1-1-2008


Mark Salling
Cleveland State University, m.salling@csuohio.edu

How does access to this work benefit you? Let us know!
Follow this and additional works at: https://engagedscholarship.csuohio.edu/urban_facpub

Part of the Categorical Data Analysis Commons, Databases and Information Systems Commons, Geographic Information Sciences Commons, Longitudinal Data Analysis and Time Series Commons, and the Urban Studies Commons

Repository Citation
https://engagedscholarship.csuohio.edu/urban_facpub/353

This Report is brought to you for free and open access by the Maxine Goodman Levin College of Urban Affairs at EngagedScholarship@CSU. It has been accepted for inclusion in Urban Publications by an authorized administrator of EngagedScholarship@CSU. For more information, please contact library.es@csuohio.edu.
Ohio Continues to Lag in Population Growth
And Comments on Prospects for the Future
An Analysis of 2007 State Population Estimates

January 2, 2008

Mark Salling, Ph.D.
Maxine Goodman Levin College of Urban Affairs
Cleveland State University
and
The Center for Community Solutions
m.salling@csuohio.edu  (216) 687-3716

The following is a brief descriptive analysis of recent population estimates provided by the Census Bureau. The analysis includes a comparison of Ohio to the nation and selected other states – Michigan and Indiana. We examine population change, birth and death rates, and migration and focus on more recent years – 2000 to 2007. An analysis of changes in the age distribution since 2000 and possible consequences concerning future population growth for the state is also presented.

Change in Population

Ohio, with an estimated additional 3,404 persons between April 2006 and April 2007 – a 0.03 percent increase, had the third slowest rate of growth in the nation, ahead of only Michigan and Rhode Island, both of which were estimated to have lost population in that year (see Figure 1).

The Census Bureau estimated that Michigan lost more than 30,000 persons. As has been the case for several decades, the states with the greatest growth were again in the Southwest and South.

Ohio’s net gain in population, from 11,463,513 to 11,466,917, was approximately the same as West Virginia (3,336) Maine (2,297), New Hampshire (4,007), North Dakota (2,255), and Hawaii (4,753).

The state remained the seventh most populace state in the nation but has seen a precipitous drop in its rate of growth in the last few years. Earlier in the decade, Ohio’s population was estimated to be growing at annual rates much higher – 0.25 percent from 2000 to 2001, 0.19 percent for the following two years, and 0.15 percent between 2003 and 2004. It dropped to 0.06 percent the following year and has remained at 0.03 percent for two years in a row (see Figure 2).

\[\text{\begin{footnotesize}1 Based on data from the Census Bureau at http://www.census.gov/popest/datasets.html\end{footnotesize}}\]
Figure 1: Percent Change in State Population, 2006 to 2007

Figure 2: Ohio's Annual Rate of Population Growth, 2000 to 2007
Components of Change

Population change results from three factors – births, deaths, and migration. Birth and death rates, collectively referred to as “natural change”, are relatively stable and low in developed regions, making migration the most important component of population change for places like Ohio.

Birth Rate
Ohio’s crude birth rate in 2007 was 13.01 births per 1,000.²

Though it was lower than the nation’s rate, it roughly parallels it from 2001 to 2007 (see Figure 4). Indian’s birth rate was also higher, while Michigan’s was lower and declining faster than Ohio’s.

As the population ages out of the child-bearing years we can expect a continued drop in birth rate.

Figure 3: Crude Birth Rate

² The Census Bureau calculates the crude birth rate by dividing the number of birth in the year by the year’s midpoint population (average of the current and previous years). Unlike a fertility rate it does not take into account the age distribution of females in child-bearing years.
Death Rate
Ohio’s 2007 crude death rate, 9.46 per thousand persons, was higher than all but eight other states (see Figure 5).3 Except for Pennsylvania, states with higher death rate in 2007 were in the south, including Louisiana, Tennessee, Arkansas, Kentucky, Mississippi, Alabama, and West Virginia.

Ohio’s rate was higher that the nation’s (8.16) and Michigan’s (8.57) and Indiana’s (8.83) in 2007 (see Figure 6). Though death rates are declining they have not been declining as fast as the national rate.

Crude death rates are likely to be suppressed due to improvements in the population’s health and longer life expectancy, but will increase as the baby boom population ages into age cohorts with significantly higher rates.

---

3 The Census Bureau reports a crude rate which is calculated as the number of deaths in the year, divided by the mid-year population and multiplied by 1,000.
Figure 5: Crude Death Rate

Death Rate for States, 2007

Figure 6: Ohio's Crude Death Rate, 2001 to 2007

Ohio's Crude Death Rate, 2001 to 2007

2007 State Population Estimates
Natural Change
Due to low crude birth rates, the state's natural growth in population is quite low. The state has gained about 40,000 persons through births exceeding deaths since 2002.

Figure 7: Rate of Natural Increase

Rate of Natural Increase for States, 2007

Ohio in Red
Migration
Migration includes both international migrants and those moving within the United Stated ("internal migration"). Net migration combines international and internal migration.

Ohio gained an estimated 12,332 foreign migrants in 2007, for a rate of 1.08 migrants per 1,000 base population. That rate placed Ohio 13th lowest among all state in attracting international migration that year (see Figure 8). Ohio’s international migration rate was only one-eighth that of the nation and was lower that that of neighboring state Michigan and Indiana.

After a decline in the first two years of the decade, the rate has remained relatively steady for the last few years (see Figure 9).

Internal migration has had a very negative impact on the state’s population growth. The state’s negligible population growth has resulted from its losses to other states. It is among 22 states that lost population to other parts of the country (see Figure 10). Ohio lost almost an estimated 40,000 persons to other states (and the District of Columbia) between 2006 and 2007, a similar number to the previous year.

Figure 14 shows all three migration rates – international, internal, and net. Net migration is most affected by internal migration and internal migration continues to show large losses of population to other parts of the country.

Figure 8: International Migration Rate
Figure 9: Ohio’s International Migration Rate, 2001 to 2007

Ohio’s International Migration Rate, 2001 to 2007

- Ohio
- United States
- Michigan
- Indiana

Figure 10: Internal Migration Rate

Rate of Internal Migration for States, 2007

Ohio in Red
Figure 11: Ohio’s Internal Migration Rate, 2001 to 2007

Ohio's Internal Migration Rate, 2001 to 2007

2001 2002 2003 2004 2005 2006 2007

-2.54 -3.27 -2.85 -3.28 -3.89 -4.64 -4.52
-3.31 -3.46 -3.24 -3.94 -5.65 -7.19 -9.36

Ohio United States Michigan Indiana

Figure 12: Net Migration Rate

Rate of Net Migration for States, 2007

Ohio in Red
Figure 13: Ohio’s Net Migration Rate, 2001 to 2007

Figure 14: Ohio Migration Rates, 2001 to 2007
All Three Components of Population Change

Figure 15 shows the estimated numbers of persons in each of these three components of population change in the state. Population growth through relatively steady birth and death rates remained at about 40,000 per year between 2002 and 2007. Meanwhile international migration provided some modest population growth. But losses due to migration to other parts of the nations prevented any substantial population gains for Ohio in the first years of the 21st century.

Figure 15: Components of Ohio’s Population Change, 2001 to 2007
Recent and Future Demographic Change and the Economy

The Census Bureau’s 2005 interim population projections show Ohio’s projected population at 11,477,557 in 2005, 11,576,181 by 2010, and slow growth through 2020 (to 11,644,058) followed by population lose in 2025 (to 11,605,738). The Ohio Department of Development’s projections (made in 2003) show population at 11,666,850 by 2010 and continued growth of more about 150,000 or more every five years through 2030.

The 2007 estimate by the Census Bureau is only 11,466,917. Clearly, neither the Census Bureau’s nor the Ohio Department of Development’s projection accounts for the steep declines in population growth in the last several years. The last three years of estimated population change show increases in Ohio of 6,968, 3,737, and 3,404 (see Figure 16). Thus this significantly declining rate of population growth makes the projections by the Census Bureau’s and Ohio Department of Development highly unlikely.

Figure 16: Ohio’s Annual Growth in Population, 2001 to 2007

It must be stressed that it is difficult to confidently predict what population growth will occur for Ohio in the next several years or longer. Obviously much depends on the economic conditions that lead to jobs and attraction of labor.

---

4 See http://www.census.gov/population/www/projections/popproj.html
5 See http://www.odod.state.oh.us/research/files/p200/Ohio.pdf
However, without considering possible additional changes in the economic climate we review here changes in the age profile of the state’s population and what the demographics alone suggest about the state's economy.

Figure 17 shows the change in the age distributions for the state’s and nation’s population between 2000 and 2006.

Cyclic birth rates over the last century are evident in this graph. The national “baby boom” population that was born approximately between 1946 and 1963 constitutes the population increases seen in the 44-to-60 age range. Aging of the population over the six years explains much of the increases and decreases -- increases resulting from aging from and thus decreases in the six proceeding years. Thus, following a lag in births, the children of the baby boom generation are seen in the late teens-through-twenties ages (the baby boomlet”), and their children are emerging at the youngest ages of the graph. Lowered fertility rates since the 1960s have limited the impact of the baby boom population on emerging new generations.

The important differences between the changing age distribution for Ohio and the nation are seen in the following ways:

- Greater losses in ages 68-to-78 in Ohio than the nation illustrate the state’s retiring population moving to Florida and other destinations.
- Proportionally greater losses in ages 28-to-44 and those younger than 13 in Ohio than the nation shows the state has been disproportionately losing families with young children.
- While Ohio had losses in the 18-to-20 ages, suggesting a loss of college-bound persons, the state seems to have had comparable increases to the nation in the young adult ages between 21 and 27.

Loss of the older population could have significant impacts on the economy in that this population has the greatest wealth. They own homes that will undergo declining value and investments many of which will migrate from the state with them or their heirs, thus likely causing losses to the state’s taxable resources.

The loss of population in the 28-to-44 age group is perhaps the most disconcerting observation since these are important career-advancing years and the loss in this age group suggests that the state’s economy is not providing enough jobs for them, a fact that is documented in reports on job losses in the state.6

Contrary to the earlier Census Bureau projections noted above, in the near future the state is expected to lose population for the first time in history. Furthermore, over the next decade and more much of the large baby boom population can be expected to be lost due to retirement moves or death. This will leave a precipitously declining and less wealthy population - one that is diminished due to the aging of the baby boomer

---

6 As an example of reports on low job growth in the state see http://www.communitysolutions.com/images/upload/resources/OhioJobGrowth1207.pdf.
generation and the migration of families. Losses among the older population, with the bulk of wealth, and young families, signaling losses of a labor force entering its most productive ages, could have dire effects on the state and its remaining population.

Figure 17: Age Distribution, 2000 and 2006