

Indiana Housing: A Historical Perspective

MATT KINGHORN

Economic Analyst, Indiana Business Research Center, Indiana University Kelley School of Business

The second edition of the *Indiana Business Review*—published on April 15, 1926, by the Indiana Business Research Center (known as the Bureau of Business Research in those days)—opened with these words:

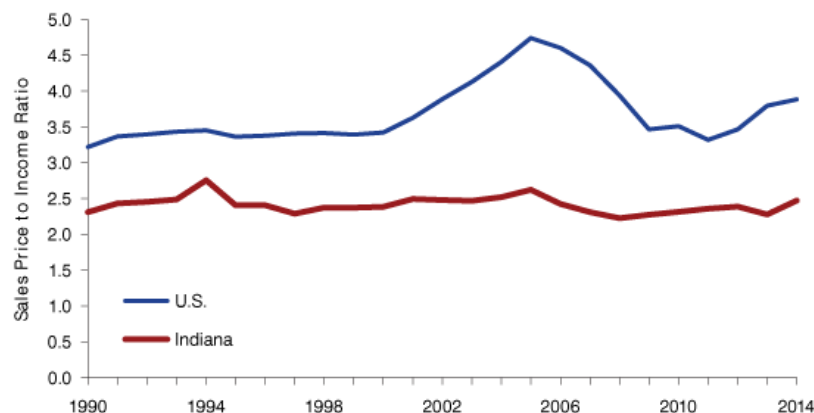
The building boom, based on speculation and easy money, which has been much talked about as a national problem, does not now exist and never has existed so far as Indiana building is concerned.

The so-called boom has been confined to Florida, New York City, and a half dozen other cities. Consequently, national predictions tend to be seriously misleading if applied to building in Indiana.

Replace the words “building” with “house prices,” and “New York City” with “Las Vegas,” and this quote would be just as true if it were written about the housing market in 2006.

While the bubble periods of the 1920s and the 2000s may not be a perfect analogy, the warning in the above quote against allowing national headlines to color our thinking on Indiana trends holds true today. This advice was never more apt than during the most recent housing bubble era, when house prices at the national level lost touch with reality before eventually tumbling back to earth. During this boom and bust period, however, Indiana’s house prices remained tied to changes in the state’s household incomes (see **Figure 1**). Unfortunately, while Indiana didn’t add fuel to the problem, the state did share in the consequences during the Great Recession.

Figure 1: Ratio of Median Home Sales Price to Median Household Income



Source: U.S. Census Bureau, Moody’s Economy.com, Indiana Association of Realtors and National Association of Realtors

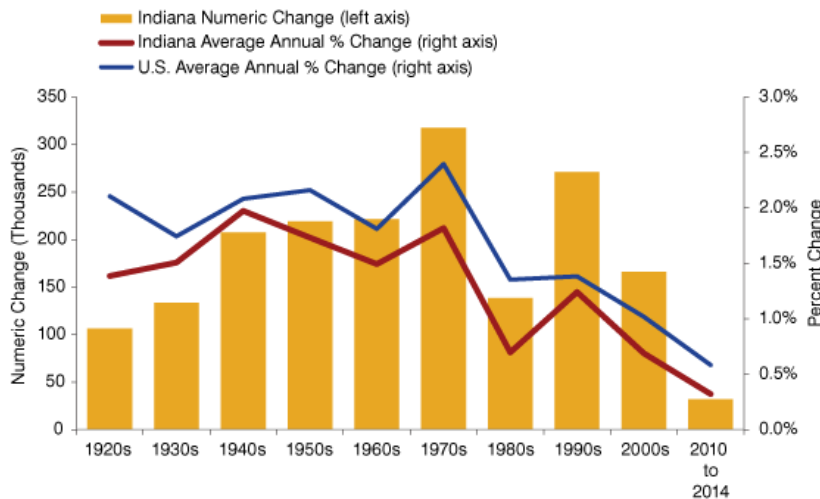
Indiana’s housing market differs from the U.S. in other ways, too. The state’s homeownership rate is well above the national average, for instance, and Hoosiers enjoy some of the most affordable housing in the country.

To commemorate the Indiana Business Research Center’s 90th anniversary, this article will take a long look back at changes in Indiana’s housing market. Not all of the data series presented in this piece extend back to the 1920s, but we will cover as much ground as possible to highlight the key shifts in Indiana housing over the last 75 years or more.

Household Formation Ups and Downs

The number of households in Indiana has increased more than threefold over the last 95 years, from nearly 721,600 in 1920 to more than 2.5 million in 2014. Indiana experienced strong increases in the post-World War II years, averaging 216,000 new households per decade between 1940 and 1970. Household growth really spiked in the 1970s, adding nearly 317,600 households, as the baby-boom generation began to come of age and women entered the labor force in larger numbers. Indiana's household formation trend has been on a bit of a roller coaster ride since the 1970s, however (see **Figure 2**).

Figure 2: Household Formation Trends



Source: U.S. Census Bureau, Decennial Census and American Community Survey

In terms of the rate of growth, the 1940s set the fastest pace of household gains in Indiana by climbing at a rate of 2 percent per year over the decade. The average annual marks set during the 1950s and 1970s were just a shade lower at 1.7 percent and 1.8 percent, respectively.

After a return to strong growth during the 1990s, Indiana's household formation rate has slowed over the last 15 years. The number of households in the state grew at a rate of nearly 0.7 percent a year during the 2000s—the lowest mark for any decade in the last 90 years. Indiana's pace has slowed even further so far in this decade, with a household formation rate of just 0.3 percent a year between 2010 and 2014.

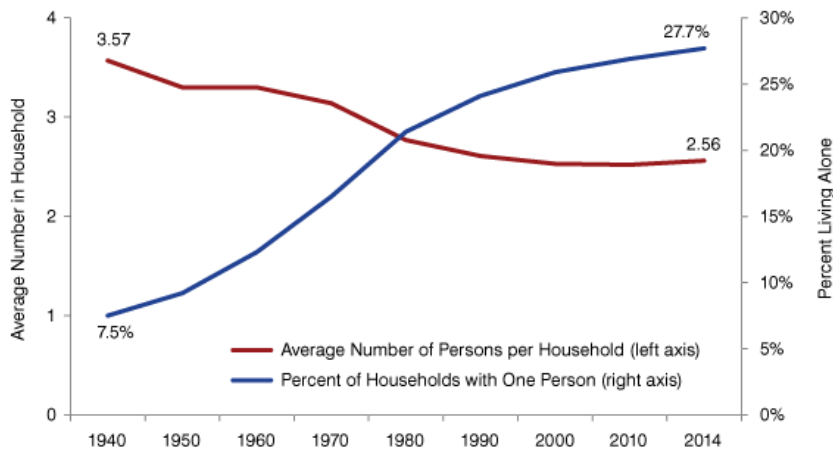
Much of this recent slowdown can be pinned on the Great Recession, as migration into Indiana has declined sharply since 2007 and household formation rates among younger adults are well below pre-recession levels. These younger adults now on the sidelines, though, do represent a pool of pent-up housing demand that could enter the market as their job prospects improve. A stronger labor market could also attract more residents to the state, so there is a good chance that the state's household formation rate will pick up in the second half of this decade if the economy continues to improve.

Shifts in Household Composition

In addition to strong population growth, another reason why the number of Indiana households increased so dramatically through much of the 20th century is that the very nature of households changed over that time. Perhaps the best example of the shifts in household composition is the explosion in the number of people living alone.

In 1940, roughly 72,300 Indiana residents lived alone, which translated to nearly 8 percent of all households in the state. This number jumped by a factor of nearly six by 1980 when there were 413,000 Hoosiers living alone—or more than 21 percent of all households. This share has continued to climb since, although not quite as dramatically. As of 2014, more than one-quarter of all households in Indiana had one occupant (see **Figure 3**).

Figure 3: Indiana's Shifts in Household Composition



Source: U.S. Census Bureau, Decennial Census and American Community Survey

Several factors have contributed to this shift, including increased economic security for the elderly, longer life expectancies and improved health in old age, a higher rate of divorce, better economic prospects for young adults and the trend toward young adults marrying later in life.¹ The share of solo households should continue to inch up as baby boomers age.

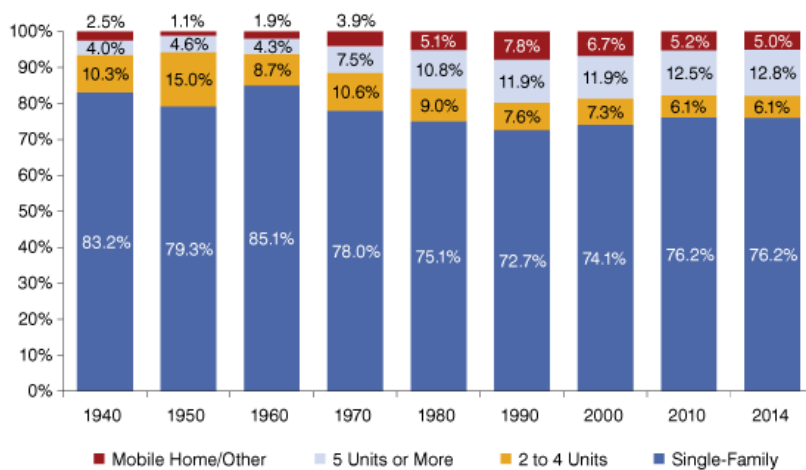
This increased likelihood of living alone, along with lower fertility rates after the baby boom, has led to a decline in the average size of Hoosier households. In 1940, Indiana averaged nearly 3.6 residents per household, but this measure has declined to roughly 2.6 by 2014.

It is interesting to note that this entire decline occurred by the year 2000, and that Indiana's average household size has held fairly constant since then. This newfound stability may simply be a side effect of the Great Recession, with the poor economy forcing an increase in multi-generational households.² Only time will tell whether this measure will continue to hold steady or if an improving economy will cause it to begin to fall again.

Changes in the Types of Housing Units

Not surprisingly, the rise in people living alone has led to a greater demand for apartment units. Structures with five or more units accounted for only 4 percent of the total in 1940, but this share has climbed to nearly 13 percent in 2014. As a result, the proportion of single-family units has declined some over this period, but it remains the dominant housing type in Indiana (see **Figure 4**). As a point of comparison, single-family units accounted for 67 percent of the total nationally in 2014, while apartment structures with five or more units represented nearly 18 percent of all dwellings.

Figure 4: Indiana Housing Units by Type



Source: U.S. Census Bureau, Decennial Census and American Community Survey

Homeownership Becomes the Norm

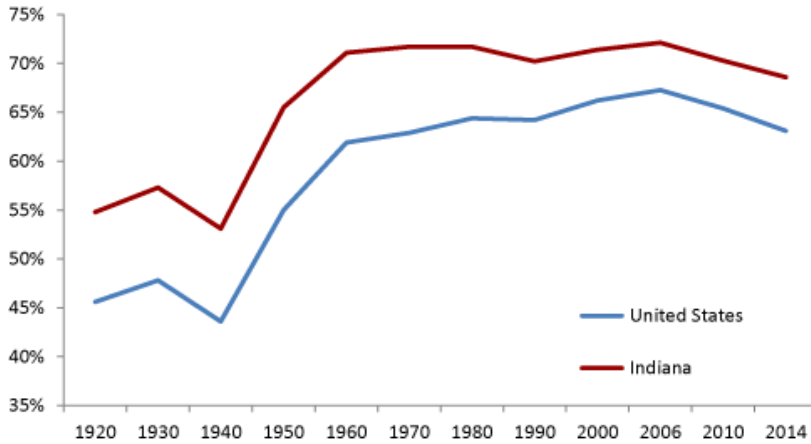
Indiana's homeownership rate was on the rise in the 1920s, but the Great Depression reversed these gains and drove the state's rate down to 53 percent by 1940. Following World War II, however, homeownership began to take off in a big way, with the rate

rising to 71 percent by 1960 (see **Figure 5**).

Indiana's homeownership rate had stayed above the 70 percent mark until the housing bust and Great Recession hit in the late 2000s. Indiana's rate peaked at 72.1 percent in 2006, but has since dropped to 68.6 percent in 2014. This decline was driven in large part by a sharp spike in foreclosures beginning in 2006, but the state's foreclosure rate has dropped just as dramatically since late 2011 and now sits at its lowest point in the last 14 years.³ This development offers some hope that Indiana's homeownership rate will begin to stabilize.

The homeownership rate for the U.S. has followed a similar pattern, although Hoosiers have always been more likely to own their homes. The U.S. homeownership rate peaked at 67.3 percent in 2006, but has slid to 63.1 percent in 2014. Indiana's homeownership rate ranked 11th-highest among states in 2014.

Figure 5: Homeownership Rates in Indiana and the U.S.

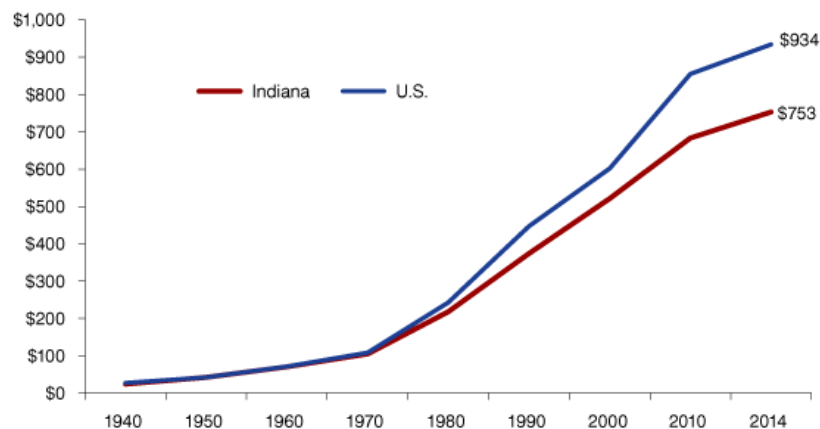


Source: U.S. Census Bureau, Decennial Census and American Community Survey

Indiana Housing Costs Rise Slower than the Nation

Through the middle part of the 20th century, both monthly rents and home values in Indiana were similar to the national average. Beginning in the 1970s, however, housing costs around the country started to climb much faster than in Indiana. Median monthly rents for Indiana and the U.S., for instance, were identical in 1950 at \$42 a month. Rents at the national level were 11 percent higher than in Indiana by 1980, and were 21 percent higher in 2014 (see **Figure 6**).

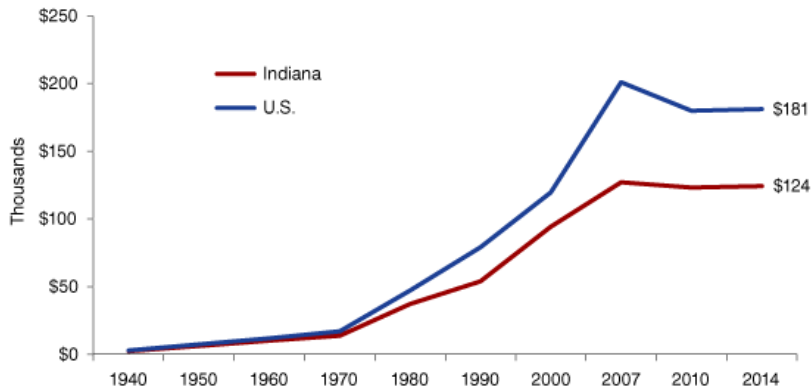
Figure 6: Median Monthly Rents in Indiana and the U.S.



Source: U.S. Census Bureau, Decennial Census and American Community Survey

The pattern has been similar with regard to owner-occupied homes. The U.S. median home value was about 17 percent higher than the Indiana mark of \$6,226 in 1950, but the difference between the two has jumped to more than 37 percent in 2014 (see **Figure 7**).

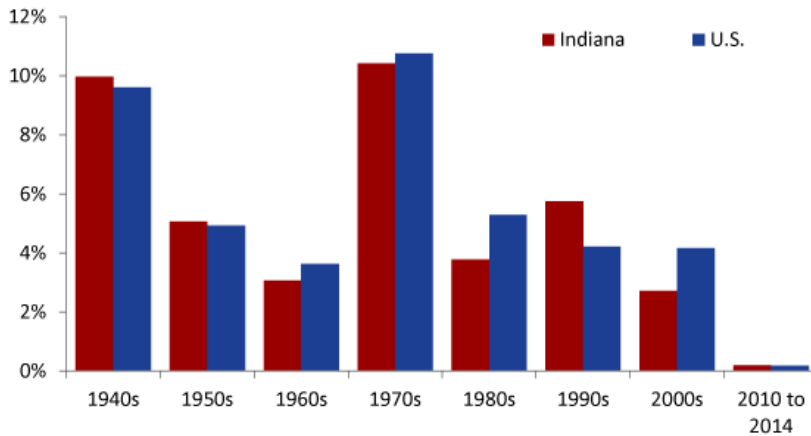
Figure 7: Median Home Values in Indiana and the U.S.



Source: U.S. Census Bureau, Decennial Census and American Community Survey

There is good news and bad news for Hoosiers in this widening gap. On the negative side, one reason that Indiana’s home values have grown more slowly is that the state’s incomes have lagged the nation for most of the last 50 years. One notable exception was during the 1990s when growth in Indiana’s median household income outpaced the nation, and the state’s home values increased at a greater rate, as well (see **Figure 8**).

Figure 8: Average Annual Increase in Median Home Value by Decade



Source: U.S. Census Bureau, Decennial Census and American Community Survey

On the positive side, as the ratios of median sales prices to median household income in **Figure 1** show, housing is more affordable in Indiana than in most other parts of the country. According to Moody’s Economy.com, in fact, Indiana enjoyed the nation’s third-best housing affordability conditions in 2013, ranking behind only Michigan and Ohio.⁴

Conclusion

Since the Indiana Business Research Center set up shop in 1925, both the state and the U.S. have seen dramatic shifts in its housing markets. Although there are certainly differences between Indiana and the nation in many housing-related measures, the general trend lines of these measures tended to follow similar contours over the past 90 years.

In one important way, though, Indiana’s housing market has been far different from the U.S., especially in the last 15 years. Just as Indiana wasn’t part of the real estate “building bubble” of the 1920s, the state avoided the price bubble of the 2000s. Had Indiana’s house prices followed national trends, even more Hoosiers would have been at risk of foreclosure in recent years. Instead, housing indicators in Indiana typically follow the economic and demographic fundamentals in local markets—both in good times and bad. The same can’t always be said for the nation.

Notes

1. Rosa Kreider and Jonathan Vespa, “The Historic Rise of One-Person Households: 1850-2010,” SEHSD Working Paper No. 2014-19, April 2014, www.census.gov/hhes/families/files/paa2014_kreider_vespa.paper.pdf.
2. Richard Fry and Jeffrey Passel, “In Post-Recession Era, Young Adults Drive Continuing Rise in Multi-Generational Living,” Pew Research Center, July 2014, www.pewsocialtrends.org/2014/07/17/in-post-recession-era-young-adults-drive-continuing-rise-in-multi-generational-living/.

3. Matt Kinghorn and Zoe Caplan, "Indiana Reaches Important Housing Milestones in 2015," *InContext*, September-October 2015, www.incontext.indiana.edu/2015/sept-oct/article1.asp.
4. Matt Kinghorn, "Indiana's Housing Market in 2014: Moving toward Stability," December 2014, www.ibrc.indiana.edu/studies/2014HousingReport.pdf.

What Is the Unemployment Rate Really?

KENT SELLERS

Workforce Analyst, Indiana Department of Workforce Development, Research & Analysis Division

August: 4.6. May: 5.1. January: 6.0.

What do all of these unemployment rate data points mean?

Labor market information (LMI) can help workforce professionals, educators and job seekers distinguish where there are strengths and/or weaknesses in their economies. All of the attention to economic data may allow for more informed decision-making at all levels: informed job seekers, business owners, educators and policymakers.

The unemployment numbers (and rates) are some of the most monitored economic data across the United States. The monthly unemployment rate attracts lots of media coverage. Consequently, it is important to have a good understanding of the unemployment and labor force estimates, how they are calculated, and what these numbers can (and don't) mean. This article looks briefly at the sources and covers the annual and monthly revision process. To conclude, this article offers some "best practices" so that the reader will be more fully prepared to understand and interpret the monthly unemployment rate and labor force estimates.

Where Does the Unemployment Rate Come From?

Workforce agencies, such as the Indiana Department of Workforce Development (DWD), exist as part of state government in all 50 states and have cooperative data agreements with the Bureau of Labor Statistics (BLS) of the U.S. Department of Labor. Each state has analysts who work cooperatively and uniformly in each of the employment and wage statistical program areas. The Local Area Unemployment Statistics (LAUS) is just one of several programs, and this is the program from which the monthly unemployment and labor force estimates are produced.

Each month, BLS announces the total number of employed and unemployed persons in the United States for the most recently completed month, along with many characteristics of such individuals. This LAUS program is a federal-state cooperative program and estimates several components of the labor force each month: civilian labor force, employment, unemployment and unemployment rate. The data can be drilled down to the county level, as well as cities with populations exceeding 25,000. Some states also publish data for smaller cities and towns, but this data can be highly volatile due to the small survey sample size. Indiana publishes data for some of these small areas throughout the state.

One of the biggest misconceptions is the notion that the unemployment numbers are derived solely from those who file claims for unemployment insurance (UI). However, there are people without jobs who delay or do not file for UI benefits; there may also be some that have exhausted their benefits and still do not have a job, and individuals that just aren't eligible to receive UI benefits. As you can imagine, this would not be an accurate depiction of the total count of the unemployed population.

Instead, LAUS estimates are based on a model using three primary variables in addition to historical trends and current surveyed estimates:

1. The Current Population Survey (CPS), a phone survey conducted by the U.S. Census Bureau. There are about 60,000 households in the U.S. and about 1,000 households in Indiana that make up the sample in this survey each month. The survey participants are asked detailed questions about their current work or work search activities.
2. The statewide and metropolitan statistical area (MSA) estimates of Current Employment Statistics (CES) for each month, plus CES-type estimates for non-MSA counties. CES is another federal-state survey-based cooperative

Did You Know?



Did you know that a consistent, quantifiable measure of the unemployed came about during the Great Depression? Although there have been minor changes, the U.S. Bureau of Labor Statistics still uses that base for classifying unemployment to this day. One of the requirements for being counted as unemployed is that you are seeking employment and not "discouraged."

Did You Know?



program that estimates monthly employment by industry and area (statewide and MSAs) based on reports for around 5,000 establishments each month in Indiana. The CES produces the monthly “jobs” numbers we learn about each month and are typically released at the same time as the LAUS estimates by BLS and the states.

3. The UI continued claims counts by area (these are used in part to allocate unemployment estimates to MSAs, counties and smaller cities).

The LAUS model is heavily driven by the CPS sample of about 1,000 households in Indiana, but CES estimates, claims counts and historical trends serve to mediate the volatility of the sample and provide more real-time local data.

As more data becomes available, we revise.

How Is the Unemployment Rate Revised?

The LAUS preliminary estimates are revised each month to take advantage of the revised CES estimates, which are used as one major variable for the LAUS model, and of the additional unemployment claims data—another major variable. Sometimes firms surveyed report their data late, and sometimes there are other delays in modeling or processing that contribute to these minor monthly revisions.

In addition, at the beginning of each year, the previous year’s estimates are thoroughly revised again through a process known as benchmarking. The Quarterly Census of Employment & Wages (QCEW) is known as the “universe” (counts) of employment and wage data. These data come from Unemployment Insurance (UI) covered employers, sometimes referred to as payroll employers, who provide quarterly employment levels and payroll to the states. The QCEW is a much more complete set of data that provides employment levels of all payroll establishments. The CES (monthly jobs numbers) draws its sample of establishments from QCEW. The QCEW program publishes a quarterly count of employment and wages reported by employers, covering approximately 95 percent of wage and salary workers (not including self-employment). Unfortunately, the QCEW is lagged by about six months (e.g., January–March data isn’t available until early September). Once this complete data set becomes available, it is used to benchmark the employment levels used for the monthly estimates prior to beginning another year of estimating.

How Much Can the Preliminary Unemployment Rate Differ from the Benchmarked Unemployment Rate?

Let’s illustrate the extent of the differences between the monthly estimates and the benchmarked (final revision) estimates. **Table 1** shows those counties with some of the largest revisions during the most recent benchmark process, along with Indiana as a comparison point. Whereas Indiana had a relatively minor final revision of half a percentage point, the counties highlighted saw revisions of more than 1 percentage point, either plus or minus. That upward revision for Orange County means that the rate for March 2014 was actually significantly higher than originally estimated—8.7 percent instead of 6.9 percent. Other counties had their unemployment rates revised downward; for example, Tipton’s rate was revised to 5.4 percent from the original 6.6 percent.

Therefore, it would be wise to keep in mind that unemployment rates are best used when analyzing trends over a period of time rather than analyzing the most recent unemployment rate only.

Table 1: Monthly Unemployment Rates and Revisions in 2014

| Geography | Month | Preliminary Unemployment Rate | Benchmarked Unemployment Rate | Percentage Point Difference |
|------------------|--------|-------------------------------|-------------------------------|-----------------------------|
| Indiana | August | 5.5% | 6.0% | +0.5% |
| Orange County | March | 6.9% | 8.7% | +1.8% |
| Greene County | March | 7.1% | 8.7% | +1.6% |
| Blackford County | March | 6.8% | 8.3% | +1.5% |
| Floyd County | April | 6.0% | 4.8% | -1.2% |
| Tipton County | June | 6.6% | 5.4% | -1.2% |
| Harrison County | April | 6.5% | 5.4% | -1.1% |

Employment status depends upon an individual’s “activity” within the designated time period (currently the week of the 12th of each month). An individual is only in the labor force if they were actively working, or if they were actively seeking and available for work. Another caveat to the early and current conceptual definitions involved the notion of a “civilian” labor force. The labor force does not include military or incarcerated individuals as either employed, or unemployed; both are outside the scope of the labor force, as are retired workers, students in college, and anyone else not actively seeking or available for work.

What Are Some Best Practices When Looking at the Unemployment Rate?

Now that a better understanding of the unemployment data and caveats have been established, here are a few tips to keep in mind to best utilize unemployment data:

1. Understand that there is a statistically acceptable margin of error for these estimates and all economic models. For example, we hear this all the time when political polls are released with a “plus or minus” 3 percent or 5 percent.
2. Look for the trends. Instead of looking at each month compared to the last, identify trends over the course of many months. Year-to-year trends are best when looking at non-seasonally adjusted rates, as it is less subjective to the volatility of monthly preliminary estimates.
3. Recognize that most of the monthly economic indicators from the U.S. Department of Labor published in the media are the preliminary estimates. Further exploration will have to be done in order to learn about the revised or benchmarked unemployment rates.

What Are Some Alternative Measures to the Unemployment Rate?

During the current economic recovery, increased attention has been given to the BLS' *Alternative Measures of Labor Underutilization*.¹ These measures offer an alternative to the more commonly reviewed total unemployment rate as an estimate of all labor underutilization, including people that are considered underemployed. BLS has published these for the U.S. on a monthly basis for many years. They can be found at the end of the monthly employment situation press release in Table A-12.² Whereas the total unemployment rate only considers people unemployed if they are actively seeking work, these measures offer broader definitions of “unemployed,” as well as some narrowly defined targeted measures of the long-term unemployed. The U-1 measure is the narrowest definition and estimates the percentage of the labor force unemployed for 15 weeks or longer.

One of the broadest alternative measures of labor underutilization, the U-6, is expanded to include unemployed or underemployed people that may be working part-time for economic reasons, people that are considered discouraged and are no longer looking for work, and all others that are only “marginally” attached to the labor force. The U-3 is the commonly known unemployment rate. Indiana's value has now fallen below the national average. The U-6 measure has followed the same trend, indicating a lower percent of total unemployed, and a lower percent of discouraged and underemployed workers than the national average. The most recent release for Indiana and all states is a four-quarter rolling average ending in the first quarter of 2015. For this time frame, Indiana's “regular” unemployment rate was 5.5 percent compared to 5.7 percent nationally. The U-6 measure was still nearly twice as high, at 10.3 percent for Indiana and 11.3 percent nationally.

Economic developers can hope that this indicates there is still room for discouraged and part-time workers to re-enter the labor force as the recovery continues.

Learn More

- To keep up-to-date with unemployment numbers and other labor market information, check out the Hoosiers by the Numbers website: www.hoosierdata.in.gov.
- For more information and FAQs about the BLS Local Area Unemployment Statistics program, visit www.bls.gov/lau/.
- To learn more about Alternative Measures of Labor Underutilization/Unemployment (also known as underemployment), go to www.bls.gov/lau/stalt.htm.

Notes

1. Alternative Measures of Labor Underutilization for States: www.bls.gov/lau/stalt.htm.
2. October Employment Situation, Table A-12: www.bls.gov/news.release/empst.t12.htm.

Growth and Decline in Indiana's Small Towns

RACHEL STRANGE

Geodemographic Analyst, Indiana Business Research Center, Indiana University Kelley School of Business

Since 2010, 31 percent of Indiana's small cities and towns (those with fewer than 10,000 residents) have experienced population increases. For comparison, however, 66 percent of cities and towns with more than 10,000 people have grown.

Indiana had 491 cities and towns with fewer than 10,000 residents (we will refer to these places as "small towns" for convenience) at the time of the 2010 Census.¹ Combined, these small towns were home to more than 830,000 people in 2014, based on the annual population estimates from the U.S. Census Bureau. This equates to 13 percent of the state's population, exceeding the percentage of people who live in small towns nationwide (9 percent).²

More Hoosiers live in Indiana's small towns now than in 2010, but small town growth has not kept pace with other areas. At 0.6 percent, Indiana's small towns have grown slower in recent years than the state's larger cities and towns (2.3 percent growth) and unincorporated areas (1.0 percent growth), as shown in **Table 1**.

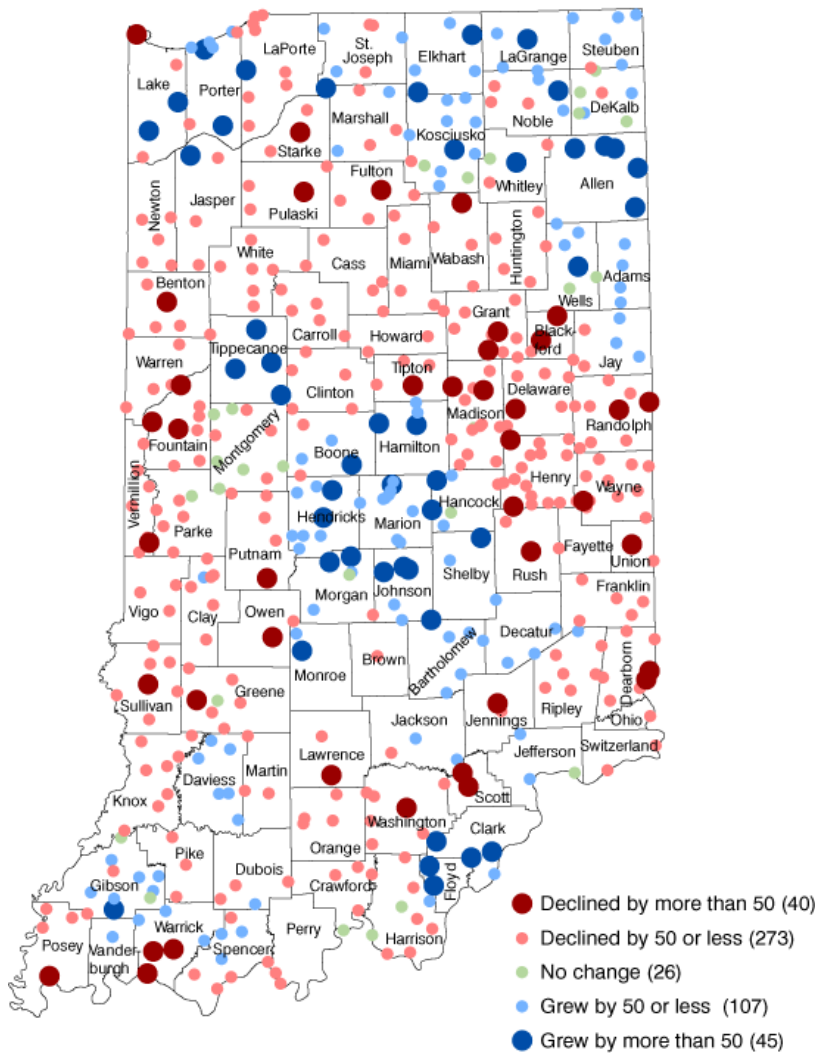
Table 1: Indiana Population Changes

| Name | 2014 Population | Percent of Total Population | Numeric Change, 2010-2014 | Percent Change, 2010-2014 |
|---|-----------------|-----------------------------|---------------------------|---------------------------|
| Indiana | 6,596,855 | 100% | 106,547 | 1.6% |
| Cities/Towns with Less than 10,000 People | 830,167 | 13% | 4,844 | 0.6% |
| Cities/Towns with More than 10,000 People | 3,535,860 | 54% | 80,385 | 2.3% |
| Unincorporated Areas | 2,230,828 | 34% | 21,318 | 1.0% |

Source: IBRC, using U.S. Census Bureau population estimates (for July of each year)

Looking at these combined groupings can hide some important details, however. **Figure 1** illustrates how growing small towns tend to be concentrated near major metropolitan areas, while significant clusters of small towns in the east-central and west-central parts of the state have lost population.

Figure 1: Numeric Change in Small Town Populations, 2010 to 2014



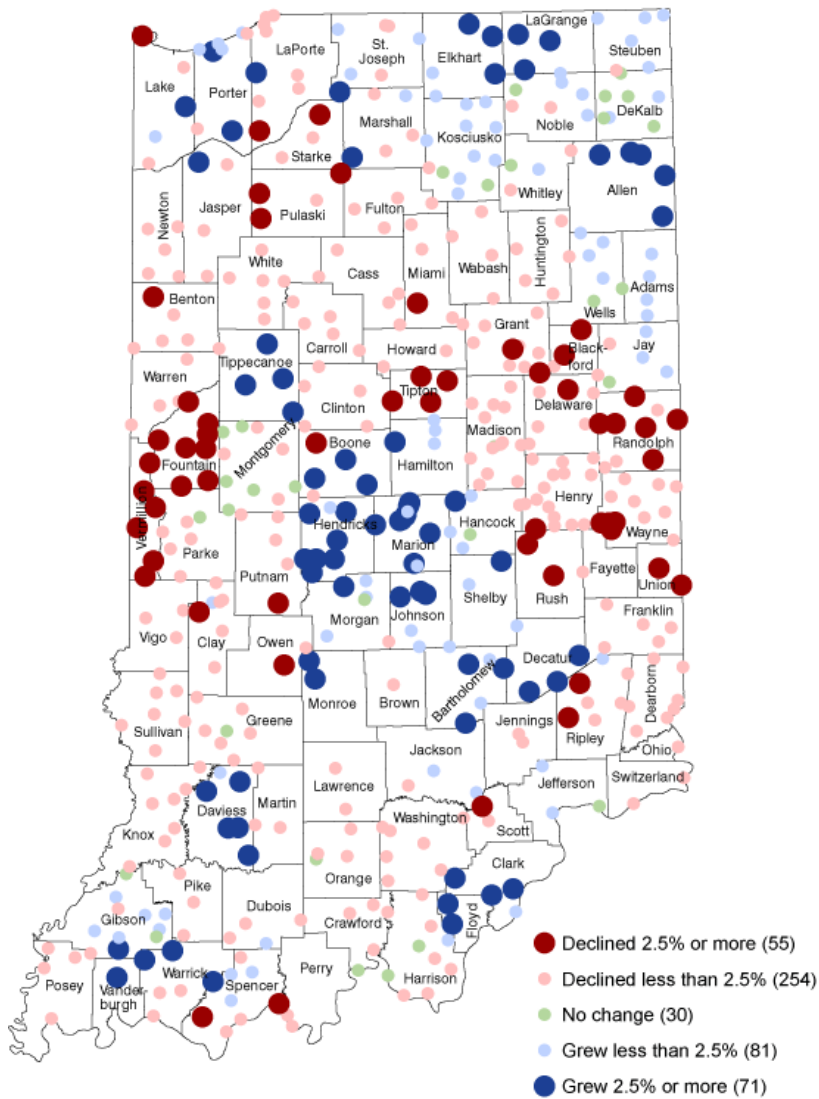
Source: IBRC, using U.S. Census Bureau population estimates (for July of each year)

Among Indiana’s small towns, Whitestown (in Boone County and home to an Amazon distribution center) saw the largest population increase: 2,100 new residents between July 2010 and July 2014 to bring the total population to 5,258. This was also the largest increase in percentage terms (66.5 percent) among all incorporated areas. Worth noting: these population estimates account for the impact of annexation, so it is not the factor driving this large population growth.

Meanwhile, out of the 491 small towns, Hartford City (in Blackford County) experienced the largest numeric decline (-176 people), which was a 2.8 percent decline since 2010. Kempton (in Tipton County)—with a 2014 population of 317—saw the largest decline in percentage terms (-5.1 percent) since 2010.

Figure 2, which shows percent change in population since 2010, further highlights the geographic concentration of growing and declining small towns.

Figure 2: Percent Change in Small Town Populations, 2010 to 2014



Source: IBRC, using U.S. Census Bureau population estimates (for July of each year)

Summary

This was only an overview of the recent population changes for Indiana's small towns since 2010. Further analysis is likely to show increasing levels of suburbanization driving the growth in cities and towns with less than 10,000 people. In a future issue, we will take a longer-term look and explore how population has changed in Indiana's small towns over the past several decades. In the meantime, you can explore the population estimates for all cities and towns on STATS Indiana at

www.stats.indiana.edu/population/sub_cnty_estimates/2014/e2014_places.asp.

Notes

1. This total excludes the town of Fredericksburg in Washington County, which dissolved in 2012. Its Census 2010 population was 85 people.
2. Sarah Gibb and Rodger Johnson, "Growth in Small Town America," Random Samplings (blog): U.S. Census Bureau, May 21, 2015, <http://blogs.census.gov/2015/05/21/growth-in-small-town-america/>.