

Reaching Those in Need:

STATE FOOD STAMP PARTICIPATION RATES IN 2006



FOOD AND NUTRITION SERVICE



which more emphasis was placed on work for public assistance recipients through the enactment of the Personal Responsibility and Work Opportunity Reconciliation Act.

Recent studies have examined national participation rates as well as participation rates for socioeconomic and demographic subgroups (Wolkwitz 2008), and rates for all eligible people and for the working poor for States (Cunyngham, Castner, and Schirm 2007). This document presents estimates of Food Stamp Program participation rates for all eligible people and for the working poor for States for fiscal year 2006. These estimates can be used to assess recent program performance and focus efforts to improve performance.



The Supplemental Nutrition Assistance Program (SNAP)—formerly 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 and Nutrition Act of 2008). SNAP 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 2008, the program served 28 million people in an average month at a total annual cost of over \$34 billion in benefits.

The Government Performance and Results Act of 1993 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 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 about 25 years. The U.S. Department of Agriculture's budget request for fiscal year 2009 includes a performance target to reach 68 percent of the eligible population by 2010.

SNAP provides an important support for the “working poor”—people who are eligible for SNAP benefits and live in households in which someone earns income from a job. Of the 26 million people who received benefits in an average month in 2007, over 10 million—41 percent—lived in households that had income from earnings, up from 30 percent of all participants in 1996, the year in

Participation Rates in 2006

About 67 percent of eligible people in the United States received Food Stamp Program benefits in fiscal year 2006. Participation rates varied widely from State to State, however. Twenty States had rates that were significantly higher (in a statistical sense) than the national rate, and 20 States had rates that were significantly lower. Among the regions, the Midwest Region had the highest participation rate. Its 74 percent rate was significantly higher than the rates for all of the other regions. The Western Region's participation rate of 58 percent was significantly lower than the rates for all of the other regions. (See the last page for a map showing regional boundaries.)

Supplemental Nutrition Assistance Program

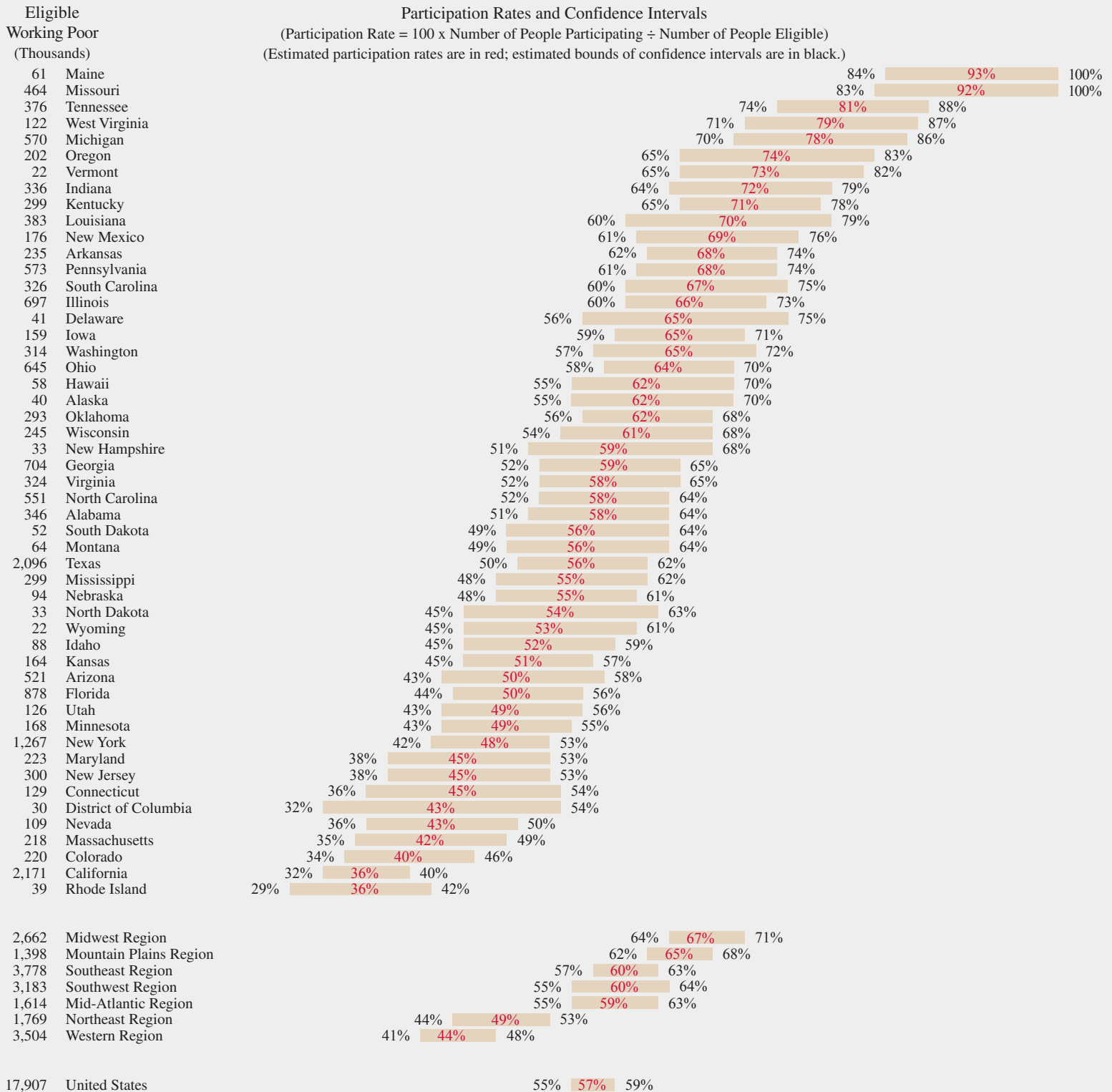
Beginning October 1, 2008, the Food Stamp Act of 1977 is renamed the Food and Nutrition Act of 2008, and the Food Stamp Program is renamed the Supplemental Nutrition Assistance Program.

How Many Were Eligible in 2006? 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 Wisconsin's participation rate was 67 percent in 2006, the true rate may have been higher or lower. However, the chances are 90 in 100 that the true rate was between 62 and 71 percent.

How Many Working Poor Were Eligible in 2006? 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 Wisconsin's working poor participation rate was 61 percent in 2006, the true rate may have been higher or lower. However, the chances are 90 in 100 that the true rate was between 54 and 68 percent.

In 2006, 57 percent of eligible working poor in the United States participated in the Food Stamp Program, but as with participation rates for all eligible people, rates for the working poor varied widely across States. Twenty States had rates for the working poor that were significantly higher than the national rate, and 15 States had rates that were significantly lower.

While 67 percent of all eligible people in the United States participated in 2006, only 57 percent of the eligible working poor participated, a significant difference of 10 percentage points. In 34 States, the participation rate for the working poor in 2006 was—like the national rate for the working poor—significantly lower than the rate for all eligible people; in 8 of these States, the rate for the working poor was more than 10 percentage points lower than the rate for all eligible people. In no State was the rate for the working poor significantly higher than the rate for all eligible people.

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 2006 show whether a State's participation rate for all eligible people was probably at the top, at the bottom, or in the middle of the distribution. Missouri, Maine, and Tennessee, were very likely at the top, with higher rates for

all eligible people than most States. In contrast, California likely had a lower rate than most States.

Similarly, it is possible to determine that some States were probably at the top, at the bottom, or in the middle of the distribution of rates for the working poor in 2006. Maine and Missouri were very likely ranked at the top, with higher rates for the working poor than most States. In contrast, Rhode Island and California likely had lower rates than most States.

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 for all eligible people and the working poor suggest that some States have fairly consistently been in the top or bottom of the distribution of rates in recent years. In all 3 years from 2004 to 2006, Illinois, Kentucky, Maine, Missouri, Oregon, Tennessee, and West Virginia had significantly higher participation rates for all eligible people than two-thirds of the States, while Arkansas, the District of Columbia, Louisiana, and Vermont had significantly higher rates than half of the States. Florida, Kansas, Maryland, Massachusetts, New Jersey, New York, and South Dakota had significantly lower rates than half of the States in all 3 years, while California, Colorado, Nevada, North Dakota, Rhode Island, and

Wyoming had significantly lower rates than two-thirds of the States.

A State ranked near the top or bottom of the distribution of participation rates for all eligible people is likely to be ranked near the top or bottom, respectively, of the distribution of participation rates for the working poor. Although the rankings of States by participation rates for the working poor and for all eligible people are generally similar, the rankings do not exactly match. Three States (North Dakota, South Dakota, and Wyoming) are ranked significantly higher for all 3 years when ranked by their participation rate for the working poor than when ranked by their participation rate for all eligible people, and the District of Columbia and Minnesota are ranked significantly lower.

Estimation Method

The estimates presented here were derived using shrinkage estimation methods (Cunnyngham, Castner, and Schirm 2008, and Cunnyngham, 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 Program eligibility rules to households in the Current Population Survey to estimate numbers of eligible people and eligible working poor, while estimating numbers of participating people and participating working poor from administrative data. The "working poor" were defined as

Participation Rates

	All Eligible People			Working Poor		
	2004	2005	2006	2004	2005	2006
Alabama	60%	66%	66%	54%	63%	58%
Alaska	60%	67%	63%	57%	67%	62%
Arizona	62%	62%	61%	49%	49%	50%
Arkansas	71%	77%	77%	61%	72%	68%
California	48%	49%	50%	34%	35%	36%
Colorado	52%	53%	54%	42%	36%	40%
Connecticut	59%	65%	65%	48%	45%	45%
Delaware	62%	65%	73%	57%	59%	65%
District of Columbia	77%	73%	86%	34%	34%	43%
Florida	57%	59%	62%	42%	46%	50%
Georgia	66%	70%	68%	58%	62%	59%
Hawaii	73%	72%	72%	60%	65%	62%
Idaho	58%	59%	57%	50%	53%	52%
Illinois	69%	76%	79%	59%	65%	66%
Indiana	67%	72%	74%	65%	72%	72%
Iowa	59%	66%	71%	52%	58%	65%
Kansas	54%	59%	59%	47%	50%	51%
Kentucky	72%	77%	78%	65%	75%	71%
Louisiana	74%	80%	75%	71%	81%	70%
Maine	81%	86%	96%	77%	87%	93%
Maryland	52%	54%	60%	44%	40%	45%
Massachusetts	48%	52%	61%	39%	34%	42%
Michigan	65%	72%	80%	66%	72%	78%
Minnesota	63%	67%	69%	45%	45%	49%
Mississippi	59%	61%	63%	50%	58%	55%
Missouri	86%	95%	98%	78%	90%	92%
Montana	58%	61%	62%	51%	56%	56%
Nebraska	62%	66%	67%	51%	54%	55%
Nevada	53%	51%	54%	37%	37%	43%
New Hampshire	61%	64%	68%	53%	55%	59%
New Jersey	55%	59%	60%	48%	45%	45%
New Mexico	65%	69%	71%	61%	73%	69%
New York	55%	60%	63%	43%	46%	48%
North Carolina	60%	63%	67%	51%	56%	58%
North Dakota	51%	53%	57%	51%	51%	54%
Ohio	62%	67%	70%	59%	63%	64%
Oklahoma	67%	70%	69%	60%	66%	62%
Oregon	79%	80%	85%	68%	70%	74%
Pennsylvania	65%	71%	75%	59%	65%	68%
Rhode Island	53%	56%	55%	40%	37%	36%
South Carolina	67%	70%	74%	63%	68%	67%
South Dakota	53%	56%	58%	52%	56%	56%
Tennessee	85%	91%	91%	74%	85%	81%
Texas	56%	59%	63%	49%	57%	56%
Utah	58%	61%	56%	48%	54%	49%
Vermont	70%	75%	80%	62%	68%	73%
Virginia	63%	66%	69%	53%	55%	58%
Washington	67%	68%	75%	55%	59%	65%
West Virginia	76%	78%	83%	70%	80%	79%
Wisconsin	55%	59%	67%	51%	54%	61%
Wyoming	51%	52%	53%	53%	54%	53%
Northeast Region	55%	60%	64%	45%	46%	49%
Mid-Atlantic Region	62%	66%	70%	55%	56%	59%
Southeast Region	65%	68%	70%	55%	60%	60%
Midwest Region	64%	70%	74%	60%	64%	67%
Southwest Region	61%	65%	67%	55%	62%	60%
Mountain Plains Region	65%	70%	72%	56%	62%	65%
Western Region	55%	56%	58%	42%	43%	44%
United States	61%	65%	67%	52%	56%	57%

There is substantial uncertainty associated with most of these estimates. Confidence intervals that measure the uncertainty in the estimates for 2004 and 2005 are presented in Cunningham, Castner, and Schirm (forthcoming). These confidence intervals are generally about as wide as the confidence intervals that are presented in this document for the 2006 estimates.

people who were eligible for the Food Stamp Program and lived in a household in which a member earned money from a job. 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 Stamp Program benefits.

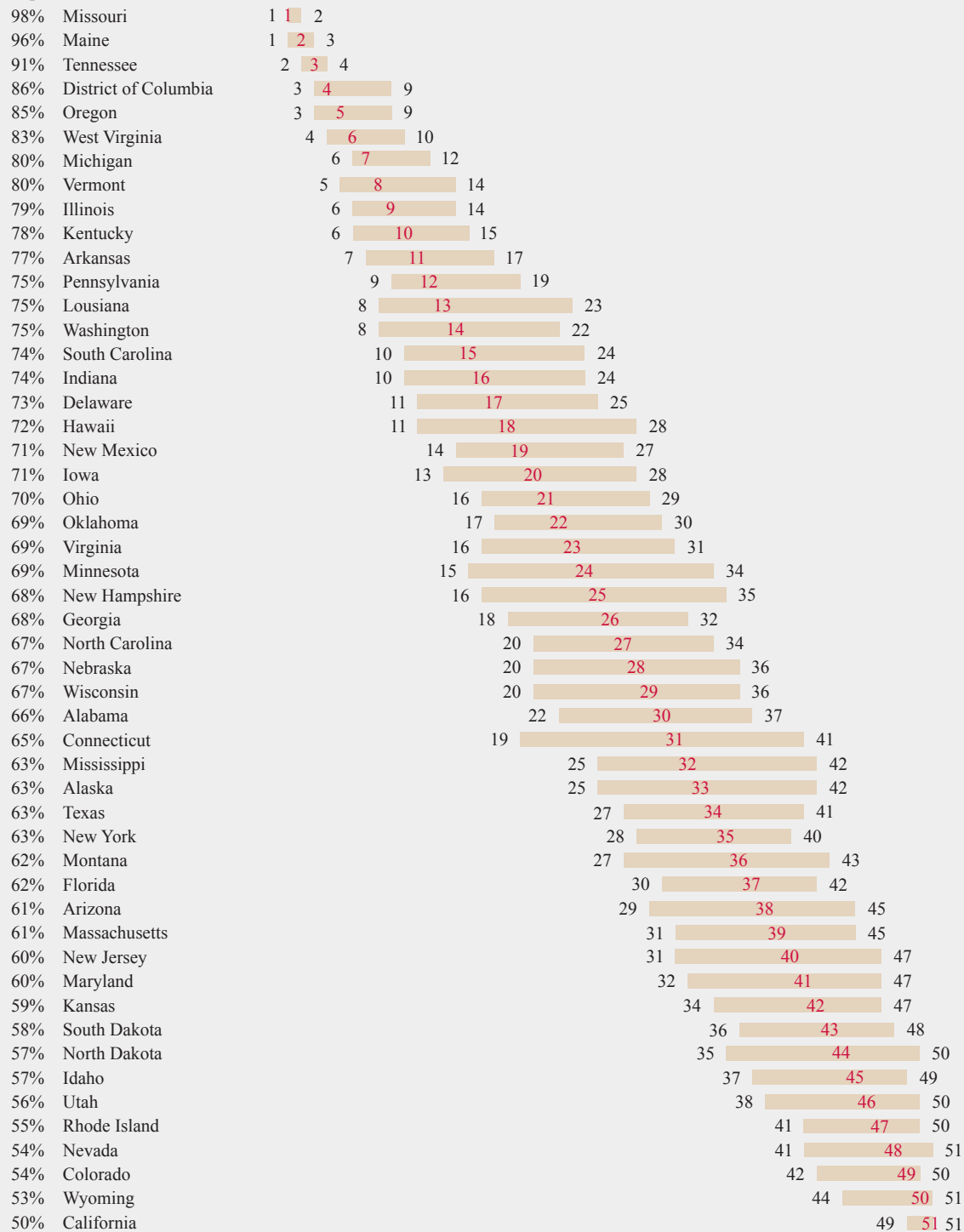
Shrinkage estimates are substantially more precise than direct sample estimates from the Current Population Survey or the Survey of Income and Program Participation, the leading sources of data used to estimate program eligibility. Because these surveys do not collect data on participation in the Food Distribution Program on Indian Reservations, the estimates presented here were not adjusted to reflect the fact that participants in that program were not eligible to receive Food Stamp Program benefits at the same time (Wolkwitz 2008). The Food Distribution Program on Indian Reservations served about 89,900 people in 2006, so the effects of such adjustments would be negligible in almost all States. Because our focus in this document is on participation among people who were 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 were not legally eligible to receive Food Stamp Program benefits because they received cash instead. It might be useful in some other contexts, however, to consider participation rates among those eligible for Food Stamp Program benefits or a cash substitute.

How Did Your State Rank in 2006?

Participation
Rate for
All Eligible
People

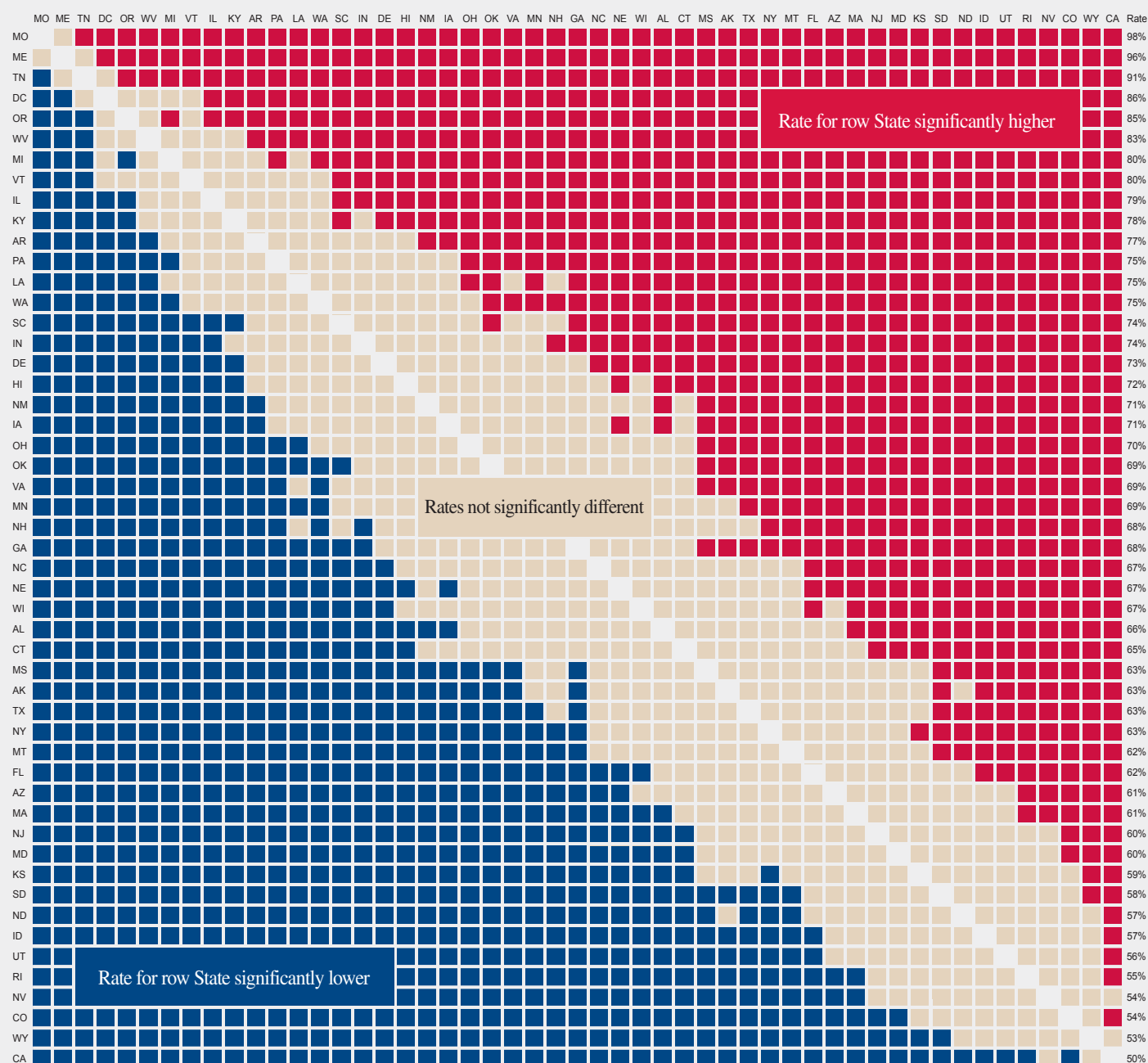
Ranks and Confidence Intervals

(Estimated ranks are in red; estimated bounds of confidence intervals are in black.)



A confidence interval expresses our uncertainty about the true value of a State's rank. 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 rank falls within the estimated bounds. For example, while our best estimate is that Georgia had the 26th highest participation rate in 2006, the true rank may have been higher or lower. However, the chances are 90 in 100 that the true rank was between 18 and 32 among all of the States. To determine how Georgia or your State compares with any other State, see the chart on page 7.

How Did Your State Compare with Other States in 2006?



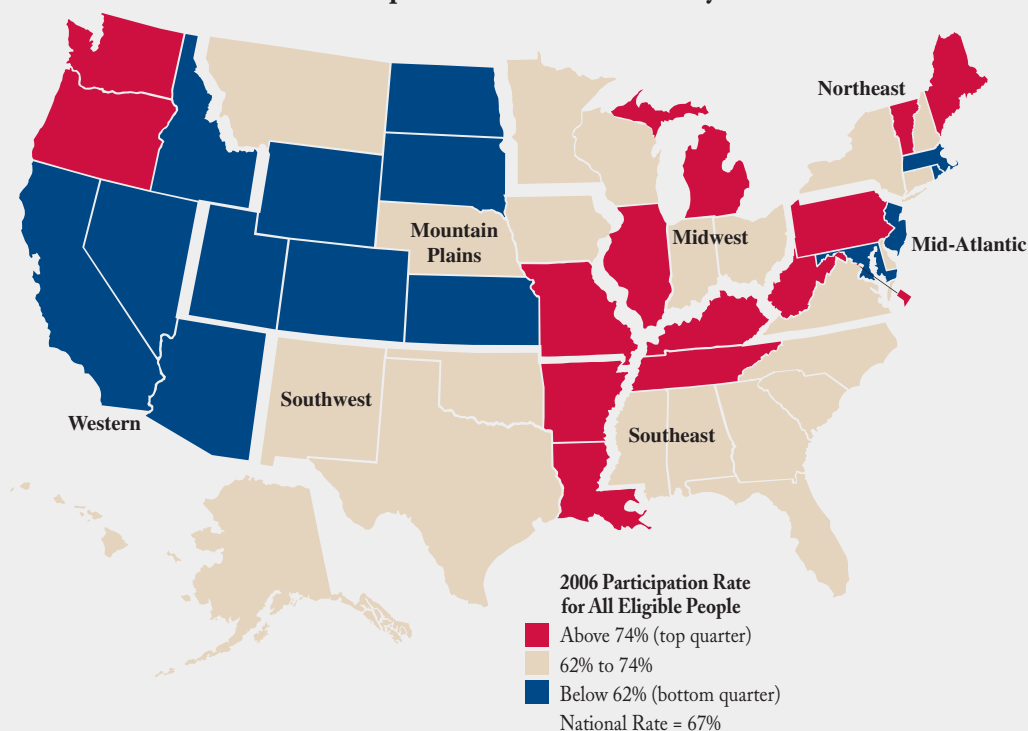
Whether one State has a significantly higher participation rate than a second State can be determined from this figure by finding the row for the first State at the left of the figure and the column for the second State at the top of the figure. If the box where the row and column intersect is red, there is at least a 90-percent chance that the first State (the row State) has a higher true participation rate. If the box is blue, there is at least a 90-percent chance that the second State (the column State) has a higher true participation rate. Equivalently, there is less than a 10-percent chance that the first State has a higher rate. If the box is tan, there is more than a 10-percent chance but less than a 90-percent chance that the first State has a higher rate; thus, we conclude that neither estimated rate is significantly higher.

Taking Georgia, the State in the middle of the distribution, as an example, we see that it had a significantly lower participation rate than 16 other States (Missouri, Maine, Tennessee, the District of Columbia, Oregon, West Virginia, Michigan, Vermont, Illinois, Kentucky, Arkansas, Pennsylvania, Louisiana, Washington, South Carolina, and Indiana) and a significantly higher rate than 20 other States (California, Wyoming, Colorado, Nevada, Rhode Island, Utah, Idaho, North Dakota, South Dakota, Kansas, Maryland, New Jersey, Massachusetts, Arizona, Florida, Montana, New York, Texas, Alaska, and Mississippi). Its rate was neither significantly higher nor significantly lower than the rates for the other 14 States, suggesting that Georgia is probably in the broad center of the distribution, unlike, for example, Missouri and California, which were surely at or near the top and bottom of the distribution, respectively. Although we use the statistical definition of “significance” here, most of the significant differences were at least 10 percentage points, a difference that seems important as well as significant, and all of them were at least 4 percentage points.



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Participation Rates Varied Widely



Although our focus is on participation among people who were eligible for the Food Stamp Program, no data were available to estimate the number of people who would fail the program's income tests but were categorically eligible for Food Stamp Program benefits through participation in noncash public assistance programs. Therefore, because such people could not be included in estimates of eligible people, they were also excluded from the estimates of participating people. Wolkwitz (2008) presents details on the methods used to estimate the numbers of eligible and participating people used in deriving the participation rates presented here.

References

Cunyngham, Karen E., Laura A. Castner, and Allen L. Schirm. "Empirical Bayes Shrinkage Estimates of State Food Stamp Participation Rates in 2004-2006 for All Eligible People and the Working Poor." Washington, DC: Mathematica Policy Research, Inc., forthcoming.

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Wolkwitz, Kari. "Trends in Food Stamp Program Participation Rates: 2000 to 2006." In *Current Perspectives on Food Stamp Program Participation*. Alexandria, VA: Food and Nutrition Service, U.S. Department of Agriculture, June 2008.