

Methodology for Indiana State and County Labor Force Projections, 2010 to 2040

Overview

The primary data inputs for these labor force projections are the IBRC's population projections, which were released in March 2012, and age and sex-specific labor force participation rates (LFPR) for the state and each county derived from the U.S. Census Bureau's 2010 American Community Survey (ACS). The labor force estimates are calculated by taking five-year age and sex population cohorts in a given year and multiplying them by the appropriate LFPR. The exceptions to the five-year cohorts are the youngest age group (age 16 to 19) and the oldest age group (75 and older). County results were controlled to the state totals.

Adjustments to Participation Rates

The ACS is an ongoing survey that releases data on an annual basis. However, the reference period for these annual releases differs based on the population size of geographic areas. For large geographic areas, such as states or counties with a population above 60,000, the ACS provides 1-year estimates on an annual basis. For smaller geographic areas, like counties with populations below 20,000, data are gathered for five years before an average annual estimate for that period is released. Therefore, some Indiana counties have 1-year estimates on an annual basis while others have only 5-year estimates annually.

For these projections, the IBRC used 2010 1-year ACS estimates for the state and adjusted 5-year estimates for all counties. One problem with relying on the 5-year estimates is that these data were collected between 2006 and 2010. Of course, the labor market changed drastically over this period, with LFPRs and in many areas and in many age groups declining. To address this problem, the IBRC calculated the difference in age and sex-specific LFPRs between Indiana's 2010 5-year and 1-year ACS estimates and then applied those changes to the LFPRs for all counties.

Changes in future age and sex-specific LFPRs were based on national-level projections from the most recent long-term labor force projections from the U.S. Bureau of Labor Statistics (BLS), available at www.bls.gov/opub/mlr/2006/11/art3full.pdf.

Limitations

As projections, these estimates simply reflect the labor force changes we can expect if past trends continue into the future. There are many factors, however, that could alter these expected trends. Probably the variable that is most sensitive to change is the LFPR. The LFPR in the younger age groups, for instance, is very low in 2012 and is projected to remain that way. However, a strong economy with a tight labor market could draw more young workers into the labor force. Similarly, a variety of factors could force the LFPR for older workers to rise even more than expected.

Migration is another variable that is important to future labor force trends but is susceptible to large swings and is difficult to project. Strong economic growth and a tight labor market could spur a greater

than expected net in-migration to Indiana in the coming decades. Or, in the other direction, Indiana could experience periods of net out-migration like it saw during the 1970s and 1980s.

Notes

- The labor force-eligible population for these estimates is all Indiana residents age 16 or older. This definition is somewhat different than the one used by the BLS and the Indiana Department of Workforce Development, which restricts the population to all civilian noninstitutional residents age 16 and older.
- The data inputs for the base year estimates (2010) are intercensal population estimates for July 1, 2010, and the adjusted LFPRs. As a result, the labor force estimates for 2010 do not match those published in ACS releases or any other data source.
- While these estimates indicate that Indiana's labor force will grow in the next decade, labor force changes are subject to short-term swings. A look at recent monthly data from the Local Area Unemployment Statistics program, for instance, indicates that Indiana has had a significant decline in the size of its labor force between March and August of 2012. This data series does not show a similar drop for the U.S. or any of Indiana's neighbors. This drop may be real or it could be an anomaly that will be revised away when the data are benchmarked. In either event, short-term variations in the labor market can run counter to long-term trends.