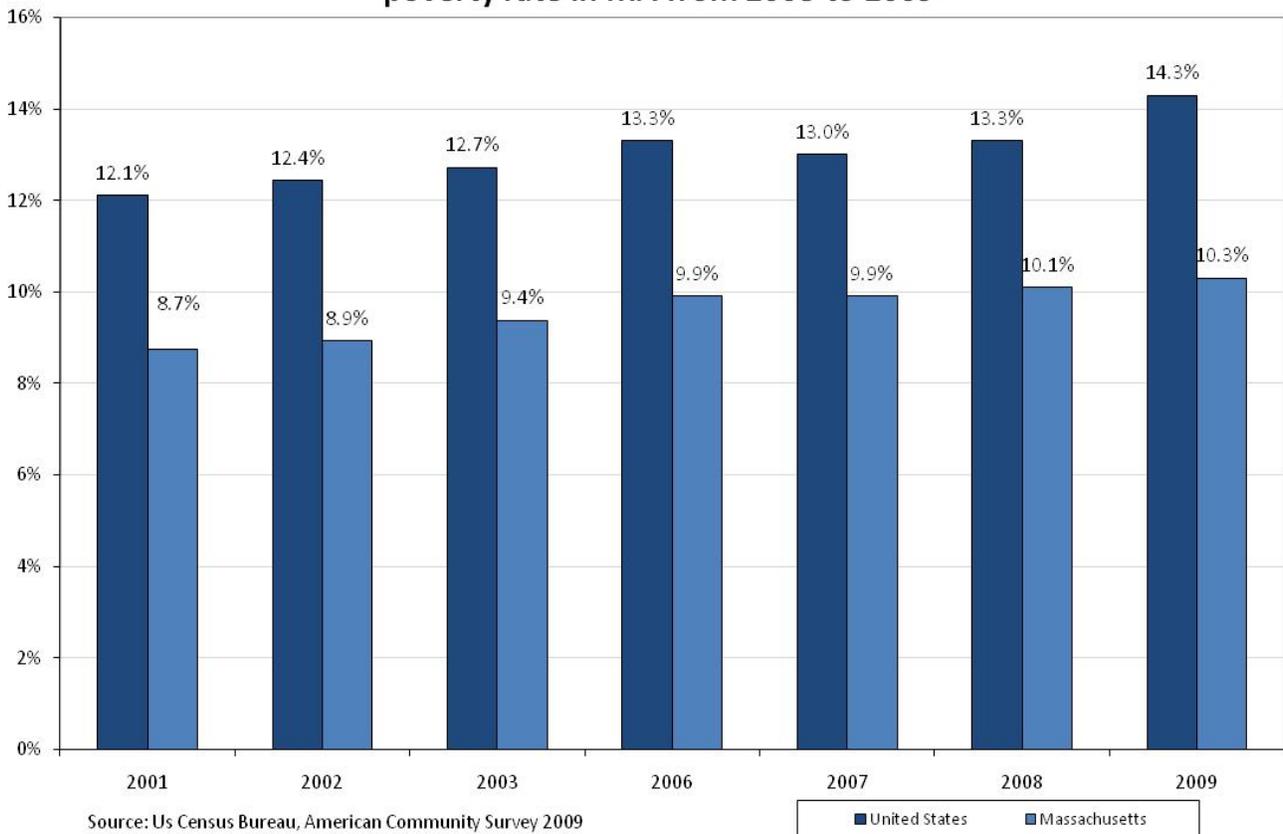


## No Significant Rise in Poverty in MA in 2009

Today, the U.S. Census Bureau released its annual update of state-level poverty rates from the American Community Survey (ACS). It indicates no statistically significant change in the overall poverty rate in Massachusetts from 2008 to 2009.

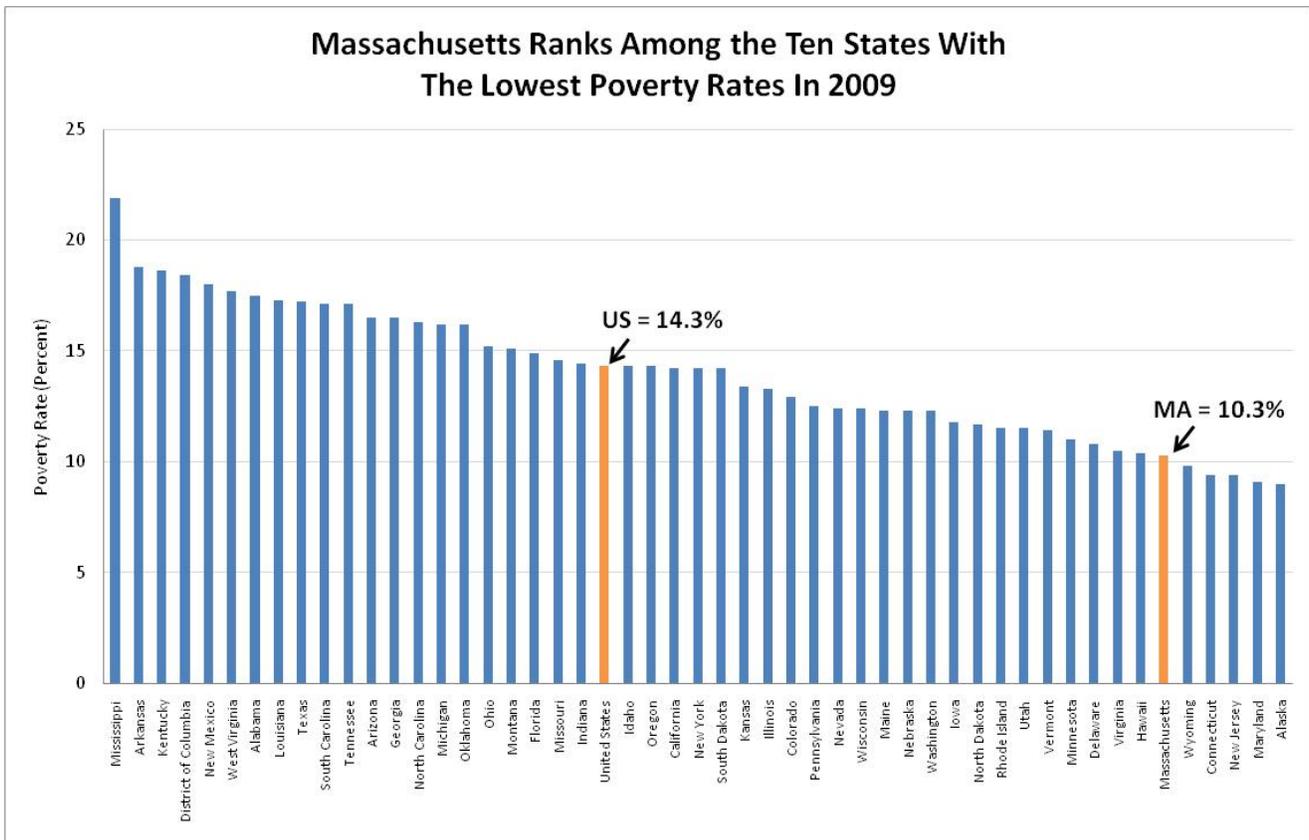
- Despite the appearance of a small rise (0.2 percent) in the overall poverty rate in Massachusetts in 2009, the new figure (10.3 percent) is statistically indistinguishable from 2008 levels of 10.1 percent. (See our discussion of “statistical significance” at the end of this document.)
- The new ACS data indicate that 600,000 to 650,000 people in Massachusetts lived in households that fell below the federal poverty threshold in 2009 (which was set at \$21,756 for a four-person family with two children for 2009).

**There was no statistically significant change in the overall poverty rate in MA from 2008 to 2009**



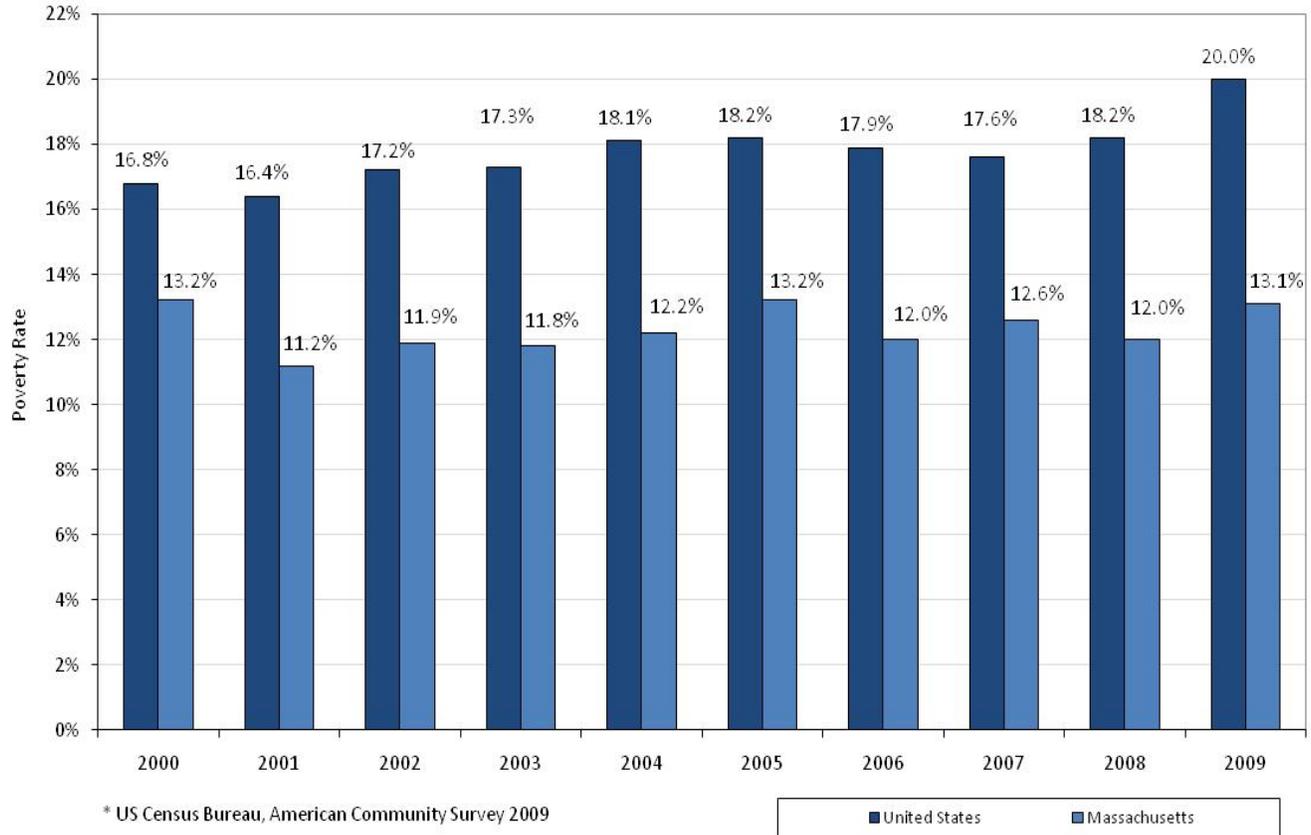
Note: According to the Census Bureau, 2004 and 2005 poverty data from the ACS are not comparable to other years due to a change in the way that survey respondents living in group quarters are recorded. These years are removed from the chart above.

- By contrast, according to the ACS data, for the country as a whole there was a statistically significant increase in the poverty rate from 2008 to 2009, from 13.3 percent to 14.3 percent (See chart on page 1, above). The much larger sample size at the national level allows for greater certainty even for relatively small year-to-year changes. The same degree of certainty is not possible for small changes at the state level.
- According to ACS data, in 2009, Massachusetts had an overall poverty rate (10.3 percent) substantially below that of most other states (US average = 14.3 percent). Because of uncertainty about the precision of state-level estimates (due to smaller sample sizes at the state level) it is not possible to rank the states with precision. Nevertheless, it is clear that Massachusetts is among the ten states with the lowest overall poverty rates in 2009. Mississippi unequivocally had the highest rate of overall poverty at 21.9 percent.



- The observed change from 2008 to 2009 in child poverty for Massachusetts was also within the margin of error. Again, due to smaller state-level sample sizes, it is not possible to say definitively that childhood poverty in Massachusetts increased in 2009. ACS estimates that childhood poverty in Massachusetts was 13.1 percent in 2009. The Census estimates that of the 1.4 million children under age 18 in Massachusetts, there were some 185,000 children living in poverty in 2009.

### Trends in Childhood Poverty in Massachusetts and The US, 2000-2009



- At the national level, the ACS shows a substantial and statistically significant increase in childhood poverty from 2008 (18.2 percent) to 2009 (20.0 percent). (See our discussion of “statistical significance” at the end of this document.)
- The new release presents data for 2009. Data for 2010 are not yet available. Given that unemployment remains high and the overall economy remains weak in 2010, it is likely that current (2010) poverty rates have not improved substantially, or possibly may have deteriorated, from the 2009 figures presented in today’s Census report.

### METHODOLOGICAL NOTES

- The poverty rate measures the percentage of people who live in households with incomes below a certain level, known as the poverty threshold. This threshold varies depending on the number of people in a family and their ages; it is updated each year for inflation. For 2009, the poverty threshold for a single person under the age of 65 was \$11,161; for a family of four with two children it was \$21,756; for a single parent with two children it was \$17,285. For purposes of determining the poverty rate, income is defined as all money income earned by a family, before taxes and excluding any non-cash benefits such as Medicaid or food stamps.

For poverty threshold figures see:

<http://www.census.gov/hhes/www/poverty/about/overview/measure.html>

- The poverty threshold does not vary from state to state. If the poverty threshold were adjusted to take differences among the states into account, it is likely that the poverty rate for Massachusetts would be higher, given the Commonwealth's high cost of living. For instance, a December 2003 study by two U.S. Census Bureau analysts found that the poverty rate in Massachusetts for the period 1999-2001 would have been 13.3 percent, rather than 10.2 percent, if the federal poverty threshold were adjusted to account for differences in housing prices.
- The Census Bureau's recent data on poverty and incomes derives from two main sources: the Current Population Survey (CPS) and the American Community Survey (ACS). The CPS is the official source for national poverty and income data. However, the ACS is based on a far larger sample and is thus able to provide better estimates at the state and sub-state levels.
- *Statistical Significance:* At various points in this analysis we refer to whether or not the difference between two estimates, usually from two years, is statistically significant. Because the CPS and ACS data are based on surveys of a random sample of individuals (meant to represent the entire state or nation), one cannot be certain that the estimate produced by the sample reflects the actual rate for the entire population. For each number they publish, the Census Bureau therefore includes a "margin of error" using a 90 percent confidence level, in effect, creating a range around its estimate. A "90 percent confidence level" means that there is a 90 percent likelihood that the true population measure falls within the margin of error or range established around the estimate.

When two estimates (for example, a single measure taken in two different years) are compared, we must determine how certain we are that any difference reflected in these estimates actually denotes a true difference in the real population. Using the margin of error we can calculate whether the two measurements reflect a true difference in the real population rather than an artificial difference occurring by chance in two random samples. When we say that two estimates do not show a "statistically significant difference," we therefore are saying that we cannot be certain that the estimates -- even though numerically different -- provide an accurate measure of a real difference in the true population.

Finally, it is important to note that the term "statistical significance" is a purely technical term and does not in any way refer to the relevance or "importance" of a given finding. If a survey provides a very large sample size, it may be possible to detect a very small -- and yet still statistically significant -- difference. Whether or not such a small difference holds any important meaning, however, is an issue that goes beyond the technical/mathematical matter of statistical significance.