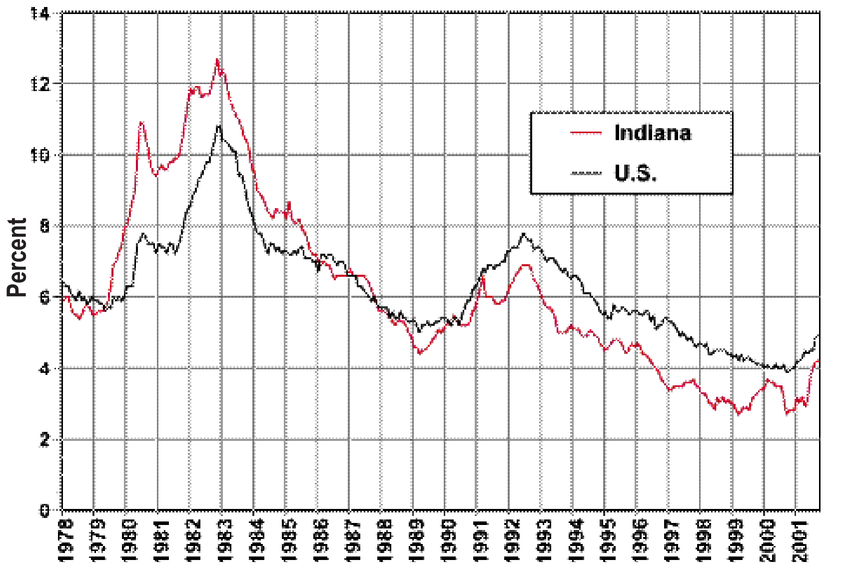
Indiana was hit hard by the recession in the early 1980s. From peak employment in mid-1979 to the low point in first quarter 1983, the number of jobs in Indiana fell by 14 percent. The state unemployment rate reached 12.7 percent by Christmas 1982 (see **Figure 1**), well above the national peak of 10.8 percent.

It was three years—1986—before employment in the state climbed back to 1979 levels. The state's unemployment rate stayed above the national average until 1986, too.

As Hoosiers now battle the recession of '01-'02, the situation for Indiana does not look as bad as it did in 1982. Interest rates today are at historical lows instead of at historical highs as they were in the early 1980s, and oil prices are relatively low and stable .

Ironically, one factor that appears to be working in the state's favor is the relatively slow population growth rate of the last decade. The rate of people moving into Indiana slowed markedly in the last few years. The result was a population increase from 1990 to 2000 of only 9.7 percent. Since the average in the nation was 13.2 percent, our relative decline cost Hoosiers a seat in the U.S. Congress.

Figure 1
Unemployment Rates
Indiana's unemployment rate was worse than the U.S. rate in the 1982 recession. Since 1991, Indiana's rate has been better than the U.S. rate.



With the slow growth in Indiana's labor force came labor shortages during the boom years of the 1990s. Demand for more employees in a tight labor market drove the state's unemployment rate to the record low level of 2.7 percent in late 2000. By comparison, the lowest rate that year for the country as a whole was 3.9 percent. As a result, Indiana enters this period of economic weakness with a comparatively healthy employment picture. Our unemployment rate in late 2001 remains near 4 percent—still not bad by historical standards and still below the national rate.

There is another factor that may protect the state from the worst of the recession. Indiana now possesses a more diverse mix of industries compared to 20 years ago. In 1981, 31 percent of all jobs in Indiana were in manufacturing. By 1990 that was down to 25 percent, and this year the percentage is just 22 percent. Even within the manufacturing sector, Indiana's mix has broadened. United States-headquartered auto manufacturers continue to face market share problems. But many jobs in Indiana are now at plants supplying Japanese-owned car companies (whose sales have held up well this year), or at medical device manufacturing firms with growing demand.

And despite widely publicized programs aimed at bringing more "dot.com" business to Indiana in the late 1990s, conservative Hoosier businesspeople were slow to join the swelling bubble of Internet startup companies. When that bubble burst a year ago, Indiana's economy serendipitously dodged the fallout.

Manufacturing's prominence in Indiana dimmed significantly in late 1997. That was when services industries as a group overtook manufacturing and claimed the largest share of the state's employment. Services industries continued to expand to 26 percent of employment by the end of 2001. This rise in services industries is another form of diversification that will bolster Indiana during the recession.

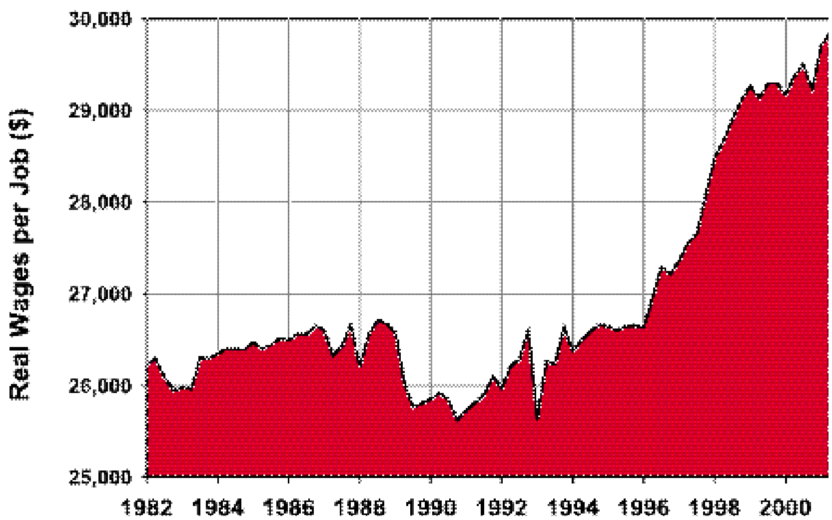
But the term *services* covers everything from lawn care to law firms. What are the big sectors in Indiana's services industry? The two principal subdivisions are health services and business services. Health care jobs now account for 8 percent of all jobs, up from 6.5 percent in 1982. And the business services category, which includes accounting firms and software companies, has nearly doubled its share of Indiana employment, from 3 percent in 1991 to 5.4 percent today.

There is no reason to think we are sacrificing good-paying factory jobs for lower-paying service jobs. Consider the average real annual wage per job in Indiana (see **Figure 2**). After practically no increase at all for almost 15 years after 1982, it began climbing in 1994. By the end of second quarter 2001, the average was up 13 percent since 1994. So the swing to more service industry jobs has not been accompanied by a decline in wages per job.

In 2002, the contraction in Indiana's economy will be limited by the momentum the state carries into this recession. The general U.S. recession will be no more severe than average and output will start expanding again by mid-year—provided no further major shocks to the economy take place. The outlook for Indiana is:

- Indiana's unemployment rate will rise toward the national average, probably exceeding 6 percent by midyear. Even as the third-quarter recovery begins, however, it is likely to begin gradually. So expect the state unemployment rate to remain near 6 percent throughout the second half of 2002.
- In the greater Indianapolis metro area, economic conditions are strongest. Rural Indiana counties and slow-growth metro areas like Kokomo, Terre Haute, Gary and South Bend are likely to experience higher unemployment rates than the state average.

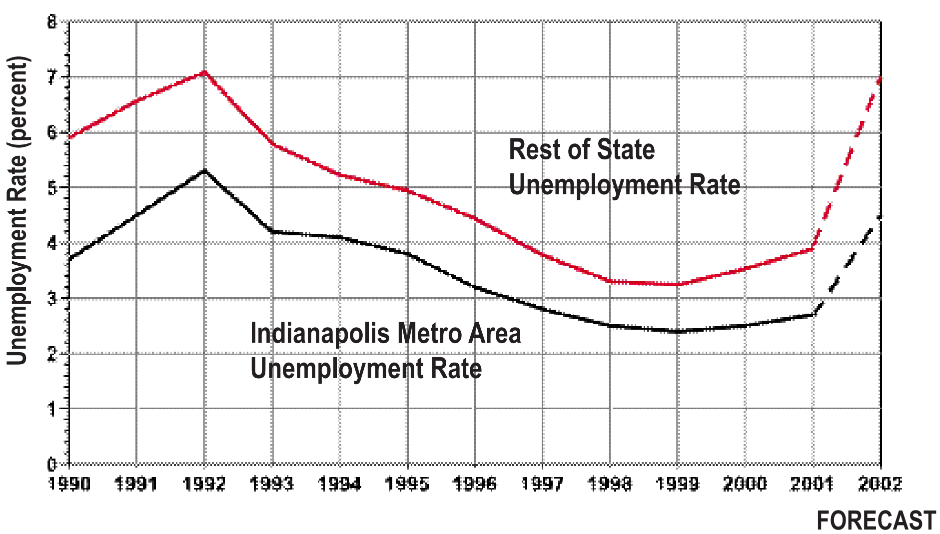
Figure 2
Indiana Real Wages per Job: Quarterly Wages at Annual Rate (1996 dollars)
Real wages changed little in the 1980s but have risen sharply since 1983, even as the share of jobs in services rose.



The unemployment rate in metro Indianapolis should stay below 6 percent. But in many places around the rest of the state, expect unemployment to exceed 7 percent (see **Figure 3**).

- Total jobs, now down about 1 percent from third quarter 2000, will slip at least another two percentage points. That 3 percent to 4 percent decline translates into a shrinkage of about 90,000 jobs since the peak in 2000. By the end of 2002, employment should be on the rise again. There were 3 million jobs in Indiana in 2000, though. For a return to that level, we probably will have to wait until 2003.
- Manufacturing employment will see a larger percent decline, as layoffs continue through the winter. Barring unusual weather, construction employment should do better than manufacturing. And services industries not linked to manufacturing are likely to suffer very few job losses.

Figure 3
Unemployment Rate Percent in Indianapolis and the Rest of Indiana



For additional information on the state of Indiana's economy, please read on.

Anderson

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Sometime during 2001, or 2002 at the very latest, the historical relevance of manufacturing employment will take a back seat to retailing. The status of manufacturing, once the largest employment category for Madison county, will fall to third place behind the services sector and now, retailing. We won't notice it until after the employment numbers are calculated and reported to us later next year. But, clearly the history of Madison County employment will change. Manufacturing will no longer be the primary employment category for the county. Retailing employment will take over that role.

By the end of 2000, the number of manufacturing jobs had decreased to 10,816. The number of retailing jobs in the county stood at 10,336. Our average loss of manufacturing jobs throughout the decade of the 1990s was 500 per year. So it seems very likely that the number of manufacturing jobs in the county will fall below the level of retail employment. Of all the employment categories, manufacturing continues to have the most significant financial impact on the county economy due to its high average wage rates.

The population in Madison County stabilized and grew slightly during the decade of the 1990s. The 2000 census reported an increase in population to over 133,000. The city of Anderson's population also expanded to just under 60,000. The county is still below the population levels of the 1970s (139,000), but we see a reversal of the population loss during the 1980s (-9,000) to a gain in the 1990s (+3,000).

The employment picture has not changed much in the past year. Compared to last year, the number of jobs in the county remains steady at 45,600. However, in the past 10 years the job total has fallen by almost 4 percent. The loss of jobs is clearly being driven by the manufacturing sector. In the year 2000 another 453 manufacturing jobs moved away from the county. The potential closure of Magnaquench would be a significant loss to the local economy. There is clearly no sign of any reversal of the current structural changes.

Employment totals remain high. Over 63,000 residents of Madison County were working in 2000. The average unemployment rate for 2000 was a scant 3.3 percent. Following the national trend, the unemployment rate is rising for 2001, but only slightly. By August 2001, the unemployment rate had only increased to 4.4 percent.

The retail face of Anderson and Madison County has been changing quite a bit this past year. Penney's is now gone as an anchor store at the Mounds Mall. Furrows has closed, along with Kmart and Ames. However, the pace of retail sales has yet to show much effect. The retail sales for the year 2000 still finished far ahead of years past. There was an increase of approximately 20 percent in retail sales from the 1999 level of $1.167 billion for the county to a high of $1.407 billion in sales for 2000, a particularly good year for consumer spending. This was consistent with Indiana and the nation. We should expect local retail sales totals for 2001 to be lower, reflecting the national trend of falling consumer confidence and spending. However, do not look for much effect from the loss of local retailing establishments. What we are seeing is the shuffling of retailing power from store to store rather than any change in the role of retailing in the local economy.

Personal income in the county (through 1999) continued to show unimpressive growth. Per capita income remained below the state average. Not only did we lose 453 manufacturing jobs, but the average yearly manufacturing wage fell from $54,000 in 1999 to about $53,500 in 2000. The national manufacturing slowdown likely had a negative impact on overtime for the local automotive plants. This was a contributing factor to our weak income performance.

Residential construction is below the pace of the mid to late 1990s. For 2000, the dollar value of permits issued was a modest $42 million, while in 1996 we saw $52 million worth issued. For 2001, we maintained last year's modest pace at $34 million through August.

The short-term economic performance of the local economy is in keeping with the structural change that has been ongoing since the 1970s. We are meeting with moderate success in the short term. The long-term prognosis for the local economy is not as positive. We should expect the county to struggle to attract high value-added jobs. For the coming year, we should expect the local unemployment rate to rise along with the national and state levels. As in the past, we should anticipate an unemployment rate that is higher than the national level, but not strikingly higher (as say, in the early 1980s). Slower automobile sales at the national level will inhibit overtime hours in the local plants, which will depress income earnings. Slower consumer spending will also slow down local retail sales. Many economists are suggesting a mild recovery late next year. Until that recovery arrives we can expect modest economic activity locally.

Bloomington

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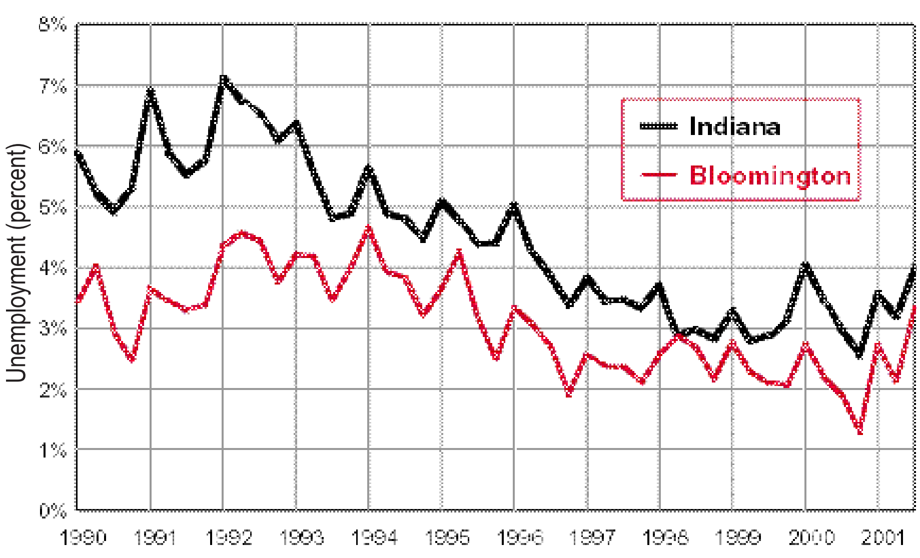
The headlines in Bloomington about layoffs and plant closings might lead you to believe the area entered a recession a year ago. So why has the unemployment rate in Bloomington been among the lowest of any metropolitan area in the state? How much will Bloomington be affected by the nationwide recession?

In the third quarter of 2001, Bloomington posted an unemployment rate of 3.3 percent. Among the 11 metropolitan statistical areas in Indiana, only Lafayette at 2.7 percent and Indianapolis at 3.1 percent were lower. (The Indiana portion of the Louisville MSA also had a third quarter rate of 3.1 percent. The Louisville metro area as a whole, however, was at 3.8 percent.) And Bloomington has maintained its unemployment rate advantage over the rest of the state for many years (see **Figure 1**).

It turns out there is more strength in the Bloomington economy than the publicity about layoffs would suggest. Layoffs get headlines; the hirings that have continued, one person at a time, at many Bloomington area firms do not.

Figure 1
Unemployment Rates by Quarter, 1990-2001: Indiana and Bloomington



Source: Indiana Department of Workforce Development and STATS Indiana.

The Bloomington metro area, which includes all of Monroe County, was home to 120,563 people as of the 2000 census (college students are counted as residents). That figure represented a 10.6 percent growth rate over 1990. Indiana's population statewide grew 9.7 percent. This moderate but steady growth in the number of residents is one thing that continues to fuel the area's economy, as more people bring their spending to Bloomington.

The mix of jobs people in Bloomington hold has shifted in a way that has helped blunt the effects of the 2001-2002 recession so far. In 1995, 16 percent of the area's employment was found in manufacturing industries. The annual average for 2000 was down to 14 percent. Since manufacturing employment has led the decline nationwide in this recession, Bloomington has slightly less exposure than in the past.

Nevertheless, the manufacturing sector cost Bloomington dearly in jobs in the early months of the recession. From the late-1990s peak of 10,000 manufacturing jobs, the total had fallen to just over 6,000 by the end of the third quarter of 2001. This drop contributed to the rise in the area's unemployment rate from 1.2 percent in September 2000 to 3.0 percent in September 2001.

To some extent, though, these lost manufacturing jobs have been replaced by jobs in the services industries. Employment in services in the third quarter of 2001 was higher by more than 400 jobs than in the comparable period in 2000. Other sectors of the area economy showed little or no change in 2001 compared to 2000. In particular, the retail trade sector has not swelled: there is no evidence to substantiate the fear that high-paying manufacturing jobs are being replaced by lower-paying retail jobs.

Bloomington's health care services, business services and management services (engineering and accounting firms) are not likely to be affected by the recession as much as manufacturing has been. So in 2002, while the unemployment rate will climb further, it probably will top out at around 5.5 percent by mid-year, and it will start down again in the fall when the nationwide recovery takes hold. And as the services sector expands further in the second half of 2002, Bloomington's economy will continue to enjoy lower unemployment than most other Indiana metro areas.

Columbus

James C. Smith

Director, Indiana Business Research Center, Department of Business Economics and Public Policy, Kelley School of Business, Indiana University, Bloomington and Indianapolis

In the decade from 1990 to 2000, Bartholomew County was one of the fastest growing counties in Indiana in terms of population. A 12 percent jump in the number of residents placed the county 26th overall out of 92 counties, and that rank rises to 20th if the exceptionally fast-growing counties around Indianapolis are excluded.

As Columbus and Bartholomew counties have attracted more people, this growth has brought economic diversification. That diversification should help restrain layoffs and unemployment as the state makes its way through the recession of 2001-2002.

In fact, we can point to four factors, all of which are working together to offer Bartholomew County communities some protection against the economic downturn.

First is the simple fact that the population is growing. That brings a double benefit. On one hand, growth brings more people, who bring more value in the form of their talents and more consumption expenditures to keep the dollars flowing. Along with the direct economic boost, population growth is an excellent indicator of an area's desirability as a place to live. If there are people moving in, it must mean they see good long-term job prospects, a good education system for their children and meaningful amenities in the community. All those things help the county weather a weak economy.

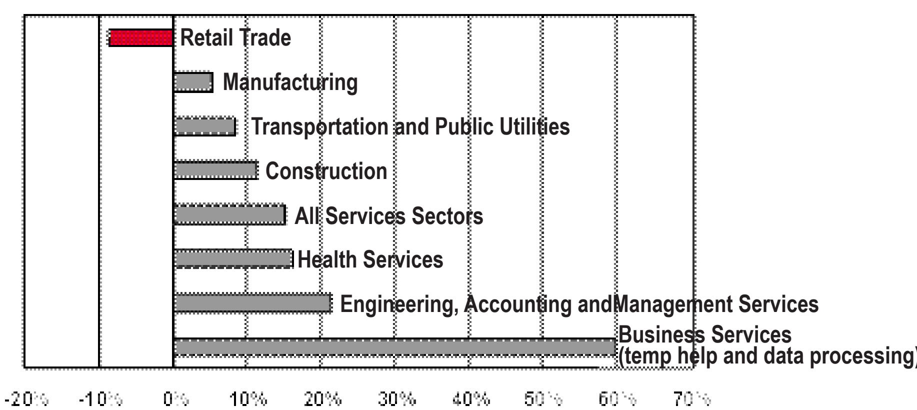
Second is the economic mix in Columbus and Bartholomew counties (see **Figure 1**). It is true that 40 percent of the jobs in the county are in the manufacturing sector, and manufacturing's predominance has not changed for many years. But employment in services industries grew 15 percent in the six years ending in 2000. Manufacturing employment grew only 5 percent. Within the services sector, much of the growth occurred in relatively high-paying fields. A 16 percent jump in health care jobs was accompanied by a 21 percent increase in engineering and management services. Engineering and management services include consulting engineers and accounting firms.

Third is the low level of unemployment in the county. Bartholomew County's monthly unemployment rate has been less than 3 percent in almost every month since 1995. Layoffs associated with the recession will drive that number up. But the low starting point means it has a long way to go before unemployment becomes a major area-wide problem.

Finally, energy prices are relatively low. Recessions are worse when several key economic factors turn bad at the same time, and in past recessions, high energy prices have worked against us. But anyone who has bought gasoline in Columbus recently has been pleasantly surprised. Prices began to fall just as the recession began. Declining fuel prices fatten consumers' spendable income just like an immediate tax cut.

All these factors combine to prevent Columbus and Bartholomew counties from any disproportionate effect of the recession. If this recession proceeds as expected, and output begins to grow again by mid-2002, it should be only a moderate recession for this area. Expect more layoffs during the winter, and the unemployment rate could easily hit 6 percent. But by historical standards, those events will not mean a severe recession here. And barring more unforeseen external shocks to the economy, things should be getting back on track by the third quarter of 2002.

Figure 1
Employment Growth in Columbus and Bartholomew Counties
Selected Sectors, 1994-2000



Source: Indiana Department of Workforce Development and STATS Indiana.

Evansville

M. Gale Blalock

Professor of Economics, University of Evansville, Evansville, Indiana

Economic activity, as measured by the index kept at the University of Evansville School of Business, continued its expansion through the year 2000. The index, shown in the table below, stood at 110 at year-end compared to 105 in the year prior. This 4.7 percent growth was slightly higher than the 4.1 percent growth of the national economy during the same time period.

Strongest growth was recorded in industrial production with an increase of 8.7 percent from 1999. The finance component of the index was next strongest with growth of 5.2 percent.

Anecdotal evidence suggests continued strength in industrial production and finance. It also suggests continued weakness in transportation. Only uncertainty characterizes the outlook for construction and trade.

The Evansville Economic Index

	Industrial Production	Construction	Trade	Transportation	Finance	Index	Index Growth
1995	0.32	0.04	0.27	0.05	0.23	0.90	
1996	0.33	0.06	0.27	0.05	0.24	0.94	0.05
1997	0.33	0.05	0.28	0.06	0.23	0.94	0.00
1998	0.36	0.07	0.28	0.06	0.23	1.00	0.06
1999	0.37	0.09	0.28	0.06	0.25	1.05	0.05
2000	0.40	0.09	0.29	0.06	0.26	1.10	0.05

Fort Wayne

Thomas L. Guthrie

Director, Community Research Institute and Associate Professor of Economics, Indiana University-Purdue University, Fort Wayne

The new world of the U.S. economy—the post September 11th terrorist-attack economy—looks similar to the old world of the Fort Wayne area economy. Stated differently, it is now a given that the U.S. economy cannot escape recession, but the area economy has been languishing there for months.

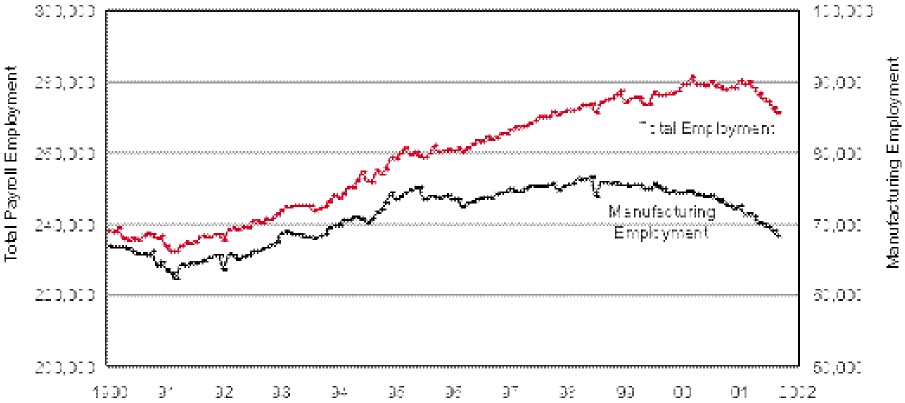
That U.S. manufacturing has been and continues to be in recession is no longer debated. Likewise, Fort Wayne area manufacturing employment has suffered significantly. Manufacturing employment has declined more than 8.3 percent in the last two years (see **Figure 1**). Specifically, average third quarter 1999 seasonally-adjusted manufacturing employment was 75,276 jobs, compared with 69,015 during the third quarter 2001.

Given the relative importance of manufacturing—one of every four jobs in the six-county metro area (and one of every three jobs in northeast Indiana)— the area economy long ago succumbed to recession. Seasonally-adjusted total employment in the Fort Wayne area has decreased by 9,355 jobs—or 3.3 percent—between January and September (see Figure 1). Total employment has recorded year-over-year declines for the last eight months. In September 2001, total employment was 273,700 jobs (not seasonally adjusted), compared with 281,000 in September 2000.

Ironically, the net effect on the area economy of the September 11th terrorist bombing may be positive despite deepening the recession in the short run. The point is that prior to September 11th the area economy was doing a slow bleed but few noticed (or were concerned if they did notice). Since September 11th, national political debate has been focused not on the elusive social security surplus, but on a stimulus package to rescue the suddenly sick U.S. economy.

Unfortunately, an economic stimulus package has not yet been agreed to (as of the writing of this article), but it will occur.

Figure 1
Fort Wayne Total Payroll and Manufacturing Employment



Data seasonally adjusted by Community Research Institute.
Source: U.S. Bureau of Labor Statistics and Indiana Department of Workforce Development

Meanwhile, the U.S. and Fort Wayne area economies are reeling from the initial shock and significant negative multiplier effects of the terrorist bombing. At this juncture, the U.S. and area recessions appear destined to continue through at least the first quarter of 2002.

Furthermore, the Fort Wayne area economy likely will lag behind the U.S. economy in recovery. Typically, the interest sensitive housing and vehicle sectors lead a recovery and the area economy is well represented in those sectors. However, sales in both sectors have held up well this year thanks primarily to the record-setting 2.75 point decline in short term interest rates engineered by the Federal Reserve since the beginning of the year. Compared to all of 2001—not just post September 11th—the upside potential for those two sectors in 2002 is limited.

The Fort Wayne area economy's best hope for significant recovery is a marked increase in capital goods expenditures—e.g., heavy-duty trucks and machinery. But that will not occur until capacity utilization of factories is considerably above the 73.8 percent seen in September and business profits recover. Those will not occur until after the U.S. economy turns—so there will be abundant forewarning. One policy shift that could change the forecasted lag in the area economy's recovery would be passage of a significant but temporary investment tax credit.

In summary, the Fort Wayne area economy is likely to incur a short-run shock to employment of at least another percentage point—3,000 jobs—before beginning a tepid recovery probably in the second quarter of the year. To recover in the second half of 2002 the jobs lost since September 11th will be quite an accomplishment. That will leave the area economy at the end of 2002 still below the last cyclical peak—likely to be identified as January 2001—by approximately 9,000 jobs.

Gary

Donald L. Coffin

Associate Professor of Economics, Indiana University Northwest, Gary

In 2001, northwest Indiana (Lake and Porter Counties) experienced a noticeable decline in total employment and in manufacturing employment (especially in steel); clearly, the recession that we believe has hit the U.S. economy arrived here some time ago. Before LTV's filing in bankruptcy court, seeking permission to cease steel making operations, it appeared likely that 2002 would bring more of the same, with total employment likely to fall by 1 percent to 1.5 percent (2500 to 3500 jobs), with virtually all the decline coming in manufacturing (with more than half the employment decline in manufacturing coming in steel). If LTV closes, employment may fall by an additional 4,000 to 6,000 jobs, for a total decline in employment of 6,500 to 9,500, transforming a moderate downturn locally into a reasonably severe recession.

Service employment seems likely to continue to rise modestly, as the casinos experience a strong year; however, retail employment may decline modestly, or, at best, remain unchanged. If LTV continues operations, the unemployment rate is likely to rise, peaking at 6.5 percent to 7 percent in 2002; if LTV does close, look for the local unemployment rate to peak at 8.5 percent to 9 percent.

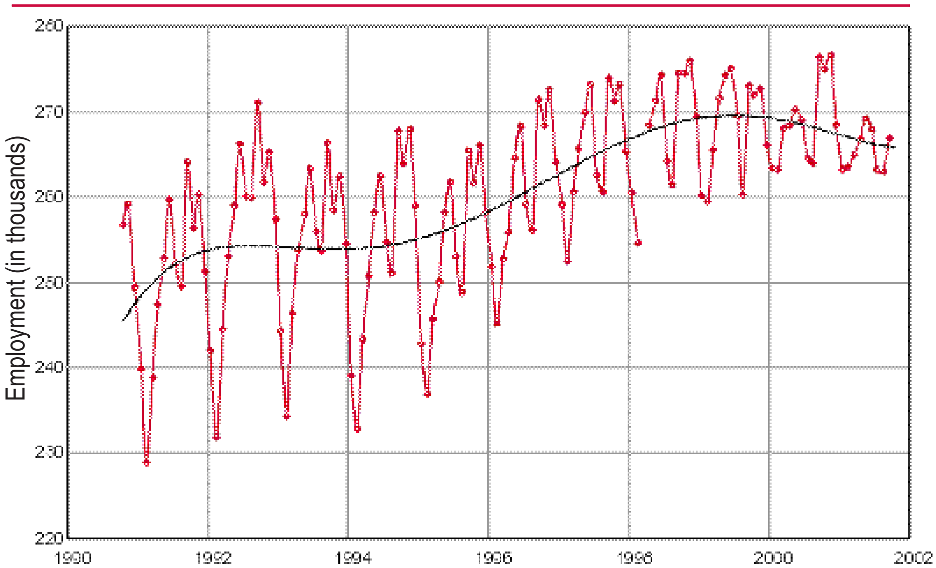
The causes for continued difficult economic times in northwest Indiana are not hard to identify. National forecasts suggest declining automobile and truck sales (down from about 16 million in 2001 to around 15 million in 2002—and the 2001 sales already mark a decline from 2000). The continued reliance of Northwest Indiana on steel suggests that this will translate into declining output and employment locally. A national recession, if it extends into the second half of 2002, is likely to reduce the demand for gasoline and other fuels, also with predictable local results. Even if the national economy recovers more quickly, or more strongly, the local economy's recovery is likely to depend on developments in the steel industry. If LTV ceases operations and the property is not acquired and operated by another steel producer, then the local economy is likely to recover slowly, if at all, during 2002.

Total Employment and Unemployment

Total establishment employment has declined since late 1999 by about 1.5 percent, a loss of about 4,000 jobs (see **Figure 1**). That decline has come entirely in manufacturing (where about 4,400 jobs have been lost); more than 80 percent of the decline in manufacturing jobs (about 3,600) has occurred in the steel mills. The year-to-year change in total employment actually slowed somewhat in 2001 compared with 2000, falling by 0.5 percent to 1 percent in the first half of 2001 compared with year-earlier data. (Household employment data show smaller declines. The distinction is important, since establishment employment is an estimate of the number of jobs available at northwest Indiana employers. Household employment includes northwest Indiana residents working outside Lake and Porter counties, mostly in Chicago.)

While local unemployment rates are notoriously unreliable measures of local economic activity, the unemployment rate estimated for Lake and Porter counties has also begun an upward trend, to about 4.6 percent recently. (This follows declining unemployment rate estimates for most of 2000—from about 5.6 percent to less than 3 percent—a decline that seems somewhat at variance with the observable changes in employment during 2000).

Figure 1
Total Employment



The northwest Indiana economy remains more heavily concentrated in manufacturing (about 17 percent of total employment is in manufacturing locally, compared with less than 16 percent nationwide) and especially in steel (now about 9 percent of local employment, but around 0.1 percent of national employment). As a result, a national recession, which will most likely affect durable goods manufacturing more strongly than other sectors, will have a disproportionate effect on this region. It seems likely that total employment will continue to decline, by 1 percent to 3.5 percent over the next year, a loss of another 2,500-9,500 jobs. The continued job losses locally, coupled with a national recession that will likely make finding jobs in the Chicago area more difficult as well, suggest that the unemployment rate will continue to rise well into 2002, probably reaching as high as 6.5 percent to 9 percent, depending on what happens with LTV.

Manufacturing

Manufacturing employment continues to decline in northwest Indiana (see **Figure 2**). In 1991, the region had about 57,000 manufacturing jobs out of a total of about 258,000 (22 percent). By the middle of 2001, manufacturing employment had declined to about 44,000 out of 263,000 total jobs (17 percent). The declines over the past 4-5 years have been steady and consistent, and so it is reasonable to suggest they will continue, with manufacturing employment falling to perhaps 41,000 by the end of 2002.

As the local economy has weakened, average weekly hours in manufacturing have declined from 42.9 hours per week in August 2000 to 41.3 hours per week in August 2001. As scheduled overtime has diminished, average hourly earnings have declined, by about 2 percent, from $21.40 in August 2000 to $20.93 in August 2001. Average weekly earnings fell by nearly 6 percent as a result both of declining hours and of declining hourly wages. (Hourly and weekly earnings are in 2001 dollars (see **Table 1**)).

Combining the 5 percent decline in employment in manufacturing with the additional 3.7 percent decline in hours suggests that the total use of labor in manufacturing declined by about 8 percent. The 3 percent decline in hourly earnings suggests that total incomes in manufacturing fell by nearly 11 percent from August 2000 to August 2001. By itself, the income declines in manufacturing suggest that total local income fell by at least 2 percent between August 2000 and August 2001.

Figure 2
Manufacturing Employment

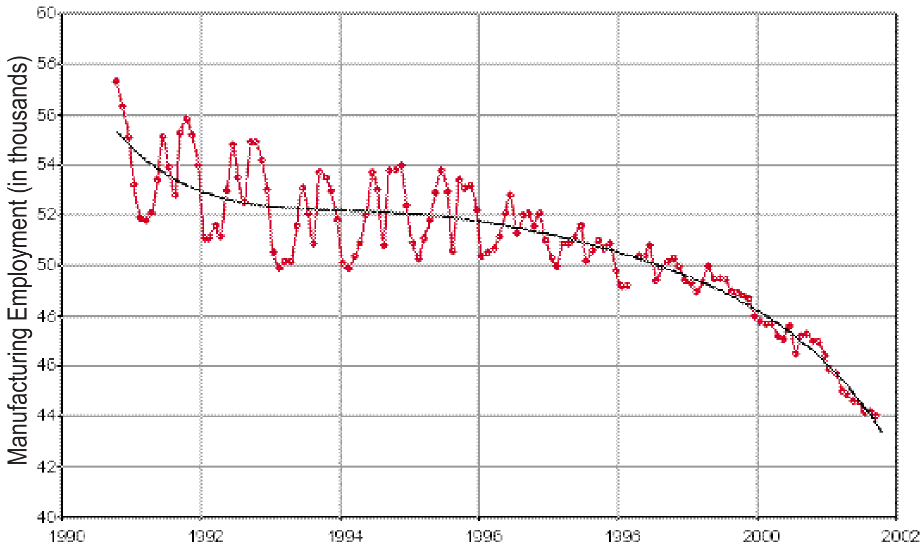


Table 1
Average Weekly Earnings, Average Hourly Earnings, and Average Hours Per Week

Industry	Weekly Earnings August 2001	Weekly Earnings August 2000	Percent Change in Weekly Earnings
Manufacturing	$864	$918	-5.8%
Durable Goods	$880	$943	-6.7%
Primary Metals	$967	$1,047	-8.2%
Steel	$982	$1,070	-8.4%
Industrial Machinery	$700	$764	-0.3%
Non-Durable Goods	$793	$796	-3.0%
Chemicals	$636	$700	-9.2%

Industry	Hourly Earnings August 2001	Hourly Earnings August 2000	Percent Change in Hourly Earnings
Manufacturing	$20.93	$21.40	-2.2%
Durable Goods	$21.93	$21.93	-2.9%
Primary Metals	$23.19	$24.02	-3.4%
Steel	$23.56	$24.38	-3.3%
Industrial Machinery	$17.76	$17.52	+1.3%
Non-Durable Goods	$19.30	$18.90	+2.1%
Chemicals	$18.48	$18.15	+1.8%

Industry	Weekly Hours August 2001	Weekly Hours August 2000	Percent Change in Weekly Hours
Manufacturing	41.3	42.9	-3.7%
Durable Goods	41.3	43.0	-4.0%
Primary Metals	41.7	43.6	-4.4%
Steel	41.7	43.9	-5.0%
Industrial Machinery	39.4	43.6	-9.6%
Non-Durable Goods	41.1	42.1	-2.4%
Chemicals	34.4	38.8	-11.3%

Depending on the resolution of the LTV bankruptcy petition, manufacturing employment will probably decline by at least 5 percent. Hours will decline over the next year as well, but at a slower rate than in the past year. Income earned in manufacturing will likely decline over the next year, probably by between 5 percent and 10 percent.

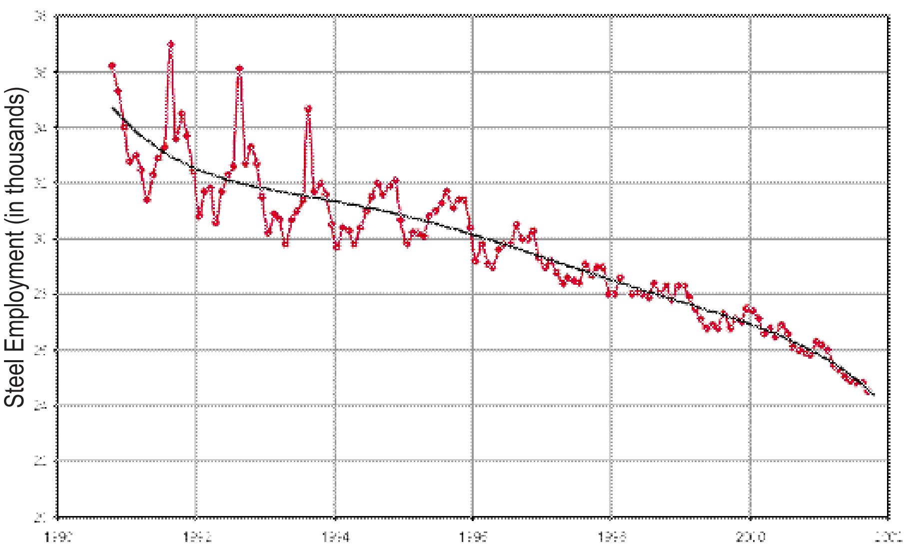
Steel

Steel continues to be of special importance in northwest Indiana. As a result of productivity increases and relatively modest increases in local steel output between 1997 and mid-2001, steel mill employment declined from around 29,000 in early 1997 to around 24,500 by mid-2001 (see **Figure 3**). Local steel output declined in the last half of 2000 and recovered somewhat in the first half of 2001. The International Trade Commission (ITC) has recently ruled that the domestic steel industry has been damaged by imports and is now completing hearings designed to result in recommendations for protection for the steel industry. Such protection is likely to provide short-term benefits to local steel output and employment. However, it is also likely to lead to increased imports of such products as automobiles, trucks and appliances. Any benefits to northwest Indiana are likely to be offset in Indiana by reduced output and employment in steel-using industries.

In addition, data from the American Iron and Steel Institute on domestic production and imports suggest that steel imports rise during periods of rising domestic steel output—the correlation between domestic steel output and steel imports is 0.33—small, but positive and significant. In addition, the ratio of imports to domestic production *falls* as domestic output rises (the correlation between them is –0.35)—imports rise more slowly than domestic production (and, when domestic production is falling, imports fall more slowly as well). This is not consistent with the notion that imports displace domestic production, but rather with the conclusion that both domestic production and imports rise as domestic demand for steel rises, and fall as domestic demand falls.

With or without protection, output in the steel industry is likely to rise if the economy recovers rapidly and fall if it does not. Employment is likely to continue to fall as productivity continues to rise—unless steel output increases quite rapidly. Locally, steel output is likely to remain roughly constant, so employment will probably continue to fall at about the same rate as productivity increases (roughly 5

Figure 3
Steel Mill Employment



percent per year). Steel mill employment fell by about 2,000 jobs in 2000 and has declined by almost 1,300 jobs so far in 2001. It is reasonable to expect employment in steel mills will continue to decline over the next year, perhaps by another 1,200 jobs, to around 23,000, even in the absence of changes attributable to Bethlehem Steel and LTV.

For northwest Indiana, the bankruptcy filings by Bethlehem Steel and LTV pose additional concerns. Despite Bethlehem's having relatively new, modern and productive facilities, the continued operation of those facilities is not certain. Either a recovery to profitability or the purchase of the company by another steel producer in a stronger financial position seems necessary for Bethlehem's continued existence. Some observers, writing in *Business Week*, attribute the bankruptcy in part to cheap imports, but it seems clear that the other factors also cited by *Business Week*—"anemic demand, and a $3 billion tab for health-care liabilities it owes retirees and their families"—are of greater importance.[1]

The losses Bethlehem Steel has suffered have come during a period of declining domestic output and declining imports, so weak demand has clearly had a major impact. When this is coupled with a very inflexible cost structure—the retiree health-care costs are totally unrelated to, and thus totally unresponsive to, changes in output—Bethlehem would have faced a difficult position in any event. Imports have probably played a fairly minor role in Bethlehem's difficulties, and import restrictions are likely to play a fairly minor role in its return to profitability.

LTV's request for permission to cease operations creates additional concerns. If a buyer for the assets does not emerge, then the local economy will lose about 3,000 jobs fairly quickly, with additional losses in industries serving the steel industry of up to another 3,000 jobs. Sale and continued operations of the facilities would, of course, mitigate these job losses.

Services

Services employment has been the continuing strength of the Northwest Indiana economy, rising by about 20 percent over the past decade and about 2 percent during the past year. The period of fastest growth in services employment corresponded to the opening of the casinos and rapid growth in employment in that sector. Even if a national recession continues into 2002, services employment will almost certainly continue to rise.

Services employment has displayed substantial seasonal fluctuation, rising rapidly in the first half of the year, declining at mid-year, then rising again toward the end of the year. (In part, the mid-year decline stems from declining employment in public schools.) This pattern is likely to continue in early 2002, providing a boost to local employment at a time when it is likely to be badly needed.

In addition, in the next six months, activity at the casinos is likely to rise faster than usual, as people travel less and substitute local entertainment for vacations. In the short-run, then, casino employment is likely to rise.

The seasonal patterns in retail employment are even more pronounced. Following a fairly sharp decline at the end of the year, retail employment tends to rise through the year. During the first part of 2001, however, retail employment rose more slowly than usual, driven almost certainly by a slowing local economy. Slower growth in the retail sector will continue so long as local and national economies are in a recession. The retail sector is unlikely to provide any noticeable support for the local economy in the next six to nine months; current trends suggest a small decline in employment in retail trade over the next year.

State and local government employment are also unlikely to rise rapidly. The continuing budget difficulties of state government and the uncertainties surrounding local government budgets related to property tax reassessments are likely to prevent any expansions in government services. The relatively limited importance of federal government activities in northwest Indiana makes it unlikely that even expanded federal government activity will provide any direct local economic stimulus.

Tax Restructuring

The state seems poised to enact a comprehensive restructuring of its tax system, a restructuring that will involve not just funding for state government, but also, by reducing local government reliance on property taxes, funding for local government units. A key provision here is the assumption by the state of additional funding responsibilities for local schools. The restructuring plan is complex, and already a number of industry groups have identified aspects of it that may lead to higher business taxes (while, it seems, ignoring the parts of the plan that will reduce business taxes). Overall, the plan will apparently shift the tax burden from business to individuals. It will also shift taxes from property taxes to tax sources that are more responsive to changes in economic conditions.

Of major importance for northwest Indiana is the proposed replacement of the inventory tax by other sources of revenue and the assumption of local (township) welfare costs by the state. Both of these changes will reduce business tax burdens.

Among the unanswered questions in the proposed restructuring plan are the formulas to be used to increase state funding of local schools and the mechanism by which local welfare expenditures are to become the responsibility of the state.

Conclusion

The northwest Indiana economy will continue in recession during the next six to nine months. Total employment will decline by 1 percent to 3.5 percent, primarily as a result of declining manufacturing employment, and the resolution of LTV's bankruptcy filing. Declining weekly hours in manufacturing will contribute to declining local incomes as well. Even continued increases in services employment will not be sufficient to prevent the local economy from continuing in a recession, which will have a total duration (from its beginning in late 1999) of more than two years. Unemployment will rise, with the unemployment rate peaking between 6.5 percent and 9 percent. As the national economy recovers (probably in the second quarter of 2002), the local recession is likely to end as well. In the longer-term, the tax restructuring may have substantial consequences for businesses, and therefore for business activity.

Finally, we need to remain aware of the potential vulnerability of the economic infrastructure to continued terrorist acts. While in countries in which there is an extended history of such acts (Israel, Ireland, the Basque region of Spain) most of the attacks have not targeted the economic infrastructure, that is by no means a guarantee for the future.

Notes and References

1. *Business Week*, October 29th, p. 40.

A note on data sources. Local employment and unemployment data are drawn from the Labor Market Letters for Lake and Porter counties issued by the Indiana Department of Workforce Development. Data on steel output and imports comes from data on the web site of the American Iron and Steel Institute (www.asisi.org).

Indianapolis

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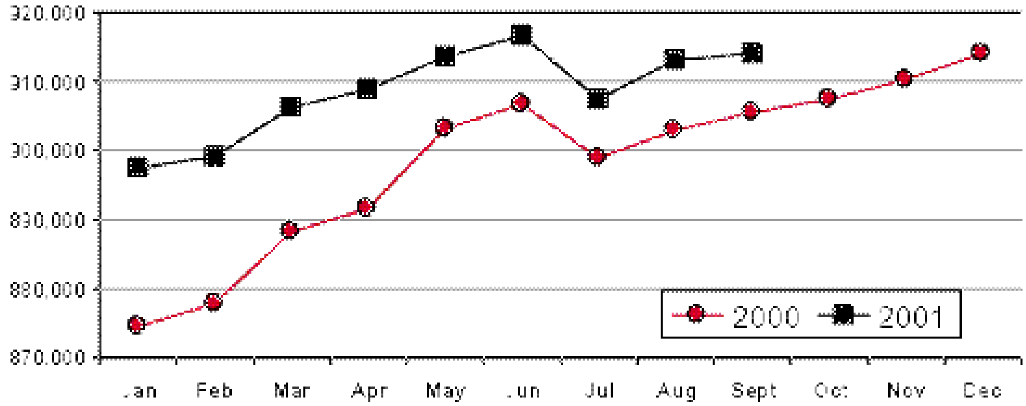
As of the week of September 11th, Indianapolis employment was still running ahead of the same month a year earlier (see **Figure 1**). More recent data are not available as we go to press.

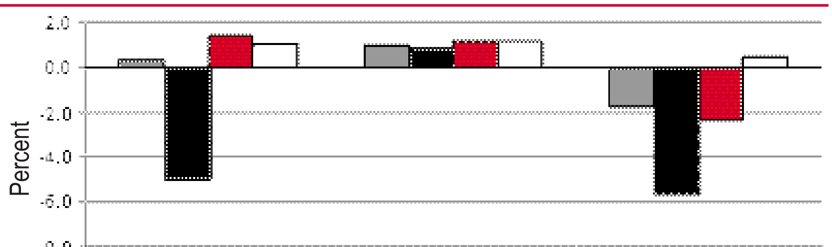
The nine county metro area had 8,500 more jobs in September 2001 than in 2000. This was a shallow 0.9 percent increase over a year earlier and ranked 100th among the nation's 275 metro areas. But in a Midwestern perspective, the Indianapolis metro area looked far better, ranking 17th of 75 metro areas, with only one larger metro area doing better (Kansas City ranked 6th).

Figure 1
Metropolitan Indianapolis Total Non-farm Employment



Source: U. S. Bureau of Labor Statistics

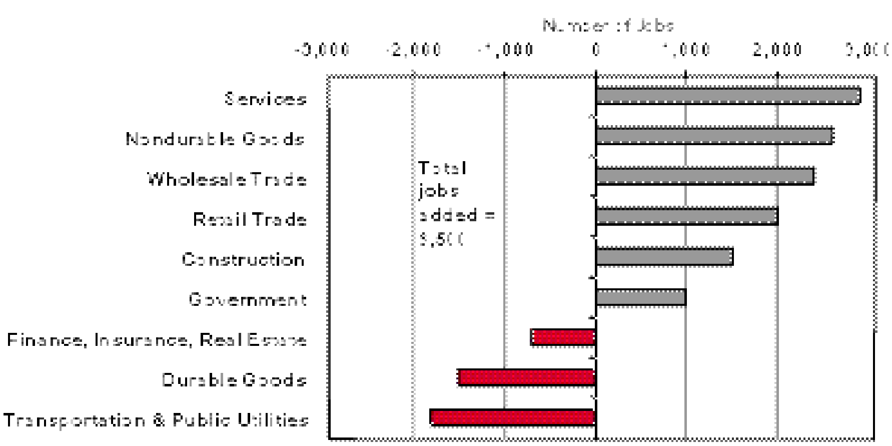
Figure 2
Employment Changes September 2000 to 2001



	United States	Indianapolis MSA	Balance of Indiana
Total	0.34	0.34	(1.75)
Manufacturing	(5.02)	0.95	(5.65)
Retail	1.41	1.16	(2.33)
Services	1.06	1.12	0.47

Source: U. S. Bureau of Labor Statistics

Figure 3
Employment Changes, Indianapolis MSA, September 2000 to 2001



Source: U. S. Bureau of Labor Statistics

Among Indiana metro areas, Indianapolis had no peer. Only Muncie showed an increase (0.3 percent) in jobs while each of the other metro areas declined in jobs over the year. The difference between Indianapolis and the rest of the state is shown in **Figure 2**. In total employment and key sectors, Indianapolis outperformed the rest of Indiana and even the nation.

Business and personal services accounted for nearly 3,000 of the 8,500 jobs added in the Indianapolis metro area (see **Figure 3**). Manufacturing was mixed, with job gains in non-durable goods exceeding the losses of durable manufacturing.

The strengths of the past year should be a good guide to the year ahead. Added stimulus from security spending will boost the services area and might reverse the loss in durable goods. In addition, the insurance industry might benefit from added security concerns as firms and households reexamine their exposure to risks.

However, weakness in adjacent regions of the state does not bode well for the Indianapolis metro area. As the services, transportation and retail hub of the state, Indianapolis depends to some extent on the economic vitality of Kokomo, Bloomington, Richmond, Columbus and other nearby centers of employment and housing.

Overall, the recession of 2001-2002 will not be a major setback for the Indianapolis metro area. Recovery at the national level in the spring of 2002 may even mean no noticeable recession in central Indiana.

Kokomo

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Long time Indiana Business Review contributor, Dr. Dilip Pendse, passed away on September 19th, 2001. He leaves large shoes to be filled and he will be greatly missed at IU Kokomo—K.P.

Ed. Note: These pages have been graced by Dr. Pendse's expertise and humor since his first Outlook article in 1979. We will miss him.

Kokomo's economy is heavily weighted towards manufacturing. Unfortunately, this is one of the areas of the economy that has been hardest hit since the events of September 11th and by the general economic slowdown affecting the country prior to September 11th. This has meant that many firms in the Kokomo area have seen a general economic malaise and a slowdown in business. This hits especially hard since Kokomo has been one of the economic powerhouses of the area. The Kokomo Metropolitan Statistical Area has long had the distinction of being one of the top MSAs in the country in terms of average salary, despite the fact that the Kokomo MSA is the smallest of the 11 MSAs in Indiana.

There has been one large piece of good news in the manufacturing front: DaimlerChrysler's Indiana Transmission Plant recently produced its 1 millionth transmission. The plant has been open about three years and is now up to full speed. Original goals for the plant called for about 2,900 transmissions produced per day, and they are now up to about 3,400 per day. This translates into about 800,000 per year.

But, there have been some specific problems that have become evident in Kokomo's economy in the past few months. Unemployment has increased from the September 2000 levels of 2.7 percent to September 2001 levels of 5.4 percent. The average workweek has dropped, resulting in fewer hours worked and/or less overtime pay. Thus, average weekly earnings have fallen from $1,014.34 to $996.38, leaving many confused and ill at ease about their economic future.

Visible Changes in the Kokomo Landscape

There have been other changes that are easily visible in the Kokomo region. The Superfund site at Continental Steel has finished with the first level of remediation, and discussions are underway to find an alternative use for the land, most likely as a brownfield type usage. Delphi Delco Electronic Systems is also involved in an environmental cleanup at Plant 1, due to be completed shortly. The new DaimlerChrysler plant at the north edge of Kokomo is an approximately 600,000 square foot plant that will have $400 million worth of equipment and machinery. This plant will create new jobs and new tax revenues for the city of Kokomo and is a win-win all around.

Prospects for the Future

Kokomo remains highly dependent on the automobile industry. The zero-percent financing has enticed many consumers to purchase a new vehicle, but time will tell what impact these purchases will have on automobile manufacturers' bottom lines in general. Specifically, DaimlerChrysler has been experiencing overall problems and has failed to meet analysts' forecasts. This has led to cuts at DaimlerChrysler plants nationwide, and in fact, DaimlerChrysler will be offering early retirement packages to Kokomo workers similar to the early retirement packages that Delphi Delco offered to workers in the region. This may adversely affect the Kokomo economy.

In summary, the Kokomo economy, like much of the rest of the country, is in a wait-and-see mood and consumers are keeping their pocketbooks more tightly closed than in the past.

Lafayette

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Which metropolitan area in Indiana has the strongest economy? Of all the metro areas apart from Indianapolis, Lafayette probably turned in the best performance during the long economic boom of the 1990s.

The Indianapolis metropolitan area was unusually prosperous during the past decade and led the state in almost every category. But Indianapolis is much bigger than any other Indiana metro area, so it is perhaps unfair to include it in the comparisons. Not counting Indianapolis, then, Lafayette was arguably the strongest of the 11 other metro areas. Consider the evidence (see **Table 1**):

Table 1
Lafayette Metropolitan Area Recent Economic Performance

	Performance	Rank in State (of 11 metro areas excluding Indianapolis)
Population Growth, 1990-2000	13.2%	2
Payroll Employment Growth, Sept. 1995-Sept. 2001	6.0%	1
Unemployment Rate, Sept. 2001	2.9%	1
Commute Ratio, number commuting in divided by number commuting out	5.1 to 1	1
Growth Rate of Employment in Services Industries, Sept. 1996 to Sept. 2001	10.5%	3

Source: U.S. Bureau of Labor Statistics, U.S. Bureau of the Census and STATS Indiana.

Population Growth. With a 13.2 percent growth rate from 1990 to the 2000 census, the Lafayette metro area, which encompasses Tippecanoe and Clinton counties, was the second fastest growing metro area in the state outside Indianapolis. It was only edged out by Elkhart at 17 percent. Total population in the metro area was 182,821 at the 2000 census.

Job Growth. From September 1995 to September 2001, the Lafayette area added 4,500 jobs, an increase of 6 percent. That was the highest percent increase of any metro area other than Indianapolis.

Unemployment Rate. In September 2001, the Lafayette metro area had the lowest unemployment rate in the state, at 2.9 percent. Outside Indianapolis, only Bloomington can rival Lafayette for low unemployment.

Commute Ratio. The ratio of the number of commuters into an area compared to the number out of the area is an indicator of economic attractiveness and economic independence. Some suburban counties, for example, send many more commuters out to the nearby city than they attract. Tippecanoe County, however, had a ratio of five to one in 1999 (the most recent data available). That means five times more people commuted *into* the county than commuted out. Apart from Marion County, at 6.1, Tippecanoe had the highest commute ratio in Indiana.

Growth in Services Industries. All over Indiana, manufacturing has dominated the economic mix. But a more diverse economy helps protect against the unemployment and loss of revenue that recessions bring. Services industries, therefore—especially health care, business services and management services—have been a focus for economic development. From September 1996 to September 2001, employment in services industries in the Lafayette metro area grew 10.5 percent. Not counting Indianapolis, that figure puts Lafayette in a tie for third place with South Bend-Mishawaka. Bloomington, with a 25.6 percent increase, and Gary-Hammond, up 15 percent, led the non-Indianapolis areas.

The economic vitality the Lafayette metro area displays places it in a strong position entering the recession of 2001-2002. While manufacturing activity slowed first in this recession, Lafayette has only 23 percent of its employment in that sector, one of the lowest levels in the state. With nearly 20 percent of its employment in services industries, the Lafayette metro area is not likely to see the high unemployment rates that will visit those counties dependent on the U.S. automobile-maker business.

Unemployment probably will peak between 5 and 6 percent in Lafayette in 2002, but will decline quickly as the country's recovery picks up steam in the second half of the year. With good weather, a strong construction sector will help keep that rate down. And as service and retail businesses expand, the Lafayette area should continue to attract a big share of that expansion.

Muncie

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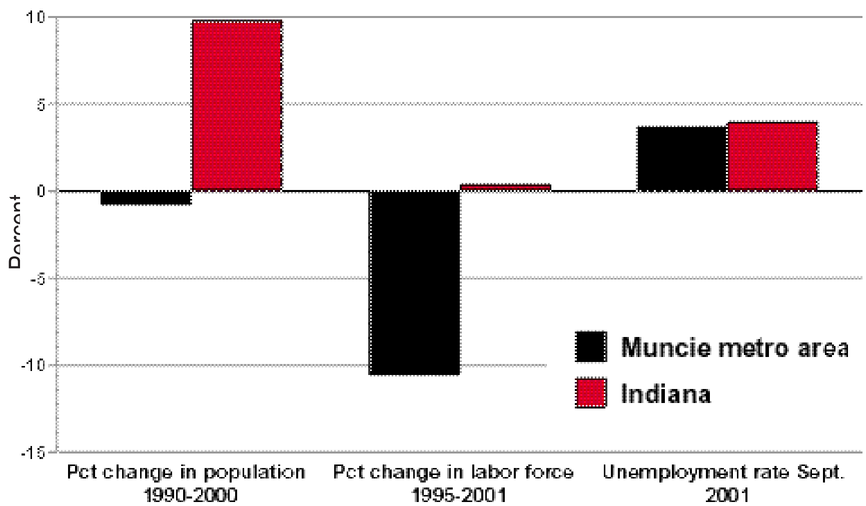
Sometimes circumstances can turn a weakness into a strength. Muncie's weakness is that despite all the economic virtues the area can claim, Muncie cannot seem to attract new residents. The Muncie MSA, which includes all of Delaware County, was the only metro area in Indiana to post a net loss in population in the 2000 census.

From 1990 to 2000, the population of Muncie and Delaware County declined by 890 people, to 118,769. That is a 0.7 percent drop, and it allowed the Bloomington metro area to pass Muncie in size to become the 10th largest metro area in the state. Muncie is now 11th out of 12 (Kokomo is the smallest).

The population shrinkage has been a feature of the Muncie and Delaware County economy for many years, as new residents continue to move into other parts of the state. Indiana's population grew 9.7 percent over the past decade, while Muncie's contracted.

Figure 1
Shrinking Labor Force Keeps Unemployment Low in Muncie Area



Source: U.S. Bureau of Labor Statistics, U.S. Bureau of the Census

Viewed in purely regional economic terms, Muncie and Delaware County have several virtues. The economic mix is well diversified. Manufacturing, while a prominent part of the area's economy, accounts for only 15 percent of total employment. And within the manufacturing sector there is a good mix of major corporations' plants and successful locally-owned factories. Employment in the services industries has grown strongly compared to other parts of the state, up 18 percent since 1995. A major university campus lies just a few blocks from downtown Muncie, and on the north side of town is a modern, well-equipped airport.

As recession spreads across the United States, however, the declining head count in Muncie and Delaware County becomes a benefit, in the following sense.

During the boom years of the 1990s, labor shortages were common. In Muncie and Delaware County, the shortages were especially intense, owing to the lack of growth in the area's labor force. A consequence of the shortages was an unusually low rate of unemployment (see **Figure 1**). The unemployment rate in Delaware County dropped to a low of 2 percent in October 2000. By the third quarter of 2001, as the U.S. economy slowed, the unemployment rate in Muncie and Delaware County only climbed as far as 4 percent. Neighboring Henry County was at 4.4 percent in the third quarter, and Grant County had hit 6.6 percent.

In 2002, a tight labor market along with a favorable economic mix will continue to shield Muncie and Delaware County from the worst of the national recession. More large factories may announce layoffs, but the unemployment rate is not likely to reach more than 6 percent. Expansion or at least stability in sectors such as health services, business services (temporary help, data processing) and professional services (engineering, accounting) will tide the area's economy over until the national recovery begins later in 2002.

The only question is: When prosperity begins to rise again, can Muncie and Delaware County begin to attract more of it?

New Albany and Louisville MSA

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In the year 2001, economic activity in southern Indiana and the Louisville metropolitan area continues to defy national economic trends. Continued employment losses and increases in the unemployment rate in the Louisville area were not as extreme as in other parts of Indiana, Kentucky, and many parts of the U.S. The seven counties in the Louisville Metropolitan Statistical Area (MSA) are Clark, Floyd, Harrison and Scott in southern Indiana and Bullit, Jefferson and Oldham in northern Kentucky. The following analysis examines various measures of economic growth in the Louisville MSA and its component counties. Three additional Indiana counties—Crawford, Orange, and Washington—in the southern Indiana labor market area are included when data are available.

Labor Markets

Throughout 2001, the unemployment rate in the Indiana counties in the Louisville metropolitan area continued to be below or even with that of Indiana as a whole and below that of Kentucky and the United States as shown in **Table 1**. The September 2000 unemployment rates in the Kentucky counties of the metropolitan area were well below the Kentucky state average at 3.2 percent, 4.0 percent, and 2.2 percent in Bullit, Jefferson, and Oldham counties, respectively. Scott is the first county in the MSA to experience a substantial increase in unemployment. The increasing national unemployment rate indicates that other counties in the Louisville MSA may follow. However, the September 2001 unemployment rate in many counties is below that of 2000.

Table 1
Unemployment Rate
(not seasonally-adjusted)

	1999 Annual Average	2000 Annual Average	Annual Average (Jan.-Sept. 2001)	Sept. 2001
Clark, IN*	2.8	3.3	2.8	3.6
Crawford, IN	5.7	5.9	4.5	3.8
Floyd, IN*	2.3	3.0	2.4	2.8
Harrison, IN*	2.6	2.9	2.7	2.7
Orange, IN	7.0	6.2	8.0	8.0
Scott, IN*	3.1	3.2	4.1	4.3
Washington, IN	4.6	4.5	5.4	6.2
Indiana	3.0	3.2	3.7	3.9
Kentucky	4.5	4.1	4.6	4.4
U.S[1]	4.2	4.0	4.5	4.7

Sources: Indiana Department of Workforce Development and Kentucky Cabinet for Workforce Development
**Counties in the Louisville Metropolitan Statistical Area*
[1]The October 2001 seasonally-adjusted unemployment rate for the U.S. was 5.4 percent. October rates were not released for states and counties at the time of writing.

Recent data for the Louisville MSA (see **Table 2**) indicate that the average level of nonagricultural employment increased by 7,700 jobs through September of 2001. Manufacturing employment remained steady in southern Indiana and decreased by about 2,400 jobs in the MSA. Non-manufacturing employment remains steady in southern Indiana and grew by about 10,000 jobs in the MSA. The MSA job growth in the non-manufacturing sector was led by increases in the services and retail sectors. Other non-manufacturing sectors remain stable in southern Indiana and the MSA.

Recent data from the Indiana Department of Revenue indicate that 37,500 workers commuted daily between southern Indiana and Kentucky in 1999 (see **Table 3**).

Several major retail chains are expanding operations in southern Indiana, and the retail sector will experience substantial growth over the next few years. Home Depot and Kohls have recently opened in New Albany, as has a 500-room hotel at Caesars Casino in Harrison county. These developments will further increase the demand for retail and services workers in southern Indiana.

Wages and Hours in Manufacturing

Manufacturing is the only sector for which wage and salary information is collected for the southern Indiana area. As shown in Table 2, average hourly earnings in manufacturing industries are consistently below that of Indiana as a whole. Hourly earnings have increased over those of 2000, but not enough to suggest that inflationary pressures are evident. While there is no standard measure of labor productivity for metropolitan areas, national averages suggest that labor productivity in manufacturing has increased substantially over the past decade, thus holding output prices and wages down.

Average weekly hours worked in the manufacturing sector have remained stable over the past year, at around 40 hours per week in the southern Indiana counties. There was a noticeable increase (of almost two hours) in September 2001, which may indicate that the level of overtime increased. Average weekly earnings also increased substantially (almost $50) in September 2001, hence the increase in average hourly earnings for the month.

Consumer Activity

Sales and Marketing Management magazine's 2001 Survey of Buying Power shows that growth of retail

Table 2
Nonagricultural and Manufacturing Employment

		1999 Annual Average	2000 Annual Average	2001 Annual Average (through Sept.)	Sept. 2001
NONAGRICULTURAL EMPLOYMENT					
Southern Indiana Counties[1]	(000)	94.4	95.0	96.2	94.9
Louisville MSA[2]	(000)	579.5	591.6	599.3	603.1
Manufacturing Empl.					
Southern Indiana Counties	(000)	20.3	20.3	20.8	20.4
Louisville MSA	(000)	89.0	88.2	85.8	84.4
Durable Goods					
Southern Indiana Counties	(000)	11.2	11.0	11.6	11.2
Louisville MSA	(000)	50.4	50.7	49.1	48.1
Nondurable Goods					
Southern Indiana Counties	(000)	9.1	9.3	9.1	9.2
Louisville MSA	(000)	38.6	37.5	36.6	36.3
Avg. Hourly Earnings, Manufacturing ($)					
Southern Indiana Counties		13.18	13.40	14.55	15.45
Indiana		15.26	15.83	16.15	16.33

Source: Indiana Department of Workforce Development

[1] Clark, Floyd, Harrison and Scott counties. The Indiana Department of Workforce Development refers to this as the New Albany area.

[2] The Louisville MSA is Clark, Floyd, Harrison and Scott counties in Indiana and Bullit, Jefferson and Oldham counties in Kentucky.

Table 3
Commuting Flows, 1999

Living in / Working in..........	Kentucky	Clark	Crawford	Floyd	Harrison	Orange	Scott	Washington
Clark	16,458	40,805	14	4,379	395	8	323	172
Crawford	692	172	3,962	184	645	171	2	22
Floyd	12,717	4,993	19	27,666	752	17	7	122
Harrison	5,321	1,465	148	2,031	14,215	20	23	100
Orange	136	54	95	49	47	10,128	3	203
Scott	808	771	0	169	27	5	10,039	126
Washington	1,393	1,488	13	726	274	232	373	11,775
Kentucky		708	10	479	264	11	30	24

Source: Indiana Department of Revenue; retrieved from STATS Indiana

sales has slowed over the past year. Total retail sales in the Louisville MSA increased by 3.3 percent from just over $13.1 billion in 2000 to just over $13.5 billion in 2001. Harrison, Bullit, and Floyd counties led this growth (on a percentage basis) with increases in retail sales of 6.01, 5.98 and 4.75 percent, respectively, for these counties between 2000 and 2001.

Activity in the residential housing market has increased over the past year. Declining mortgage rates, now at the lowest level in over 30 years, are undoubtedly responsible. Housing sales through October 2001 in the southern Indiana area[1] totaled 2,242 compared with 1,840 for the same period in 2000. This is the largest number of homes sold since IU Southeast began tracking this indicator in 1990. The average sales price was $131,670 for January-October 2001 sales, up slightly from the year before. Approximately 73 percent of homes sold in 90 days or less in 2001, up slightly from the 2000 figure.

In contrast to housing sales, residential construction as measured by residential building permits for new single-family units decreased from the 2000 level and the 1998 peak. The largest decrease in the number of single-family permits, 336 (19.5 percent), occurred in Jefferson County. The largest percent decline occurred in Harrison County with a 54.1 percent decrease. The number of multifamily permits increased in Jefferson and Clark Counties.

Gaming at Caesar's Casino continues to expand. The turnstile count for September of 2001 was 211,380 patrons, a 19 percent increase over September 2000. The turnstile count for January through September 2001 was 38.5 percent higher than the same period last year.

Growing Population

Recently-released data from the 2000 Census show that the population of southern Indiana and the Louisville metropolitan area is growing. Population in the metro area increased by over 8 percent (76,586 persons) between 1990 and 2000. In percentage terms Oldham County led growth, followed by Bullit and Harrison counties. The portion of the MSA population living in southern Indiana increased slightly over the decade.

The number of children in the Louisville metropolitan area increased, which has implications for school finance. In percentage terms, Oldham and Bullit counties, with 32.6 and 19.4 percent increases, respectively, led growth in the number of children, well above the MSA growth rate. While the number of households increased, the average number of persons per household decreased in all counties of the metro area and the southern Indiana labor market area.

During 2001, Louisville and the southern Indiana area have settled into a period of slower growth. With the exception of housing sales, consumer activity, as measured by single-family residential building permits and retail sales, has leveled off. Employment growth in southern Indiana appears to have leveled off over the past year with stable manufacturing and non-manufacturing employment. In the Kentucky counties, there have been decreases in manufacturing employment and significant increases in non-manufacturing employment. The unemployment rate is still relatively low in the metro counties. National indicators released over the past few weeks indicate that the U.S. economy is in recession. Undoubtedly the economy of the Louisville region will begin to show signs over the next few months.

Notes

1. Data on home sales from the Southern Indiana Realtors Association multiple listing service cover the counties of Clark, Crawford, Floyd, Jefferson, Scott and Washington.

Richmond

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The Richmond-Connersville-New Castle (RCNC) area economy can expect a rebound in 2002. The erstwhile slowdown or current downturn in the United States economy is affecting local employment, income and growth.The manufacturing sector is in recession. Manufacturers in October 2000 turned in their worst performance since February 1991, when the United States was mired in its last recession. The National Association of Purchasing Management noted that its manufacturing activity index sank to 39.8 from 47 in September, the 15th consecutive month of decline. An index above 50 comprises growth in manufacturing, while a figure below 50 shows contraction.

At the local level, there was a loss of a few hundred jobs, particularly in durable goods manufacturing, such as wire, machine tools, heavy trucks and other transportation-related equipment. Consequently, companies will have poor profit performance, which in turn will affect their capital spending. Prior to September 11th, companies were prepared for a pared-down cost structure because of lower commodity and energy prices, cheaper borrowing costs, and slower wage growth. They now face, in addition to weak demand, a new layer of costs because of increased security measures and distribution problems. It is important to note that the manufacturing sector is the backbone of RCNC's economy, accounting for at least 25 percent of its total employment.

Given the manufacturing situation, employment growth in Wayne, Fayette and Henry counties was weak in 2000, with unemployment rates running higher than the state rate of 3.2 percent (see **Table 1**).

Compared to a year ago, there has been a steady increase in RCNC's unemployment rates (see **Figure 1**). However, two existing businesses, Fickenscher America and Delta Entertainment, are building new facilities costing $11 million in the Midwest Industrial Park. One will produce multi-shot injection molding to create movable plastic parts for automotive and consumer products, while the other will produce compact discs and digital video discs for the entertainment industry. Both businesses expect to create about 90 new jobs. The employment picture is expected to improve with a rebound in economic activity during 2002.

The services sector, unlike manufacturing, is holding steady. There is growth in business and personal services, transportation and public utilities, and finance, insurance and real estate. There is also increased activity in food, entertainment and financial management. Growth is not as robust as in 1999 but is expected to improve in 2002.

The housing sector, in contrast, remains relatively strong against the backdrop of plunging consumer confidence and soaring unemployment. The number of building permits issued in RCNC during the first nine months of 2001 totaled 2,612. Their total investment value is an estimated $95.3 million. In Richmond, there were 1,488 permits with an investment value of

Table 1
Labor Force Estimates

	SEPTEMBER	Fayette	Henry	Wayne	Indiana	U.S.
Labor Force	2001	10,140	23,430	35,760	3,111,500	141,576,000
	2000	9,855	23,440	35,640	3,076,200	140,357,000
Employment	2001	9,210	22,430	34,110	2,991,550	134,868,000
	2000	9,445	22,650	34,560	3,002,277	135,033,000
Unemployment	2001	930	1,000	1,650	120,000	6,708,000
	2000	410	790	1,080	74,000	5,324,000
Rate	2001	9.2	4.3	4.6	3.9	4.7
	2000	4.2	3.4	3.0	2.4	3.8

Source: Indiana Department of Workforce Development

$11.8 million; 22 of these permits were residential and 15 were commercial. The overall investment value is estimated at $41.6 million, which is much higher than last year's (see **Table 2**).

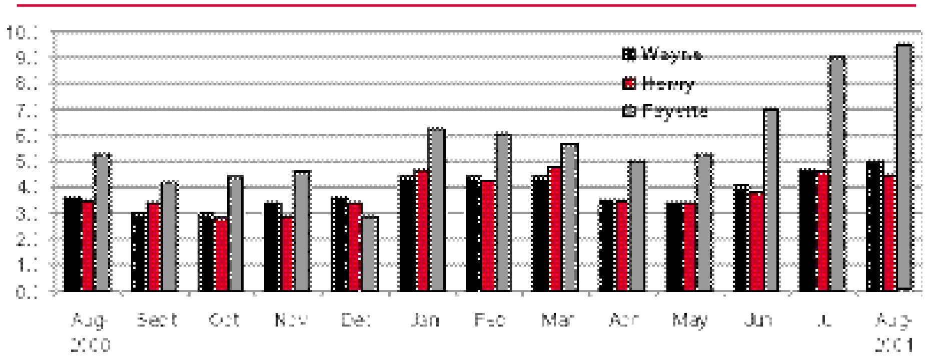
Aiding construction activity are interest rates. Responding to the anemic economy, the Federal Open Market Committee reduced its federal funds rate target to 2.0 percent in three steps of 50 basis points each, one on September 17th and the others on October 3rd and November 6th, stating that "the terrorist attacks have significantly heightened uncertainty in an economy that was already weak." The federal funds rate is the interest rate charged to commercial banks for overnight borrowing which is then filtered to other interest-sensitive sectors.

Local financial institutions, for example, had 15-year, 30-year and 1-year adjustable-rate mortgages averaging 6.54 percent, 6.78 percent and 5.93 percent, respectively, at the end of October (see **Table 3**). These rates are much lower than last year's and are fueling consumption. The housing market is enjoying the benefits of lower mortgage rates. There is brisk activity in homes priced between $75,000 and $150,000. The median RCNC home price is $89,000 ($148,000 nationally, and $131,000 regionally). Although home resales plunged 12 percent last month, reflecting a housing market in decline prior to September 11th, the local market is bucking that trend. Home buyers and mortgage refinancers are benefiting from the Treasury Department's decision to stop issuing 30-year bonds. The move immediately pushed long-term mortgage rates lower. The 10-year Treasury note, which is the basis for pricing long-term mortgages, increased in price. As price increases, yield moves in the opposite direction.

A word of caution is in order. Before the September 11th attacks, consumers, whose spending accounts for two-thirds of all economic activity, had been the main force keeping the economy afloat for more than a year. But spending declined 1.8 percent in September as Americans stayed away from stores. If there is retrenchment in consumer spending, it will have far-reaching consequences for an already wobbly economy. However, at the local level, there could be at least a 2 percent increase in consumer spending, especially during the holiday season. Such spending would cheer local retailers who have been experiencing slow sales performance.

Further, a fallout of the attacks is likely to put globalization, that is, the linking of national economies, at risk. Increased security measures will not only raise firms' costs of production but will also diminish firms' competitiveness in the global economy. Tighter border controls and immigration restrictions will slow the free movement of goods, services, capital and people, which will affect economic growth.

Figure 1
Indiana Unemployment Rate Trends



Source: Indiana Department of Workforce Development

Table 2
Building Permits Issued in the RCNC Area

2001 (Jan to Sep)	Total Permits	Estimated Cost
RCNC Area Total	2,612	$95,295,530
Richmond	1,488	$41,579,404
January	102	$1,063,905
February	93	$1,120,339
March	124	$8,939,262
April	171	$1,918,024
May	156	$16,488,269
June	186	$3,670,868
July	165	$1,470,480
August	351	$5,385,044
September	140	$1,523,213
Connersville	221	$20,012,549
New Castle	903	$33,703,577

Table 3
RCNC Area Mortgage Rates (as of October 28th, 2001)

	15-year		30-year		1-year ARM	
	This Week	Last Week	This Week	Last Week	This Week	Last Week
Advantage Home Mortgage	6.25	6.25	6.625	6.625	6.25	N/A
Capitol Mortgage	6.0	6.125	6.5	6.5	7.0	7.125
Edward Jones	6.25	6.125	6.875	6.75	5.875	5.875
Firstar Home Mortgage	6.25	6.25	6.875	6.875	5.875	5.875
First Liberty Mortgage	6.125	6.25	6.625	6.75	5.875	5.75
Galaxy Mortgage	6.125	6.125	6.625	6.625	6.0	6,0
Harrington Bank	6.25	6.5	7.0	6.875	5.75	5.75
Kenrick Financial	N/A	N/A	N/A	N/A	N/A	N/A
Merrill Lynch	6.324	6.324	6.796	6.796	N/A	N/A
Old National Bank	6.25	6.125	9.875	6.75	5.75	5.75
Peoples Trust	6.375	6.125	7.0	6.75	5.375	5.375
Premier Mortgage	6.25	6.25	6.75	6.75	6.375	6.5
Union County National Bank	6.375	6.375	6.875	6.875	6.625	6.625
Wayne Bank & Trust	6.125	6.25	6.75	6.875	4.375	4.375

In addition, the Center for Economic Education survey finds 26 percent of firms in the RCNC area have hired new employees in 2001; that 95 percent are adversely affected by current economic conditions; 36 percent plan to expand in 2002; 82 percent have good labor-management relations; and 85 percent have continuing education programs for their employees. An overwhelming majority of the firms rate RCNC favorably for doing business, but have reservations on workforce development, heath care costs, and market uncertainty.

Despite the mixed economic picture, the prospects for economic growth at both the national and local levels in 2002 are good. Fed easing, low inflation, lower energy prices, and slower wage growth, along with fiscal stimulus, could all conspire to give the economy a much needed boost in 2002, barring adverse external shocks. Consequently, RCNC is expected to have an increase in employment, income and growth.

South Bend/Mishawaka Elkhart/Goshen

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In the early 1950s, both the South Bend-Mishawaka and Elkhart-Goshen local economies featured very strong manufacturing sectors. More than half of all employment in both economies was in manufacturing. In the 1960s and 1970s, employment in the South Bend-Mishawaka local economy, like most local economies in the U.S., shifted from manufacturing to non-manufacturing. By 2000, manufacturing employment made up only 16 percent of total employment. In contrast, manufacturing employment in the Elkhart-Goshen economy, led by the recreational vehicle and manufactured housing industries, continued to grow as fast as non-manufacturing employment. In 2000, manufacturing employment made up 51 percent of total employment, the highest percentage of any MSA in the U.S. **Table 1** shows average unemployment rates and uses seasonally-adjusted index numbers to show average levels of employment for the years 1994 through the first half of 2001. Data in Table 1 indicate that the trends mentioned above were continuing until the current year, with manufacturing employment in South Bend growing 1.6 percent from 1994 through 2000, and manufacturing employment in Elkhart growing 11.4 percent during the same period. Recently, manufacturing employment has declined in both local economies.

The South Bend-Mishawaka economy has performed well since 1994. Total employment grew rapidly from 1994 to 1995, leveled off in 1996, and grew again, at a slower rate, from 1997 through the first half of 2001. Employment grew 9 percent during this period. Non-manufacturing employment increased consistently during this period, but manufacturing was up and down depending upon the national economy and specific situations facing local firms. The current downturn in manufacturing at the national level is reflected locally by a nearly 5 percent drop in manufacturing employment. Unemployment rates dropped from an average of 4.4 percent in 1994 to 3.3 percent in 1997, and have remained at very low levels

Table 1
Employment and Unemployment Rates for Selected Years

	1994	1995	1996	1997	1998	1999	2000	2001*
South Bend-Mishawaka								
Total Non-agricultural	119.5	124.1	124.1	126.0	128.6	129.5	129.2	130.3
Manufacturing	93.4	97.5	92.9	93.1	94.5	92.9	94.9	90.1
Non-manufacturing	127.1	132.1	133.3	135.7	138.5	140.3	139.0	141.6
Unemployment Rate	4.4%	4.3%	4.0%	3.3%	2.7%	2.9%	3.2%	3.5%
Elkhart-Goshen								
Total Non-agricultural	125.1	129.2	127.4	128.0	132.7	136.6	140.0	138.7
Manufacturing	120.2	122.0	119.3	119.1	124.1	129.6	133.9	128.7
Non-manufacturing	130.7	136.9	136.7	138.5	142.7	145.0	148.2	150.3
Unemployment Rate	3.8%	4.5%	3.8%	3.3%	2.6%	2.1%	2.7%	3.9%

**2001 figures cover the first six months of the year.*
All employment figures are seasonally adjusted index numbers with 1986=100.
The underlying employment data are derived from a monthly survey of employing establishments and are published by the Indiana Department of Workforce Development.

until this year. The local labor market has been very tight since 1997, but the most recent monthly rates show an increase to the levels last seen in 1994 and 1995.

The Elkhart-Goshen economy has also performed well since 1994. Total employment grew rapidly in every year since 1994, except for a slight decline in 1996 and slow growth in 1997. From 1994 through 2000 employment grew 12 percent. Total employment declined in the first half of 2001, as the decline in manufacturing jobs more than offset the growth in non-manufacturing jobs. Non-manufacturing employment increased in every year, except for a slight decline in 1996. Manufacturing employment increased in every year except for a slight decline from 1996 to 1997, and a much larger decline of approximately 4 percent in the first half of 2001. Unemployment rates dropped from 3.8 percent in 1994 to 2.6 percent in 1998, remaining at very low levels until increasing to 3.9 percent for the first half of 2001. The most recent monthly rates are even higher, as the local economy is impacted by the slowdown in manufacturing.

Data from Table 1 for the first six months of 2001 together with recently released data for September 2001 suggest both local economies are slowing down. In South Bend, average manufacturing employment is down 5 percent for the first six months of 2001 versus 2000, and September 2001 total employment is down slightly compared to September 2000. The average unemployment rate is up from 3.2 percent in 2000 to 3.5 percent for the first six months of 2001, and the September 2001 unemployment rate is at 4.2 percent. Employment levels in the South Bend economy are declining slightly, and unemployment rates are rising, but are still low by historical standards.

In Elkhart, average employment is down for the first six months of 2001 versus all of 2000, and the average unemployment rate is up from 2.7 percent to 3.9 percent. Manufacturing employment and total employment are down significantly from September 2000 to September 2001. Unemployment rate data for September 2001 show a significant increase to 4.6 percent. Data on recreational vehicle production nationally and in Indiana show significant declines in production for the first nine months of 2001 compared to the first nine months of 2000. Total production is down 16 percent for the year through September. Manufactured housing production has also declined significantly at the national level and in Indiana. The Elkhart economy has slowed significantly.

Outlook

Accurately forecasting economic conditions for local economies is very difficult for two reasons. First, we have much less economic information available for local economies than for larger economies, and the data we do have tend to be less accurate. Second, special situations affecting individual firms, which would have little impact on a regional or national forecast, can have a major impact on a local economy. The uncertainty surrounding these special situations creates uncertainty about the forecast. At the present time, we have several special situations that have the potential to affect our local economies over the next couple of years. General Motors is building a production facility in St. Joseph County to produce Hummers. Approximately 1,500 workers will be hired at wages well above the local average for production workers. Since almost all of the sales will be outside our area, and since it is likely additional new jobs will be created to supply this plant, the multiplier effect will be substantial. This development will have a very substantial impact on local employment and local income.

Crowe Chizek and Company, one of our largest local employers, has announced an expansion in South Bend. The company plans to hire a significant number of new employees in this area over the next three to five years. Since this is the company's national headquarters, much of the income supporting these new positions will come from outside our area. Many of these jobs will be high paying with excellent fringe benefits. While the multiplier effect will be smaller than the General Motors one, it will still be substantial. Local employment and income will increase from Crowe Chizek's expansion, although most of the impact will occur beyond our forecast period.

Honeywell International, Inc., one of our largest employers, is a subcontractor for the new joint strike fighter plane from Lockheed Martin Corp., which recently won a major defense contract. This new contract should help solidify Honeywell's local employment. These jobs, like the ones mentioned above, are export-oriented and high paying, so the multiplier effect will be large if the expansions take place. The combined effect of these special situations is clearly positive for our local economy. It will take time for these developments to affect our local economies, so most of the effects will be felt in 2002 and later years.

Like most local economies, the South Bend-Mishawaka and Elkhart-Goshen economies are greatly influenced by the national economy. The durable goods component of the national economy, and especially the automobile, manufactured housing, recreational vehicle, and steel industries has a big impact on our local economies. Since the Elkhart economy has very substantial manufacturing employment it tends to be affected quickly and significantly by movements in the national economy. Recent national data show declines in durable goods spending in general and in the sales of autos, recreational vehicles and manufactured housing. These economic trends have caused a decline in manufacturing employment in the South Bend economy and a small decline in total employment. In Elkhart, the declines in both manufacturing employment and total employment are much larger—nearly 3,000 jobs. If the national economy begins to recover in the spring of 2002, then we should see improvement in both local economies. Until then, we expect both local economies to remain weak. Unemployment rates in both local economies will be well above the averages for the last couple of years, averaging in the 4 to 5 percent range.

Terre Haute

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Terre Haute was one of the first Indiana metropolitan areas to feel the effects of the 2001-2002 recession. The level of payroll employment in Terre Haute declined steadily beginning in early 2001. The recession is likely to be more severe in the Terre Haute area than in most other parts of the state.

To see why, look first at the area's population growth. The Terre Haute metropolitan area, which includes Vigo, Clay and Vermillion counties, managed almost no population growth in the ten years between the 1990 census and the 2000 census. The latest census found 149,192 people in the metro area, up just 1 percent over 1990.

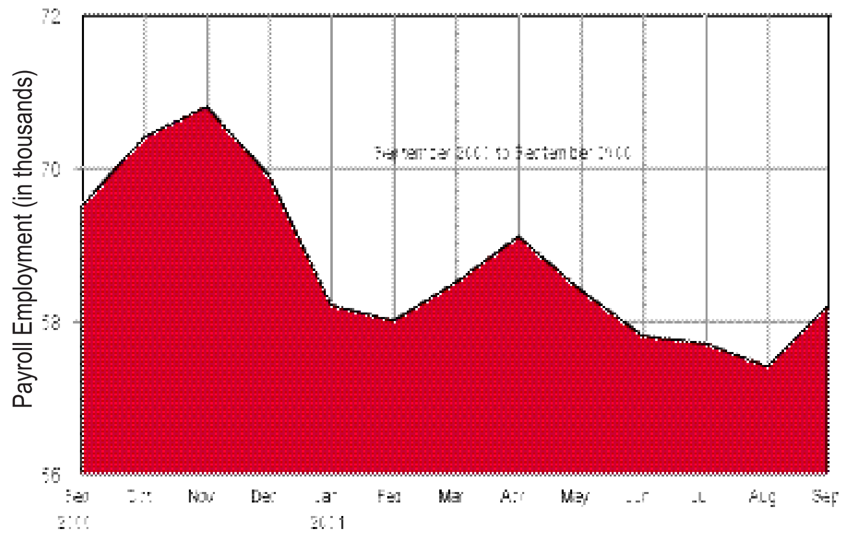
Then note the downward trend in the number of jobs in the area (see **Figure 1**). From its most recent peak in November 2000, the metro area lost 2,600 jobs by the end of September. In fact, employment in Terre Haute and surrounding counties at the end of the third quarter of 2001 was 5 percent less than it was in 1995.

As you might expect, these two factors combine to produce unemployment. In the third quarter of 2001, the Terre Haute metro area averaged a 4.7 percent unemployment rate, second highest after Kokomo among all Indiana metro areas. The statewide average for the quarter was 4 percent.

Consequently, though the recession nationwide in 2002 is predicted to be a mild one, it is likely that the Terre Haute metro area will experience more than the average level of pain. We can expect unemployment rates near 7 percent by the middle of 2002. And since most IU economists believe the nationwide recovery from the recession will be slow, unemployment rates will stay high in Terre Haute throughout next year.

A mild winter should help the region. Good weather will allow more construction work to be done and will reduce upward pressure on energy prices. Lower energy prices, on balance, are good for Terre Haute. Located relatively far from other population centers, Terre Haute derives economic benefits from

Figure 1
Payroll Employment in Terre Haute Metro Area
September 2000 to September 2001



Source: U.S. Bureau of Labor Statistics

the traffic on I-70. If fuel prices stay low, that traffic will hold up better. And while higher energy prices may help Indiana's coal industry, the Terre Haute area does not have as many direct economic ties to coal as it has had in the past.

Conversely, a severe winter could worsen the effects of the recession in Terre Haute. And since the music industry is a significant employer in the region, shifts in the technology of music delivery could hurt those Terre Haute firms that supply that industry.

2001 Business Outlook Panel
Summary for 2002
Kelley School of Business
Indiana University

- As in every year, unexpected events provide risks for our forecasts. Crises in developing countries could deepen and spread, leading to a severe cutback in U.S. exports. The events of September 11th, 2001 continue to unfold and challenge us in ways that we never could have imagined. They not only test our numbers for the coming year, they challenge us as a nation to face what comes with resolution, strong spirit, and unfettered confidence.

- As we head into 2002, the U.S. economy will be recovering from recession, reaching its trough in the first or second quarter of 2002. The recession will have been moderate by historical standards. GDP will rise by 1.0 percent in 2002, somewhat slower than the 1.1 percent increase in 2001. The inflation rate as measured by the CPI will be 2.2 percent.

- Business capital spending and exports will decline in 2002, continuing the contractions experienced this year. Consumer spending will not fall, but will grow by less than 1 percent. Demand for durables goods will decline in 2002 after growing by almost 3 percent in 2001. New autos and trucks sold will be stable at around 16 million units.

- You have to go back to 1973 to find a time when the U.S., Europe, and Japan were all simultaneously experiencing such weak growth. Indeed, the world's economy will grow much slower than it has in the past two years. That suggests some weakening of the dollar and a marginal improvement in the U.S. trade deficit, but even those changes could reverse during the latter stages of 2002.

- At midyear, Indiana's exports were just about equal to where they were at midyear 2000. This stable pattern was stronger than the performance of the nation's, whose exports fell by more than 2 percent. Rising exports to the UK, Japan, France, the Netherlands, Brazil, and China—of mostly organic chemicals, pharmaceuticals, and medical devices—helped to keep Indiana's exports from declining.

- The U.S. unemployment rate will rise in the coming year, probably averaging around 6.3 percent. That compares to 4.8 percent in 2001 and 4.0 percent in 2000. Establishment employment in 2002 could fall by over 1 million jobs as the economy slows in 2002.

- The current year has seen short-term interest rates decline precipitously but longer-term rates have stayed stubbornly high. We believe that short-term rates (3-month Treasury Bills) will average below 2 percent next year and longer-term rates (AAA bonds) could decline by about 100 basis points. Rates should begin rising, however, once economic growth picks up in 2002.

- Despite a recession, steep declines in mortgage rates have buoyed the market for new and used homes this year. Higher unemployment in the coming year will not bode well for new housing starts and we see little growth in that area. But no growth may look good when compared to other sectors that are facing decline.

- Once the recovery is underway and economic growth and earnings start returning to more normal growth paths, price-earnings ratios should shrink somewhat but remain above their historical averages. Stock prices could grow during 2002 by as much as 5 to 7 percent.

- Changes in the Indiana economy both mirror and magnify changes in the national business cycle. Structural changes in the state's economy, now less reliant on manufacturing, suggest that Indiana will not be as badly impacted by the current recession as the ones in the early 1980s. Nevertheless, we believe that Hoosier employment could fall by as many as 90,000 jobs and the state unemployment rate could average over 6 percent in 2002.

OUTLOOK 2002

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