

Reaching Those in Need:

STATE FOOD STAMP PARTICIPATION RATES IN 2001

The Food Stamp Program is a central component of American policy to alleviate hunger and poverty. The program's main purpose is "to permit low-income households to obtain a more nutritious diet . . . by increasing their purchasing power" (Food Stamp Act of 1977, as amended). The Food Stamp Program is the largest of the domestic food and nutrition assistance programs administered by the U.S. Department of Agriculture's Food and Nutrition Service. During fiscal year 2003, the program served over 21 million people in an average month at a total annual cost of over \$21 billion in benefits. The average monthly food stamp benefit was about \$195 per household.

The Government Performance and Results Act calls for policymakers to assess the effects of programs, and one important measure of a program's performance is its ability to reach its target population. The national food stamp participation rate – the percentage of eligible people in the United States who actually participate in the program – has been a standard for assessing performance for over 15 years. The U. S. Department of Agriculture's Strategic Plan for 2002 to 2007 includes a performance target to "reach 68% of the eligible population" by 2007.

Recent studies have examined national participation rates as well as participation rates for socioeconomic and demographic subgroups (Cunningham 2003) and rates for States (Schirm and Castner 2002). This document presents estimates of food stamp participation rates for States for fiscal year 2001. These estimates can be used to assess recent program performance and focus efforts to improve performance.

Participation Rates in 2001

About 60 percent of eligible people in the United States received food stamps in fiscal year 2001. (Cunningham (2003) reports both this rate for fiscal year 2001 and a 62 percent rate for September 2001.) Participation rates varied widely from State to State, however, with some rates under 55 percent and some over 70 percent. Twenty States had rates that were significantly higher (in a statistical sense) than the national rate, and 13 States had rates that were significantly lower. Among the regions, the Midwest had the highest participation rate. Its 69 percent rate was significantly higher than the rates for all of the other regions. The Mountain Plains and Mid-Atlantic Regions had participation rates that at 64 and 63 percent, respectively, were significantly higher than the rates for all of the regions except the Midwest. (See the last page for a map showing regional boundaries.)

State Comparisons

The estimated participation rates presented here are based on fairly small samples of households in each State. Although there is substantial uncertainty associated with the estimates for some States and with comparisons of estimates from different States, the estimates for 2001 show whether a State's participation rate was probably at the top, at the bottom, or in the middle of the distribution. West Virginia and Hawaii were very likely at the top, with higher rates than most States. In contrast, Massachusetts and Nevada likely had lower rates than most States. Florida, Idaho, Texas, New Jersey, Arizona, North Carolina, Colorado, Georgia, California, Utah, and Kansas probably fell in the bottom half of the distribution, while Oregon, Maine, Missouri, Kentucky, the District of Columbia, Michigan, Illinois, Louisiana, Vermont, Alaska, Indiana, Tennessee, and Pennsylvania were probably in the top half in 2001.

How a State compares with other States may fluctuate over time due to statistical variability in estimated rates and true changes in rates. The statistical variability is sufficiently great that a large change in a State's rate from the prior year should be interpreted cautiously, as should differences between the rates of that State and other States. It may be incorrect to conclude that program performance in the State has improved or deteriorated dramatically. Despite this uncertainty, the estimated participation rates suggest that some States have fairly consistently been in the top or bottom of the distribution of rates in recent years. In all three years from 1999 to 2001, West Virginia, Hawaii, Maine, Kentucky, the District of Columbia, Michigan, and Vermont had significantly higher participation rates than two-thirds of the States, and Missouri, Illinois, Louisiana, Alaska, Tennessee, and Pennsylvania had significantly higher rates than half of the States. Kansas, Colorado, New Jersey, and Florida had significantly lower rates than half of the States in all three years, and North Carolina, Arizona, Texas, Idaho, Nevada, and Massachusetts had significantly lower rates than two-thirds of the States.

Estimation Method

The estimates presented here were derived using shrinkage estimation methods (Castner and Schirm, 2003, and Castner and Schirm, forthcoming). Drawing on data from the Current Population Survey, the decennial census, and administrative records, the shrinkage estimator averaged sample estimates of participation rates with predictions from a regression model. The sample estimates were obtained by applying food stamp eligibility rules to



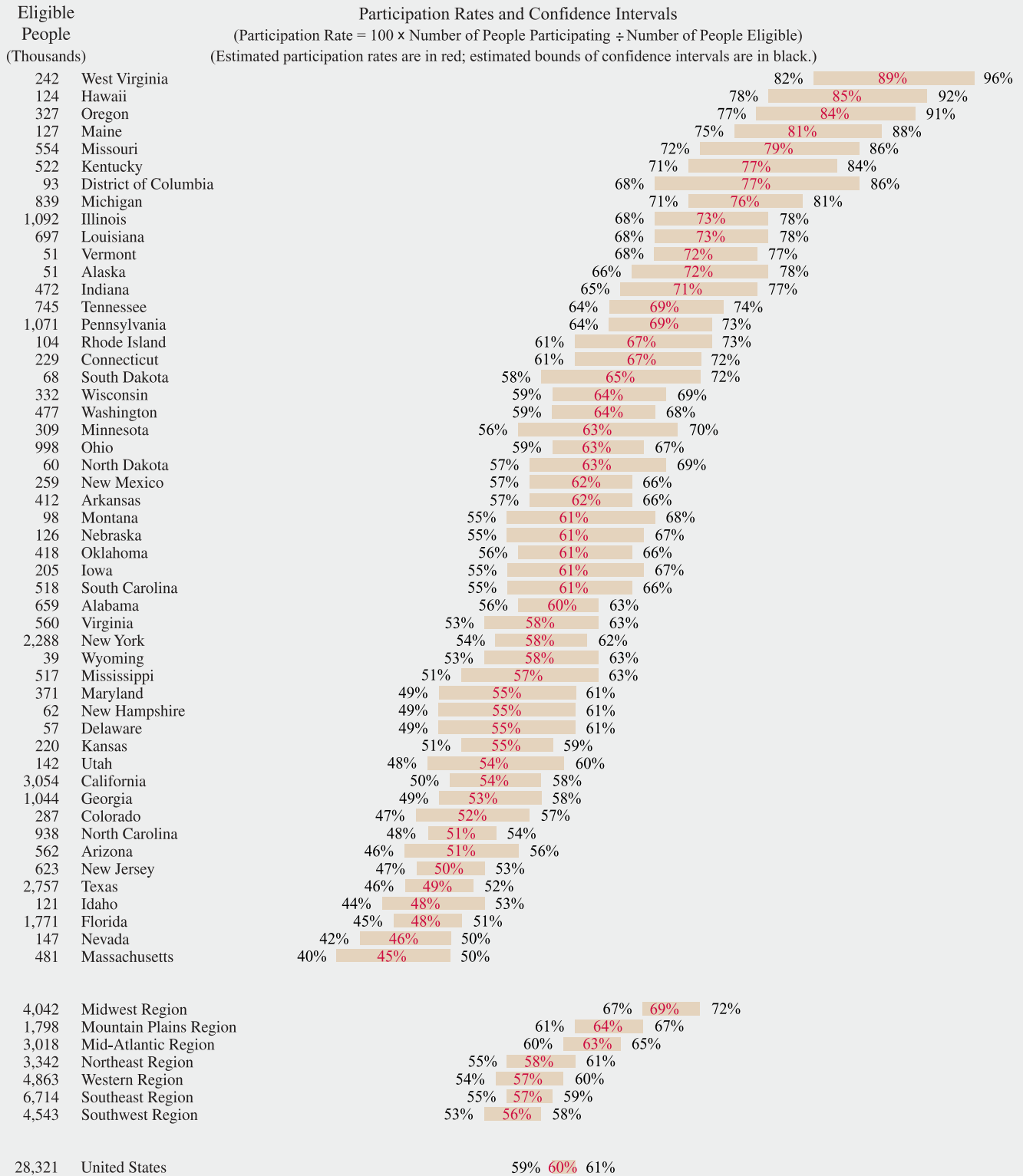
FOOD AND NUTRITION SERVICE



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How Many Were Eligible in 2001? What Percentage Participated?



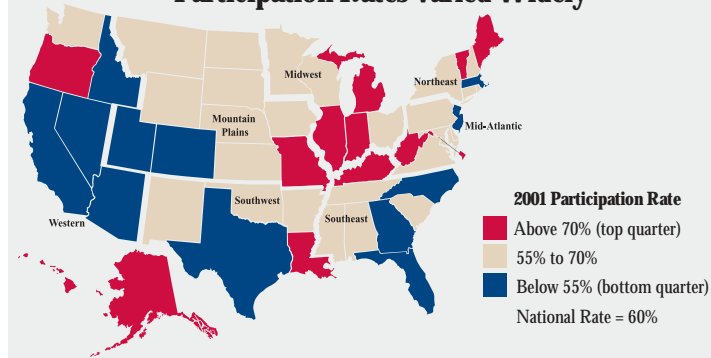
A confidence interval expresses our uncertainty about the true value of a participation rate. Each interval displayed here is a 90 percent confidence interval. One interpretation of such an interval is that there is a 90 percent chance that the true participation rate falls within the estimated bounds. For example, while our best estimate is that Wyoming's participation rate was 58 percent in 2001, the true rate may have been higher or lower. However, the chances are 90 in 100 that the true rate was between 53 and 63 percent.

Participation Rates

	1999	2000	2001
Alabama	64%	60%	60%
Alaska	71%	73%	72%
Arizona	49%	48%	51%
Arkansas	68%	61%	62%
California	54%	57%	54%
Colorado	54%	52%	52%
Connecticut	66%	68%	67%
Delaware	60%	55%	55%
District of Columbia	93%	87%	77%
Florida	55%	52%	48%
Georgia	60%	55%	53%
Hawaii	90%	94%	85%
Idaho	48%	50%	48%
Illinois	71%	71%	73%
Indiana	64%	67%	71%
Iowa	60%	61%	61%
Kansas	48%	54%	55%
Kentucky	77%	78%	77%
Louisiana	76%	70%	73%
Maine	84%	82%	81%
Maryland	60%	57%	55%
Massachusetts	43%	45%	45%
Michigan	78%	77%	76%
Minnesota	63%	65%	63%
Mississippi	63%	54%	57%
Missouri	73%	77%	79%
Montana	60%	60%	61%
Nebraska	64%	63%	61%
Nevada	39%	43%	46%
New Hampshire	51%	57%	55%
New Jersey	54%	54%	50%
New Mexico	72%	59%	62%
New York	61%	62%	58%
North Carolina	53%	49%	51%
North Dakota	53%	54%	63%
Ohio	60%	62%	63%
Oklahoma	66%	60%	61%
Oregon	70%	77%	84%
Pennsylvania	73%	72%	69%
Rhode Island	67%	69%	67%
South Carolina	64%	59%	61%
South Dakota	63%	63%	65%
Tennessee	74%	68%	69%
Texas	50%	47%	49%
Utah	57%	56%	54%
Vermont	78%	77%	72%
Virginia	58%	58%	58%
Washington	60%	64%	64%
West Virginia	100%	96%	89%
Wisconsin	54%	61%	64%
Wyoming	56%	56%	58%
Northeast Region	60%	61%	58%
Mid-Atlantic Region	67%	66%	63%
Southeast Region	62%	57%	57%
Midwest Region	67%	68%	69%
Southwest Region	58%	53%	56%
Mountain Plains Region	61%	63%	64%
Western Region	56%	59%	57%
United States	61%	60%	60%

There is substantial uncertainty associated with most of these estimates. Confidence intervals that measure the uncertainty in the estimates for 1999 and 2000 are presented in Castner and Schirm (forthcoming). Confidence intervals for the 2001 estimates are presented in this document.

Participation Rates Varied Widely



households in the Current Population Survey to estimate numbers of eligible people, while estimating numbers of participating people from food stamp administrative data. The regression predictions of participation rates were based on observed indicators of socioeconomic conditions, such as the percentage of the total State population receiving food stamps.

Shrinkage estimates are substantially more precise than direct sample estimates from the Current Population Survey or the Survey of Income and Program Participation, the leading sources of current data on household incomes and program eligibility. Because these surveys do not collect data on participation in the Food Distribution Program on Indian Reservations, the estimates presented here are not adjusted to reflect the fact that participants in that program are not eligible to receive food stamps at the same time (Cunningham 2003). The effects of such adjustments would generally be negligible. Because our focus in this document is on participation among people who are eligible for the Food Stamp Program, the estimates of eligible people were adjusted using available data to reflect the fact that Supplemental Security Income recipients in California are not legally eligible to receive food stamps because they receive cash instead. It might be useful in some other contexts, however, to consider participation rates among those eligible for food stamps or a cash substitute.

The shrinkage estimates of participation rates for 1999 and 2000 presented here differ from the estimates in Schirm and Castner (2002) and Castner and Schirm (2003). The differences are due to changes in the reference period – an average month in the fiscal year, rather than just September – and improvements in data and methods, which are described in Cunningham (2003) and Castner and Schirm (forthcoming). In the future, some of the estimates presented here will be revised – and improved – when new data become available.

References

- Castner, Laura A., and Allen L. Schirm. "Empirical Bayes Shrinkage Estimates of State Food Stamp Participation Rates for 1999-2001." Washington, DC: Mathematica Policy Research, Inc., forthcoming.
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- Schirm, Allen L., and Laura A. Castner. "Reaching Those in Need: State Food Stamp Participation Rates in 2000." Alexandria, VA: Food and Nutrition Service, U.S. Department of Agriculture, December 2002.