

A Short Retrospective on 20th Century U.S. Population Change

John Besl

Research Demographer,
Indiana Business Research
Center, Kelley School of
Business, Indiana University

The initial release of Census 2000 data, in the form of state population counts, enables researchers to take a look back at 20th century population change in the United States. From a predominantly rural country of 76.2 million persons in 1900 to a mostly urban-suburban population totaling 281.4 million in 2000, the U.S. more than tripled in population size over the course of the 20th century. The net gain of 205.2 million Americans represents a growth rate of 269 percent over 100 years.

For Indiana, the century's population change was less dramatic. In 1900, 2.5 million residents were counted in Indiana. One hundred years later, the 2000 census enumerated 6.1 million Hoosiers, a gain of 3.6 million persons, or 142 percent.

More could be written about the country's cumulative population change in the past century, but another intriguing avenue for census data analysis is the opportunity to compare and examine 10 distinct decades of population change for 50 states. Each state and decade was, of course, characterized by a different set of demographic dynamics. **Figure 1** portrays a simple comparison of population growth rates for the United States, Indiana, and the Midwest census region (composed of 12 states, including Indiana), for each decade of the 20th century. In each of the first three decades, the Hoosier state's

population growth rate trailed both the Midwest region and the U.S. The largest gap between the U.S. and Indiana growth rates, almost 14 percentage points, occurred in the 1900-1910 decade.

A close inspection of the chart reveals that Indiana lagged behind the U.S. in percent change for eight of 10 decades, holding a slight advantage only in the 1940-1950 interval and matching the national trend in the following decade. In comparison with the Midwest, Indiana's growth rate exceeds the regional rate in six of 10 decades. The largest Indiana advantage over the Midwest came in the 1940s, when the Hoosier state grew by 15 percent, compared to 11 percent for the Midwest. In the 1950-1960 decade, both Indiana and the Midwest reached their 20th century high-water marks in population growth rate: 18.5 percent for Indiana, and 16.1 percent for the Midwest. This same decade saw the U.S. post its second highest growth rate of the century, matching Indiana with an increase of 18.5 percent. The U.S. achieved its highest 20th century growth rate, 21.0 percent, in the 1900-1910 decade. The country's lowest decennial growth rate came in the 1930s, during the Great Depression, when national population growth slowed to 7.3 percent. For Indiana and the Midwest, though, the decade of slowest growth was 1980-1990, with marginal gains of 1.0 percent and 1.4 percent, respectively.

It should be noted that Alaska and Hawaii are included in the national population counts for each census year in this analysis, even though they did not become states until the 1950s. If we consider Alaska and Hawaii as states for the entire century, and omit the District of Columbia, we have a total of 50 state decennial growth rates since 1900 (50 states x 10 decades). From the entire set of 500 state rates, only three states exceeded 100 percent in any single decade, all in the 1900-1910 interval: Washington, 120 percent; Oklahoma, 110 percent; and Idaho, 101 percent.

Figure 2 portrays each state's share of the total United States population in the 2000 census. The Census Bureau counted at least 5 percent of the nation's residents within the borders of four states: California, 12.0 percent; Texas, 7.4 percent; New York, 6.7 percent; and Florida, 5.7 percent. At the opposite end of the spectrum, 19 states each account for less than 1 percent of the U.S. total population, including rapidly growing Nevada (0.7 percent), despite its unique status as the leader in rate of population growth for each of the last four decades.

Figure 1
Population Growth Rates, By Decade

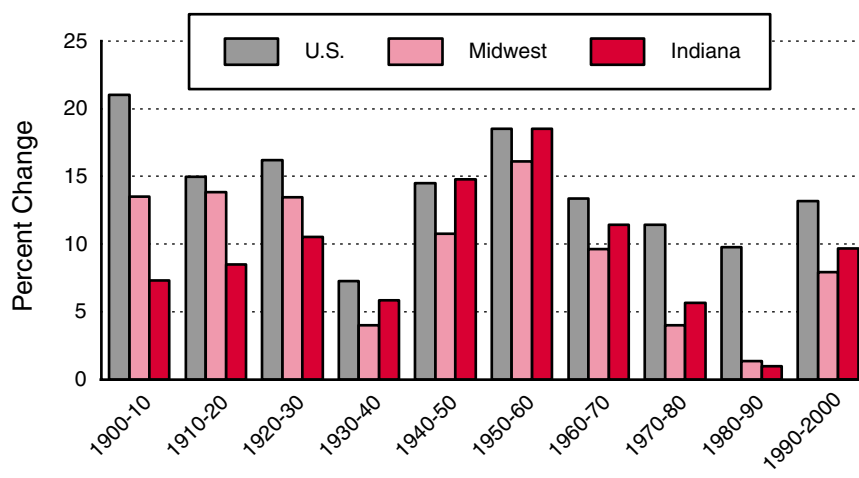


Figure 2
State Share of U.S. Population, 2000

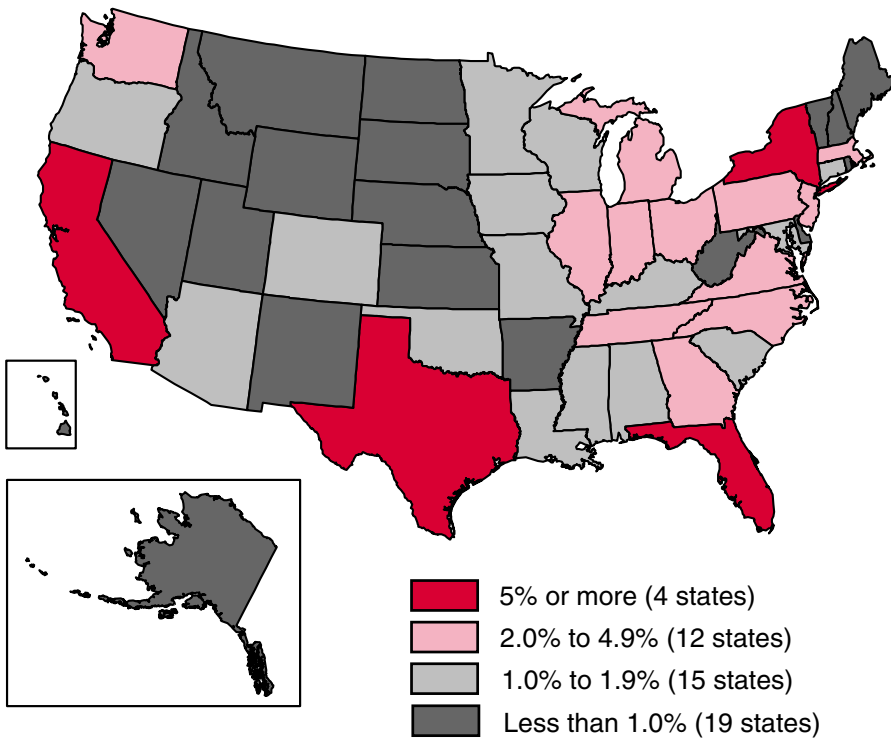
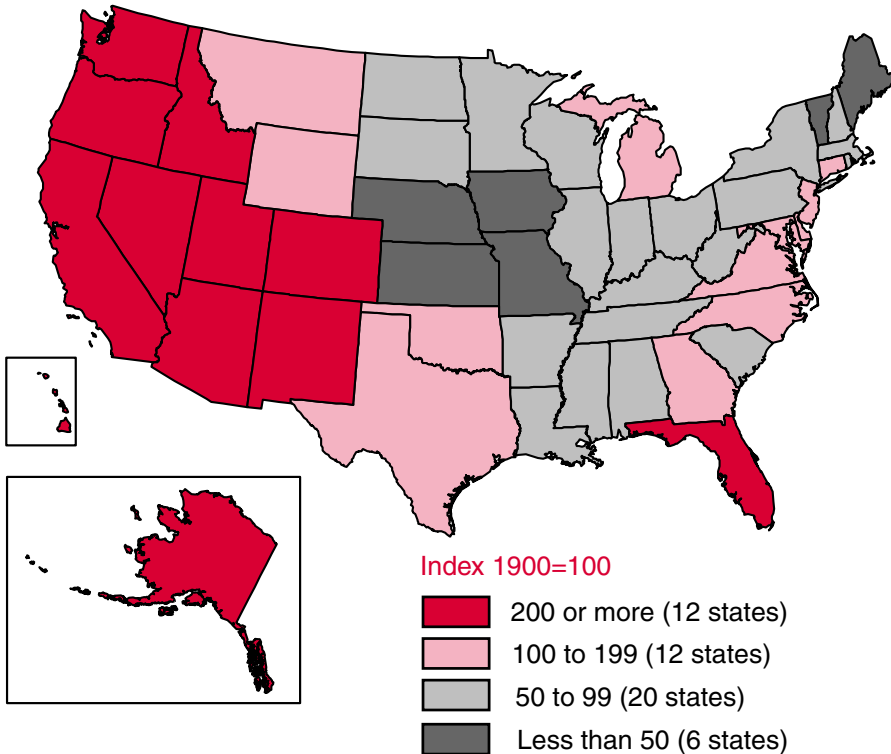


Figure 3
State Population Share Index, 2000 (1900=100)



To illustrate the momentous westward shift of the United States population in the past 100 years, a measure called a state population share index was created. Each state's share of the total national population in 1900 forms the baseline for this measure. Using Indiana as an example, divide the state's share of the U.S. population in 1900 (0.0330) by itself, then multiply by 100 to yield Indiana's 1900 index, equal to 100. In turn, the 2000 state share index for Indiana is calculated by dividing the state's share of U.S. population in 2000 (0.0216) by the share in 1900, and multiply by 100. With rounding, the 2000 state share index for Indiana is 65. A value less than 100 on a state's 2000 index indicates that the state lost population share since 1900. With a 2000 state share index of 65, it can be surmised that Indiana lost 35 percent of its national population share since 1900.

Similar measures are calculated for all 50 states, with the 1900 index for each state fixed at 100. **Figure 3** presents the 2000 state share index, in four value ranges. The 2000 index values range from 35 for Iowa to Nevada's 1,183. The six states in the lowest range, with 2000 index values of under 50, saw their state's share of total U.S. population cut in half since 1900. Four of these six states (Iowa, Kansas, Missouri, and Nebraska) are located in the nation's agricultural heartland, reflecting the transformation away from an agrarian economy. The next category of 2000 index values, from 50 to 99, includes Indiana and most of its neighboring states. Only Michigan, among all the Midwestern and/or Great Lakes states, increased its population share in the 20th century. This is no doubt due to the development of the automobile industry after 1900 and the many thousands of migrants who moved to Michigan to fill the demand for labor.

Twelve states achieved the highest category of 2000 index values, 200 or more, meaning that these high-growth states doubled their share of the U.S. population over the last century. A total of 39 states managed to double in population size since 1900, but these elite 12 actually doubled their population *share*, a more notable accomplishment in a country that itself more than tripled in size. Nevada and Arizona led the way, as each increased their population share by a magnitude of 10. The importance of one invention, air conditioning, is evident in the geographic distribution shown in **Figure 3**. One hundred years ago, places like Florida and Arizona were considered inhospitable for human habitation, but heat is no longer an obstacle and these states are now desirable destinations, especially among the elderly. In 1900 this situation was probably hard to imagine, except perhaps among the rare dreamers and innovators who envisioned air conditioning systems. What will the next hundred years bring?