

# Methodology for Indiana State and County Labor Force Projections, 2015 to 2050

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## Overview

The primary data inputs for these labor force projections are the IBRC's population projections, which were released in March 2018, and age and sex-specific labor force participation rates (LFPR) for the state and each county derived from the U.S. Census Bureau's 2015 and 2016 American Community Surveys (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.

The labor force-eligible population for these estimates is all Indiana residents ages 16 and older. This definition is somewhat different than the one used by the U.S. Bureau of Labor Statistics (BLS) and the Indiana Department of Workforce Development, which restricts the population to all civilian noninstitutional residents ages 16 and older.

## 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 one-year estimates on an annual basis. For counties with populations below 60,000, data are gathered for five years before an average annual estimate for that period is released. Therefore, some Indiana counties have one-year estimates on an annual basis, while others have only five-year estimates annually.

For these projections, the IBRC used 2015 and 2016 one-year ACS estimates for the state and adjusted five-year estimates for all counties. One problem with relying on the five-year estimates is that these data were collected over multiple years. Of course, the labor market dynamics can change over time, with LFPRs in many areas improving in recent years. To address this problem, the IBRC calculated the difference in age and sex-specific LFPRs between Indiana's recent five-year and one-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 BLS.

## 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. The variable that is most sensitive to change is the LFPR. The LFPR in the younger age groups, for instance, declined sharply between 2000 and 2010, but has since rebounded some as labor markets have tightened. These projections assume that LFPRs for younger age groups will decline slightly in the years ahead; however, a strong economy with a tight labor market could continue to 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.