

INDICATOR INSIGHT

DEMOGRAPHICS <•> AN EXPERT'S INSIGHT ON THE ISSUE IN ARIZONA

The 2010 Census Count for Arizona

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The decennial census count for Arizona of 6,392,017 on April 1, 2010 is considerably less than the latest population estimates, which are for July 1, 2009. The census count is approximately 204,000 less than the Census Bureau's 2009 population estimate and 291,000 less than the estimate for 2009 made by the Arizona Department of Commerce. Compared to an extension of the Census Bureau's population estimates to April 1, 2010, the census count is 277,000 (4.2 percent) lower. In contrast, the national population count of 308,745,538 is only about 233,000 (0.1 percent) less than the estimate for April 1, 2010.

Comparison of Census Count to Estimate by State

An estimate of the population for April 1, 2010 has been created by assuming that the Census Bureau's average monthly percent change in population for the mid-2008 to mid-2009 period continued during the nine months after July 1, 2009. Though the national decennial census count is marginally less than the estimate, the census count is higher than the estimate in 34 states. The differential is greater than 2 percent in only one state; in most states, it is less than 1.0 percent.

Among the 17 states (including the District of Columbia) with a lower census count than estimate, Arizona has the largest differential on both a numeric and percentage basis. No geographic pattern is present among the states with a lower census count than estimate: some are northeastern states, some are Great Lakes states, some are western states, and Georgia has the second-largest numeric and percentage difference.

Among Arizona's neighboring states, Utah and Colorado are among the four states with the lowest census count relative to the estimate, but the census counts for Nevada and New Mexico are among the highest in the nation relative to the estimate. The census count and estimate are virtually identical in the other border states of California and Texas.

The comparison of Arizona to Nevada is especially interesting since these states were the two fastest-growing states for decades. Both experienced an unprecedented housing boom in the mid-2000s but were among the three states that were hardest hit by the recent economic recession. The census count is 1.4 percent higher than the estimate in Nevada compared to 4.2 percent lower in Arizona.

Possible Causes of Arizona's Census Count Being Lower Than Estimated

Several factors may have caused Arizona's census count to be lower than estimated. First, population growth during the real estate boom in the mid-2000s may have been overestimated. A higher-than-normal proportion of the buyers of new homes appear to have never moved into the house or to have occupied it only on a seasonal basis. (Seasonal residents are counted only once in the census, at their primary residence.)

Second, the severity of the recent recession in Arizona could have caused net migration between Arizona and other states to be lower than estimated. However, the Census Bureau's estimates include a reduction in net domestic in-migration to near zero in the year ending June 30, 2009.



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Third, the recession may have caused net immigration with other countries to be lower than estimated. Immigration is the weakest part of the population estimates since so little information on the number of undocumented immigrants is available. Unlike net domestic migration, the Census Bureau's estimates of net immigration display little downward trend in recent years, despite the unavailability of jobs during to the deep recession.

Each of these factors may have contributed to Arizona's lower-than-estimated census count. However, each of these factors is equally applicable in Nevada, which also experienced an unprecedented housing boom in the mid-2000s followed by a recession far more severe than the national average. Thus, these factors do not explain why Arizona's census count is so much lower than the estimate relative to Nevada and other neighboring states or why Arizona's differential between the census count and the estimate is the largest in the nation.

One factor does distinguish Arizona from Nevada and other neighboring states: Arizona's legislation intended to deter undocumented immigrants from living in the state. Arizona passed the nation's first statewide employer sanctions law, effective at the beginning of 2008. It appears to have caused many undocumented immigrants to leave Arizona, based on the subsequent sharp and disproportionate decrease in the number of births to Hispanics reported by the Arizona Department of Health Services. More recently, Senate Bill 1070—whose purpose is “to discourage and deter the unlawful entry and presence of aliens and economic activity by persons unlawfully present in the United States”—was passed. This legislation received considerable publicity prior to the April 1, 2010 census date and became law shortly thereafter—before the Census Bureau began decennial census follow-up activities.

While these laws likely caused some undocumented immigrants to leave Arizona, they may have had an additional effect, prompting a disproportionate number of undocumented immigrants living in Arizona to refuse to be counted in the census. To the extent that a differential undercount of Arizona's population occurred, Arizona will lose considerable federal funding over the next 10 years since a substantial share of federal funding is determined by the state's share of the national decennial census count.

As more detailed data from the decennial census are released, some additional insight may be gleaned into the causes of Arizona's lower-than-estimated census count. A deep examination of data from the American Community Survey also may help provide understanding, but the survey error is a limiting factor. Ultimately, the annual pattern of population growth in Arizona during the 2000s will never be known with certainty. Similarly, the effects of legislation aimed at undocumented immigrants versus the economic effects of the deep and long recession on the outflow of undocumented immigrants from Arizona will never be fully disentangled. It is likely that both factors contributed to the decisions made by some undocumented workers to leave the state.

Effect of Lower Population on Interpretation of Economic Performance

The lower population count means that Arizona's economic performance on a per capita basis has not been as bad as reported. In order to estimate the annual effect of the lower population on measures such as per capita personal income, the Census Bureau's annual estimates were modified so that they are tied to both the 2000 and 2010 census counts.

The Census Bureau's estimates of net interstate migration fall from a peak of 134,000 between mid-2005 and mid-2006 to a modest 15,000 between mid-2008 through mid-2009. These estimates were lowered a little for the period prior to the onset of the recession in late 2007, particularly during the real estate boom in 2005 and 2006. The estimates also were reduced a little for the recessionary period. Net domestic migration is assumed to have continued to slide during the nine months after July 1, 2009 (until the April 1 census date), becoming slight net out-migration.

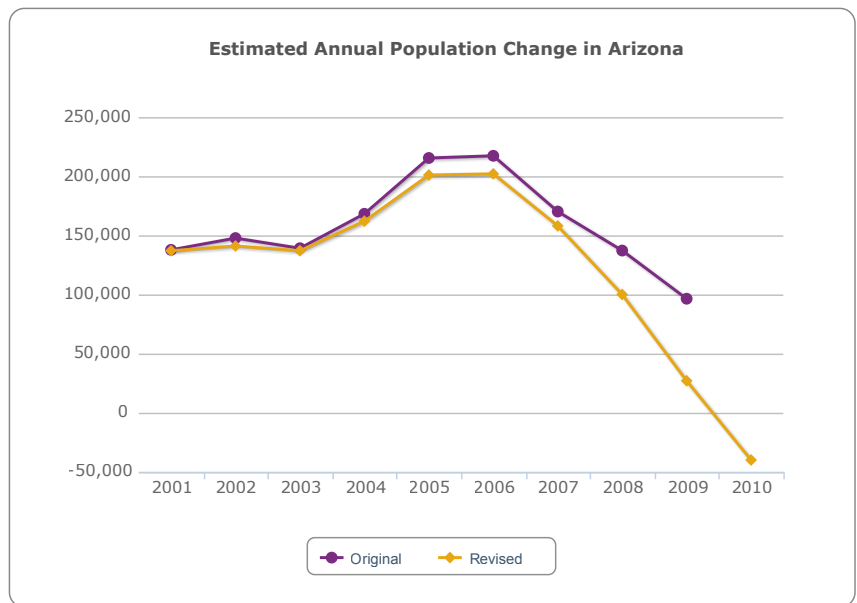


Figure 1 - Estimated Annual Population Change in Arizona. Note: the change is from July 1 of the prior year through June 30 of the year shown. For 2010, the estimate is only through April 1.

Sources: U.S. Department of Commerce, Census Bureau, and author's adjustments to Census Bureau estimates.

The Census Bureau's estimates of net immigration during the 2000s range narrowly from 27,000 to 33,000 per year, despite the sharp variations in the economic cycle and job availability that occurred during the decade. After a recession in 2001, the strongest boom in the state's history occurred in 2005 and 2006, followed by the worst recession since the 1930s. It is assumed that the Census Bureau's estimates of net immigration are too high starting in the mid-2007 to mid-2008 year, corresponding both to the onset of the recession and the employer sanctions law. Net immigration is assumed to have been negative since mid-2008. The effects on the state's population of the revisions to net immigration and net domestic migration are shown in figure 1.

Using the revised estimates, the peak annual population increase was just more than 200,000 from mid-2004 to mid-2005 and again in the following year. Since then, the annual population change is estimated to have slowed to 158,000 (still high by historical standards) to 100,000, to 27,000, then to a decline in population of 40,000 in the nine months that began on July 1, 2009.

Per capita personal income as of July 1, 2009 originally was reported as \$33,347 in Arizona—16.0 percent less than the national average. Using the revised population estimate, the 2009 figure is \$34,196—13.9 percent less than the national average. Similarly, the employment-to-population ratio for 2009 was originally reported as 48.7 in Arizona, 14.0 percent less than the national average. The new estimate is 49.9—11.9 percent less than the U.S. average. The annual effects of the revisions to population on these economic measures are displayed in figure 2.

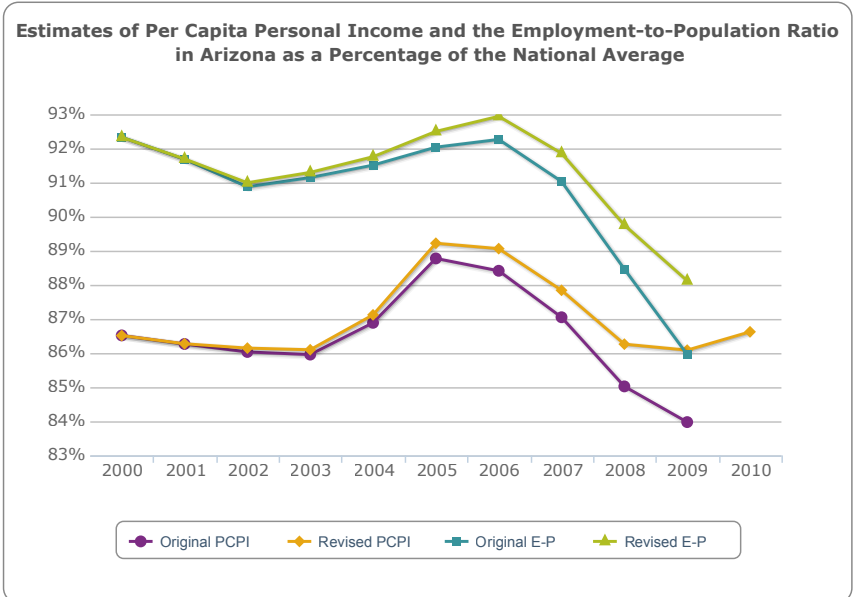


Figure 2 - Estimates of Per Capita Personal Income and the Employment-to-Population Ratio in Arizona as a Percentage of the National Average.

Sources: U.S. Department of Commerce, Bureau of Economic Analysis (personal income and employment), U.S. Department of Commerce, Census Bureau (original population estimates), and author's adjustments to Census Bureau population estimates (revised population estimates).